

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549



**FORM S-4**

**REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**



**L-3 COMMUNICATIONS CORPORATION**

(Exact Name of Registrant as Specified in its Charter)

**Delaware**

(State or Other Jurisdiction of Incorporation or Organization)

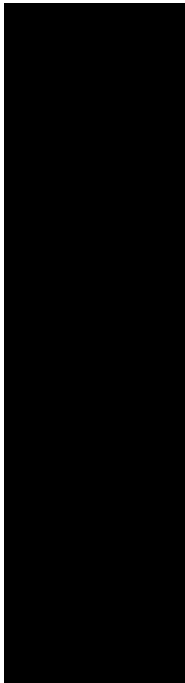
**13-3937436**

(I.R.S. Employer Identification Number)

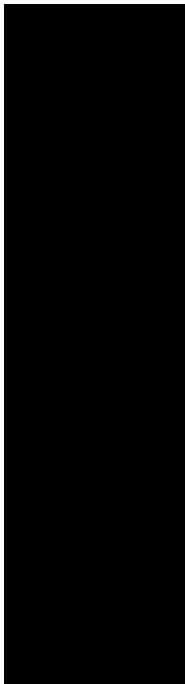
**600 Third Avenue  
New York, New York 10016  
(212) 697-1111**

(Address, Including Zip Code, and Telephone Number,  
Including Area Code, of Registrant's Principal Executive Offices)



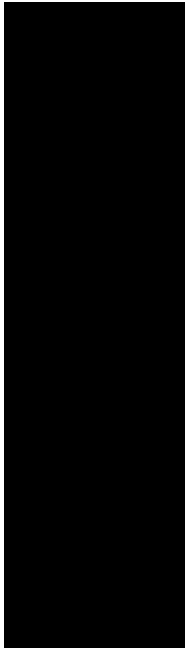


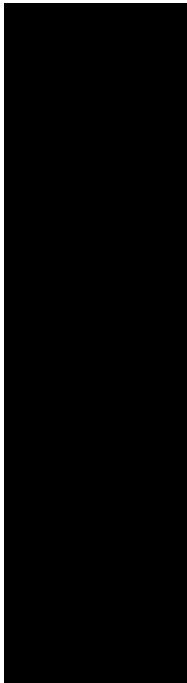
SEE TABLE OF ADDITIONAL REGISTRANTS



**Christopher C. Cambria, Esq.**  
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**New York, NY 10016**  
**(212) 697-1111**

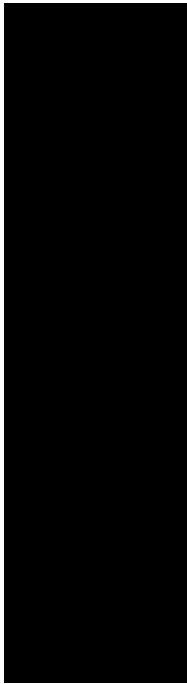
(Name, Address, Including Zip Code, and Telephone Number,  
Including Area Code, of Agent For Service)



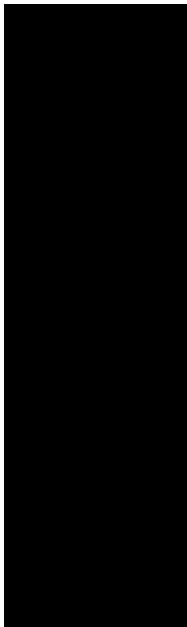


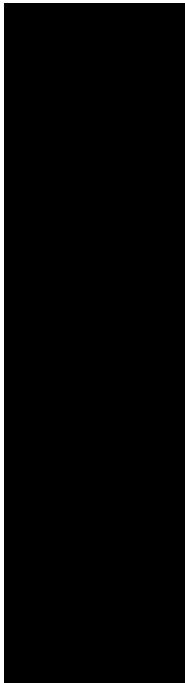
*Copy to:*

Vincent Pagano, Esq.  
Simpson Thacher & Bartlett LLP  
425 Lexington Avenue  
New York, New York 10017-3954  
(212) 455-2000



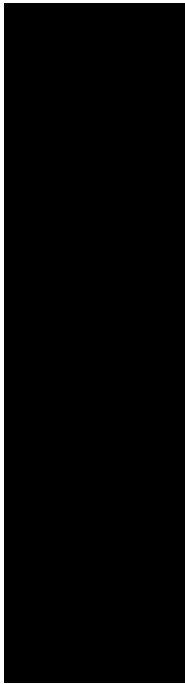
**Approximate date of commencement of proposed sale to the public:** As soon as practicable after this Registration Statement becomes effective.



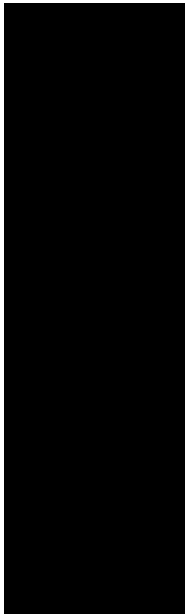


If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ☐ \_\_\_\_\_

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐ \_\_\_\_\_

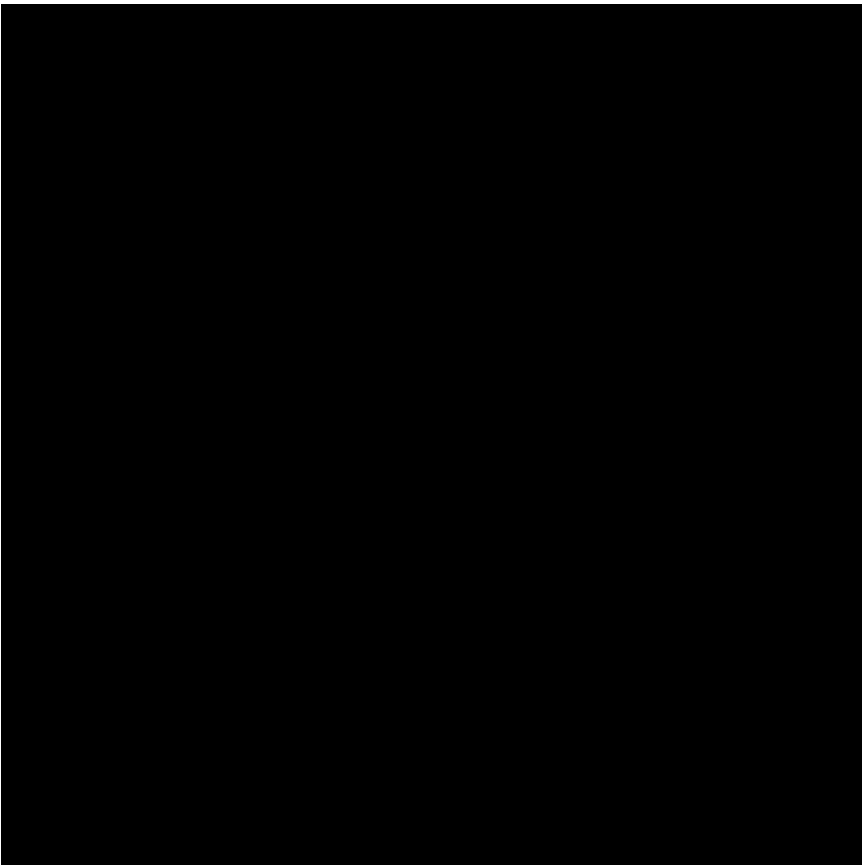


If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐ \_\_\_\_\_

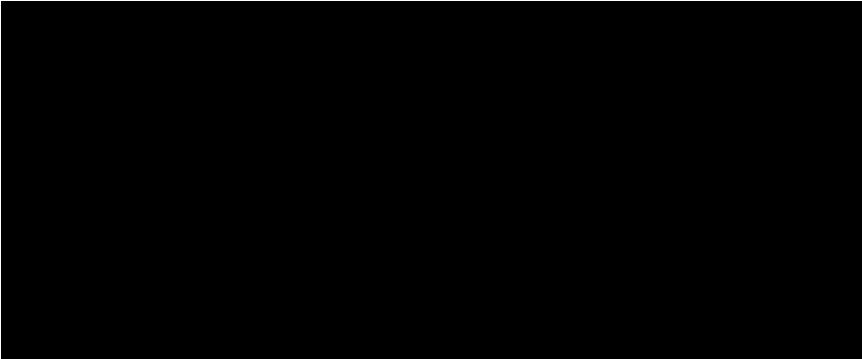


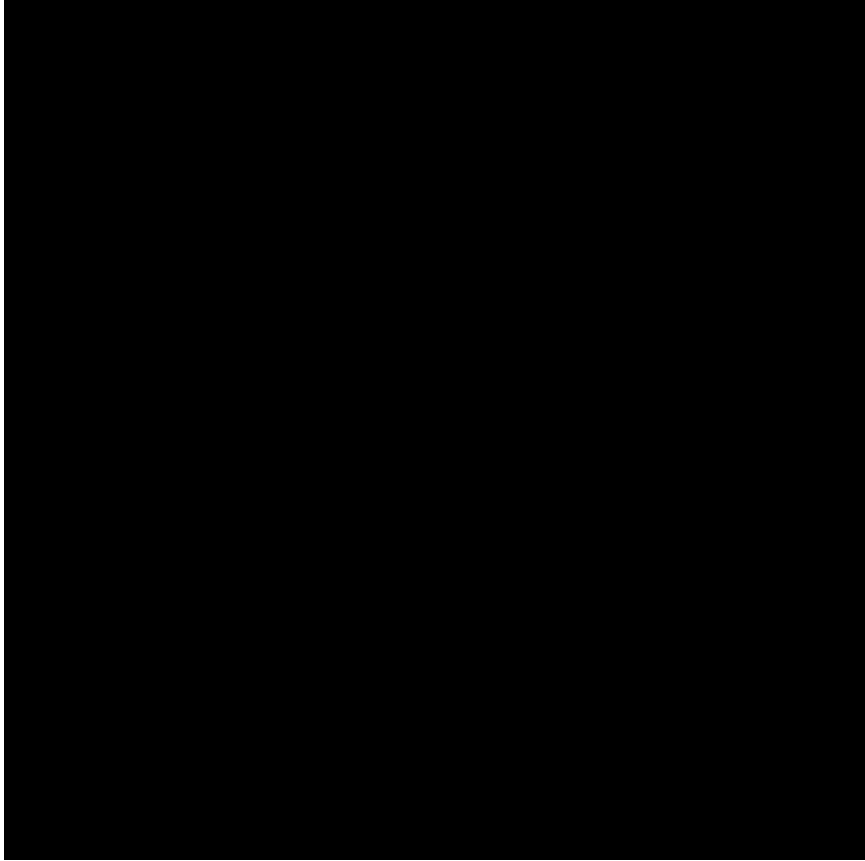


CALCULATION OF REGISTRATION FEE

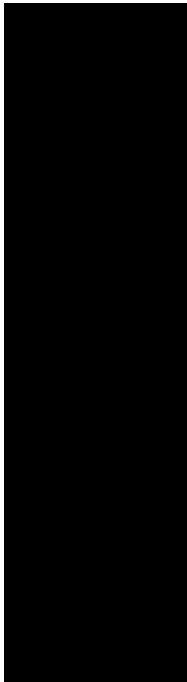


Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price <sup>(1)</sup>	Amount of Registration Fee
6 1/8% Series B Senior Subordinated Notes due 2014	\$400,000,000	100%	\$ 400,000,000	\$ 50,680.00
Guarantees of 6 1/8% Series B Senior Subordinated Notes due 2014	(2)	(2)	(2)	None <sup>(2)</sup>

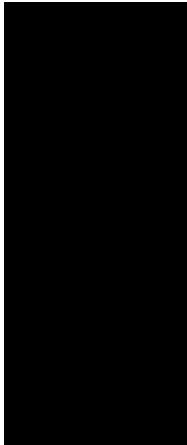




- (1) Estimated solely for purposes of calculating the registration fee.
- (2) No separate consideration will be received for the guarantees. Pursuant to Rule 457(n) of the Securities Act of 1933, as amended, there is no filing fee with respect to the guarantees.



The Registrants hereby amend this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrants shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.



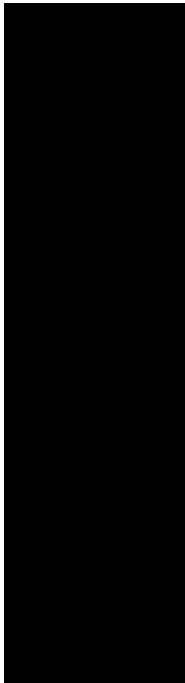


TABLE OF ADDITIONAL REGISTRANTS

Exact Name of Registrant as Specified in Its Charter	State Or Other Jurisdiction Of Incorporation Or Organization	IRS Employer Identification Number	Address, Including Zip Code, and Telephone Number, including Area Code, of Registrant's Principal Executive Offices
Apcom, Inc.	Maryland	52-1291447	600 Third Avenue New York, NY 10016 (212) 697-1111
Broadcast Sports Inc.	Delaware	52-1977327	600 Third Avenue New York, NY 10016 (212) 697-1111
Electrodynamics, Inc.	Arizona	36-3140903	600 Third Avenue New York, NY 10016 (212) 697-1111
Henschel, Inc.	Delaware	23-2554418	600 Third Avenue New York, NY 10016 (212) 697-1111
Hygienetics Environmental Services, Inc.	Delaware	13-3992505	600 Third Avenue New York, NY 10016 (212) 697-1111
Interstate Electronics Corporation	California	95-1912832	600 Third Avenue New York, NY 10016 (212) 697-1111
KDI Precision Products, Inc.	Delaware	31-0740721	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Aeromet, Inc.	Oregon	73-1291165	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications AIS GP Corporation	Delaware	13-4137187	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Avionics Systems, Inc.	Delaware	38-1865601	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Aydin Corporation	Delaware	23-1686808	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications CSI, Inc.	California	77-0365380	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications ESSCO, Inc.	Delaware	04-2281486	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Flight International Aviation LLC	Delaware	02-0654591	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Flight Capital LLC	Delaware	75-3089735	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Government Services, Inc.	Virginia	54-1349668	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications ILEX Systems, Inc.	Delaware	13-3992952	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Integrated Systems L.P.	Delaware	03-0391841	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Investments Inc.	Delaware	51-0260723	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Klein Associates, Inc.	Delaware	02-0277515	600 Third Avenue New York, NY 10016 (212) 697-1111

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			Registrant's Principal Executive Offices
L-3 Communications MAS (US) Corporation	Delaware	55-0765280	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Security and Detection Systems Corporation California	California	95-2214952	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Security and Detection Systems Corporation Delaware	Delaware	04-3054475	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Security Systems Corporation	Delaware	13-4109775	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Storm Control Systems, Inc.	California	77-0268547	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communicatons Vector International Aviation LLC	Delaware	42-1569647	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Vertex Aerospace LLC	Delaware	64-0941176	600 Third Avenue New York, NY 10016 (212) 697-1111
L-3 Communications Westwood Corporation	Nevada	87-0430944	600 Third Avenue New York, NY 10016 (212) 697-1111
MCTI Acquisition Corporation	Maryland	13-4109777	600 Third Avenue New York, NY 10016 (212) 697-1111
Microdyne Communications Technologies Incorporated	Maryland	59-3500774	600 Third Avenue New York, NY 10016 (212) 697-1111
Microdyne Corporation	Maryland	52-0856493	600 Third Avenue New York, NY 10016 (212) 697-1111
Microdyne Outsourcing Incorporated	Maryland	33-0797639	600 Third Avenue New York, NY 10016 (212) 697-1111
MPRI, Inc.	Delaware	54-1439937	600 Third Avenue New York, NY 10016 (212) 697-1111
Pac Ord Inc.	Delaware	23-2523436	600 Third Avenue New York, NY 10016 (212) 697-1111
Power Paragon, Inc.	Delaware	33-0638510	600 Third Avenue New York, NY 10016 (212) 697-1111
Ship Analytics, Inc.	Connecticut	06-0966471	600 Third Avenue New York, NY 10016 (212) 697-1111
Ship Analytics International, Inc.	Delaware	06-1336772	600 Third Avenue New York, NY 10016 (212) 697-1111
Ship Analytics USA, Inc.	Connecticut	06-1364417	600 Third Avenue New York, NY 10016 (212) 697-1111
SPD Electrical Systems, Inc.	Delaware	23-2457758	600 Third Avenue New York, NY 10016 (212) 697-1111
SPD Switchgear, Inc.	Delaware	23-2510039	600 Third Avenue New York, NY 10016 (212) 697-1111

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SYColeman Corporation	Florida	59-2039476	600 Third Avenue New York, NY 10016 (212) 697-1111
Troll Technology Corporation	California	95-4552257	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam Air Ops Inc.	Delaware	52-2304424	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam Air Ops LLC	Delaware	52-2295476	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam Holdings (US) Inc.	Delaware	51-0376332	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam Incorporated	Florida	59-3316817	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam LLC	Delaware	91-2077866	600 Third Avenue New York, NY 10016 (212) 697-1111
Wescam Sonoma Inc.	California	95-2942016	600 Third Avenue New York, NY 10016 (212) 697-1111
Wolf Coach, Inc.	Massachusetts	04-2482502	600 Third Avenue New York, NY 10016 (212) 697-1111

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Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

**Subject to Completion, Dated March 22, 2004**

PROSPECTUS

**\$400,000,000**





## L-3 Communications Corporation

Offer to Exchange All Outstanding 6 1/8% Senior Subordinated Notes due 2014 for an equal amount of 6 1/8% Series B Senior Subordinated Notes due 2014, which have been registered under the Securities Act of 1933.

### The Exchange Offer

- We will exchange all outstanding notes that are validly tendered and not validly withdrawn for an equal principal amount of exchange notes that are freely tradeable.
- You may withdraw tenders of outstanding notes at any time prior to the expiration of the exchange offer.
- The exchange offer expires at 5:00 p.m., New York City time, on \_\_\_\_\_, 2004, unless extended. We do not currently intend to extend the expiration date.
- The exchange of outstanding notes for exchange notes in the exchange offer will not be a taxable event for U.S. federal income tax purposes.
- We will not receive any proceeds from the exchange offer.

### The Exchange Notes

- The exchange notes are being offered in order to satisfy certain of our obligations under the registration rights agreement entered into in connection with the private offering of the outstanding notes.
- The terms of the exchange notes to be issued in the exchange offer are substantially identical to the outstanding notes, except that the exchange notes will be freely tradeable.

### Resales of Exchange Notes

- The exchange notes may be sold in the over-the-counter market, in negotiated transactions or through a combination of such methods. We do not plan to list the exchange notes on a national market.

If you are a broker-dealer and you receive exchange notes for your own account, you must acknowledge that you will deliver a prospectus in connection with any resale of such exchange notes. By making such acknowledgment, you will not be deemed to admit that you are an "underwriter" under the Securities Act of 1933. Broker-dealers may use this prospectus in connection with any resale of exchange notes received in exchange for outstanding notes where such outstanding notes were acquired by the broker-dealer as a result of market-making activities or trading activities. We have agreed that, for a period of 180 days after the expiration of the exchange offer or until any broker-dealer has sold all registered notes held by it, we will make this prospectus available to such broker-dealer for use in connection with any such resale. A broker-dealer may not participate in the exchange offer with respect to outstanding notes acquired other than as a result of market-making activities or trading activities. See "Plan of Distribution."

If you are an affiliate of L-3 Communications Corporation or are engaged in, or intend to engage in, or have an agreement or understanding to participate in, a distribution of the exchange notes, you cannot rely on the applicable interpretations of the Securities and Exchange Commission and you must comply with the registration requirements of the Securities Act of 1933 in connection with any resale transaction.

**You should consider carefully the risk factors beginning on page 15 of this prospectus before participating in the exchange offer.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is \_\_\_\_\_, 2004

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## WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance therewith, file reports and other information with the SEC. Such reports and other information can be inspected and copied at the Public Reference Section of the SEC located at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington D.C. 20549 and at a regional public reference facility maintained by the SEC located at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of such material can be obtained from the Public Reference Section of the SEC at prescribed rates. Such material may also be accessed electronically by means of the SEC's home page on the Internet (<http://www.sec.gov>). Information about the operation of the Public Reference Section of the SEC may be obtained by calling the SEC at 1-800-SEC-0330.

So long as we are subject to the periodic reporting requirements of the Securities Exchange Act, we are required to furnish the information required to be filed with the SEC to the trustee and the holders of the exchange notes. We have agreed that, even if we are not required under the Securities Exchange Act to furnish such information to the SEC, we will nonetheless continue to furnish information that would be required to be furnished by us by Section 13 of the Securities Exchange Act to the trustee and the holders of the exchange notes as if we were subject to such periodic reporting requirements.

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## ABOUT THIS PROSPECTUS

As used in this prospectus, (1) "L-3 Holdings" refers to L-3 Communications Holdings, Inc., (2) "L-3 Communications" refers to L-3 Communications Corporation, a wholly-owned operating subsidiary of L-3 Holdings and the issuer of the outstanding notes and the exchange notes, and (3) "Guarantors" refers to the current and future domestic restricted subsidiaries, that are or will be guaranteeing the obligations of L-3 Communications under the outstanding notes and the exchange notes. The obligations of the Guarantors are referred to herein as the "guarantees." "L-3," the "Company," "we," "us" and "our" refer to L-3 Communications and its subsidiaries. "Senior credit facilities" refers to our 364-day revolving credit facility together with our five-year revolving credit facility. Unless the context otherwise requires, "notes" refers to the outstanding notes and the exchange notes.

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## PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information you need to consider in making your investment decision. You should read carefully this entire prospectus.*

## L-3

We are a leading supplier of a broad range of products used in a substantial number of aerospace and defense platforms. We also are a major supplier of subsystems on many platforms, including those for secure communication networks, mobile satellite communications, information security systems, shipboard communications, naval power systems, fuzes and safety and arming devices for missiles and munitions, microwave assemblies for radars and missiles, telemetry and instrumentation and airport security systems. We also are a prime system contractor for aircraft modernization and maintenance, Intelligence, Surveillance and Reconnaissance (ISR) collection platforms, simulation and training, and government systems support services. Our businesses employ proprietary technologies and capabilities, and we believe our businesses have leading positions in their respective primary markets. Our customers include the U.S. Department of Defense and its prime contractors, certain U.S. Government intelligence agencies, major aerospace and defense contractors, foreign governments, commercial customers and certain other U.S. federal, state and local government agencies.

For the year ended December 31, 2003, direct and indirect sales to the U.S. Department of Defense provided 69.3% of our sales, and sales to commercial customers, foreign governments and U.S. federal, state and local government agencies other than the U.S. Department of Defense provided 30.7% of our sales. For the year ended December 31, 2003, we had sales of \$5,061.6 million, of which U.S. customers accounted for 83.1% and foreign customers, including commercial export sales, accounted for 16.9%, and operating income of \$581.0 million.

We have four reportable segments: (1) Secure Communications & ISR; (2) Training, Simulation & Support Services; (3) Aviation Products & Aircraft Modernization; and (4) Specialized Products. Financial information for our reportable segments is included in Management's Discussion and Analysis of Results of Operations and Financial Condition and in Note 18 of our consolidated financial statements.

#### *Secure Communications & ISR*

Our businesses in this segment provide products and services for the global ISR market, specializing in signals intelligence and communications intelligence systems. These products and services provide the warfighter in real-time the unique ability to collect and analyze unknown electronic signals from command centers, communication nodes and air defense systems for real-time situation awareness and response. The businesses in this segment also provide secure, high data rate communications systems for military and other U.S. Government and foreign government reconnaissance and surveillance applications. We believe our systems and products are critical elements for a substantial number of major communication, command and control, intelligence gathering and space systems. Our systems and products are used to connect a variety of airborne, space, ground and sea-based communication systems and are used in the transmission, processing, recording, monitoring and dissemination functions of these communication systems. Our major secure communication programs and systems include:

- secure data links for airborne, satellite, ground and sea-based remote platforms, both manned and unmanned, for real-time information collection and dissemination to users;
- highly specialized fleet management and support, including procurement, systems integration, sensor development, modification and maintenance for signals intelligence and ISR special mission aircraft and airborne surveillance systems;
- strategic and tactical signals intelligence systems that detect, collect, identify, analyze and disseminate information;

- 
- secure terminal and communication network equipment and encryption management; and
  - communication systems for surface and undersea vessels and manned space flights.

#### *Training, Simulation & Support Services.*

Our businesses in this segment provide a full range of training, simulation and support services, including:

- services designed to meet customer training requirements for aircrews, navigators, mission operators, gunners and maintenance technicians for virtually any platform, including military fixed and rotary wing aircraft, air vehicles and various ground vehicles;
- communication software support, information technology services and a wide range of engineering development services and integration support;
- high-end engineering and information support services used for command, control, communications and ISR architectures, as well as for air warfare modeling and simulation tools for applications used by the U.S. Department of Defense, Department of Homeland Security and U.S. Government intelligence agencies, including missile and space systems, Unmanned Aerial Vehicles (UAVs) and military aircraft;
- developing and managing extensive programs in the United States and internationally that focus on teaching, training and education, logistics, strategic planning, organizational design, democracy transition and leadership development; and
- producing crisis management software and providing command and control for homeland security applications.

#### *Aviation Products & Aircraft Modernization.*

Our businesses in this segment provide aviation products and aircraft modernization services, including:

- airborne traffic and collision avoidance systems (TCAS) for commercial and military applications;
- commercial, solid-state, crash-protected cockpit voice recorders, flight data recorders and maritime hardened voyage recorders;
- ruggedized custom displays for military and high-end commercial applications;
- turnkey aviation life cycle management services that integrate custom developed and commercial off-the-shelf products for various military fixed and rotary wing aircraft, including heavy maintenance and structural modifications and interior completion for Head-of-State aircraft;
- engineering, modification, maintenance, logistics and upgrades for U.S. Special Operations Command aircraft, vehicles and personnel equipment;
- aerospace and other technical services related to large fleet support, such as aircraft and vehicle modernization, maintenance, repair and overhaul, logistics support, and supply chain management, primarily for military training, tactical, cargo and utility aircraft, and the Patriot Missile System and M1 Abrams Main Battle Tank; and
- advanced cockpit avionics products and specialized avionics repair and overhaul services for various segments of the aviation market.

#### *Specialized Products.*

Our businesses in this segment supply products, including components, subsystems and systems, to military and commercial customers in several niche markets. These products include:

- naval warfare products, including acoustic undersea warfare products for mine hunting, dipping and anti-submarine sonars and naval power distribution, conditioning, switching and protection equipment for surface and undersea platforms;
- ruggedization and integration of commercial off-the-shelf technology for displays, computers and electronic systems for military and commercial applications;
- security and surveillance systems for aviation, port and border applications, including those for perimeter security and for detection of explosives, concealed weapons, contraband and illegal narcotics, and to inspect agricultural products and to examine cargo;
- telemetry, instrumentation, space and navigation products, including tracking and flight termination;
- premium fuzing products and safety and arming devices for missiles and munitions;
- microwave components used in radar communication satellites, wireless communication equipment, electronic surveillance, communication and electronic warfare applications and countermeasure systems;
- high performance antennas and ground based radomes;
- training devices and motion simulators which produce advanced virtual reality simulation and high-fidelity representations of cockpits and mission stations for fixed and rotary wing aircraft and land vehicles; and
- precision stabilized electro-optic surveillance systems, including high magnification lowlight, daylight and forward looking infrared sensors, laser range finders, illuminators and designators, and digital and wireless communication systems.

### ***Developing Commercial and Civil Opportunities***

Part of our growth strategy is to identify applications for commercial customers and U.S. Government agencies (other than the U.S. Department of Defense) from select products and technologies that we currently sell to our defense customers. We believe our largest opportunities are in the transportation market, where we offer:

- an explosives detection system for screening checked baggage at airports;
- X-ray screening products for cargo, air freight, port and border security applications;
- maritime voyage recorders;
- maritime automatic identification system (which is a collision avoidance tool used to improve situational awareness for the bridge crew while facilitating communication between vessels and vessel identification); and
- an enhanced aviation collision avoidance product that adds ground proximity warning to airborne collision avoidance.

We are also offering a broad range of components and products used in commercial communications networks.

We have developed the majority of our commercial and civil products employing technology used in our defense businesses. Except for our explosives detection systems, sales generated from our developing commercial and civil opportunities have not been material to us.

## **Our Strategy**

We intend to grow our sales, improve our profitability and build on our position as a leading supplier of systems, products and services to the major contractors in the aerospace and defense industry, as well as the U.S. Government, with our focus continuing to be on our defense businesses. We also intend to continue to leverage our expertise and products into selected new commercial and civil business areas where we can adapt our existing products and technologies. Our strategy to achieve our objectives includes:

**Expand Supplier Relationships.** As an independent supplier, we anticipate that our growth will be driven by expanding our share of existing programs and by participating in new programs. We identify opportunities where we are able to use our strong relationships to increase our business presence and allow customers to reduce their costs. We also expect to benefit from continued outsourcing of subsystems, components and products by prime contractors, which positions us to be a supplier to multiple bidders on prime contract bids.

**Support Customer Requirements.** We intend to continue to align our research and development, manufacturing and new business efforts to complement our customers' requirements and provide state-of-the-art products.

**Improve Operating Margins.** We intend to continue to improve our operating performance by continuing to reduce overhead expenses, consolidating certain of our businesses and business processes and increasing the productivity of our businesses.

**Leverage Technical and Market Leadership Positions.** We are applying our technical expertise and capabilities to expand our core defense businesses and apply them to certain closely aligned commercial business markets and applications, such as transportation and communications networks. We also expect to continue to explore other similar commercial and civil opportunities, particularly those related to homeland security.

**Maintain Diversified Business Mix.** We have a diverse and broad business mix with limited reliance on any single program, a favorable balance of cost-reimbursable and fixed-price contracts, a significant follow-on business and an attractive customer profile.

**Capitalize on Strategic Acquisition Opportunities.** We intend to enhance our existing product base through internal research and development efforts and selective acquisitions of businesses that will add new

products in areas that complement our present technologies. During the year ended December 31, 2003, we used cash of \$1,014.4 million to acquire businesses. We regularly evaluate opportunities to acquire businesses. See "Risk Factors — Risks Related to L-3 — Our acquisition strategy involves risks, and we may not successfully implement our strategy."

Recent Developments

On December 22, 2003, L-3 Holdings announced a full redemption of all of its outstanding \$300.0 million aggregate principal amount of 5.25% Convertible Senior Subordinated Notes due 2009 (Convertible Notes), which expired on January 9, 2004. At December 31, 2003, holders of approximately \$1.6 million of the Convertible Notes had exercised their conversion rights and converted such notes into 40,000 shares of L-3 Holdings common stock. On January 9, 2004, holders of \$298.2 million of the Convertible Notes exercised their conversion rights and converted such notes into 7,317,327 shares of L-3 Holdings common stock. The remaining \$0.2 million of Convertible Notes were redeemed on January 12, 2004 for cash. As a result of these conversions and redemptions, our principal amount of long-term debt decreased by \$298.4 million and shareholders' equity increased by \$292.3 million in January 2004 compared to December 31, 2003.

We are incorporated in Delaware, and the address of our principal executive offices is 600 Third Avenue, New York, New York 10016. Our telephone number is (212) 697-1111.

Summary of Terms of the Exchange Offer

On December 22, 2003, we completed the private offering of the outstanding notes. References to the "notes" in this prospectus are references to both the outstanding notes and the exchange notes. This prospectus is part of a registration statement covering the exchange of the outstanding notes for the exchange notes.

We and the guarantors entered into a registration rights agreement with the initial purchasers in the private offering in which we and the guarantors agreed to deliver to you this prospectus as part of the exchange offer and we agreed to complete the exchange offer within 210 days after the date of original issuance of the outstanding notes. You are entitled to exchange in the exchange offer your outstanding notes for exchange notes which are identical in all material respects to the outstanding notes except:

- the exchange notes have been registered under the Securities Act;
- the exchange notes are not entitled to certain registration rights which are applicable to the outstanding notes under the registration rights agreement; and
- certain contingent interest rate provisions are no longer applicable.

The Exchange Offer	We are offering to exchange up to \$400,000,000 aggregate principal amount of our 6 1/8% Series B Senior Subordinated Notes due 2014, which we refer to in this prospectus as the exchange notes, for up to \$400,000,000 million aggregate principal amount of our 6 1/8% Senior Subordinated Notes due 2014, which we refer to in this prospectus as the outstanding notes. Outstanding notes may be exchanged only in integral multiples of \$1,000.
Resale	<p>Based on an interpretation by the staff of the SEC set forth in no-action letters issued to third parties, we believe that the exchange notes issued pursuant to the exchange offer in exchange for outstanding notes may be offered for resale, resold and otherwise transferred by you (unless you are an "affiliate" of L-3 Communications Corporation, within the meaning of Rule 405 under the Securities Act) without compliance with the registration and prospectus delivery provisions of the Securities Act, provided that you are acquiring the exchange notes in the ordinary course of your business and that you have not engaged in, do not intend to engage in, and have no arrangement or understanding with any person to participate in, a distribution of the exchange notes.</p> <p>Each participating broker-dealer that receives exchange notes for its own account pursuant to the exchange offer in exchange for outstanding notes that were acquired as a result of market-making or other trading activity must acknowledge that it will deliver a prospectus in connection with any resale of the exchange notes. See "Plan of Distribution."</p> <p>Any holder of outstanding notes who:</p> <ul style="list-style-type: none"><li>is an affiliate of L-3 Communications Corporation;</li></ul>

- does not acquire exchange notes in the ordinary course of its business; or
  - tenders in the exchange offer with the intention to participate, or for the purpose of participating, in a distribution of exchange notes;
- cannot rely on the position of the staff of the SEC enunciated in Exxon Capital Holdings Corporation, Morgan Stanley & Co. Incorporated or similar no-action letters and, in the absence of an exemption therefrom, must comply with the registration and prospectus delivery requirements of the

	Securities Act in connection with the resale of the exchange notes.
Expiration Date; Withdrawal of Tender	The exchange offer will expire at 5:00 p.m., New York City time, on _____, 2004, or such later date and time to which we extend it (the "expiration date"). We do not currently intend to extend the expiration date. A tender of outstanding notes pursuant to the exchange offer may be withdrawn at any time prior to the expiration date. Any outstanding notes not accepted for exchange for any reason will be returned without expense to the tendering holder promptly after the expiration or termination of the exchange offer.
Certain Conditions to the Exchange Offer	The exchange offer is subject to customary conditions, which we may waive. Please read the section captioned "The Exchange Offer — Certain Conditions to the Exchange Offer" of this prospectus for more information regarding the conditions to the exchange offer.
Procedures for Tendering Outstanding Notes	If you wish to accept the exchange offer, you must complete, sign and date the accompanying letter of transmittal, or a facsimile of the letter of transmittal according to the instructions contained in this prospectus and the letter of transmittal. You must also mail or otherwise deliver the letter of transmittal, or a facsimile of the letter of transmittal, together with the outstanding notes and any other required documents, to the exchange agent at the address set forth on the cover page of the letter of transmittal. If you hold outstanding notes through The Depository Trust Company, or DTC, and wish to participate in the exchange offer, you must comply with the Automated Tender Offer Program procedures of DTC, by which you will agree to be bound by the letter of transmittal. By signing, or agreeing to be bound by the letter of transmittal, you will represent to us that, among other things:

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	<ul style="list-style-type: none"> <li>• any exchange notes that you receive will be acquired in the ordinary course of your business;</li> <li>• you have no arrangement or understanding with any person or entity to participate in a distribution of the exchange notes;</li> <li>• if you are a broker-dealer that will receive exchange notes for your own account in exchange for outstanding notes that were acquired as a result of market-making activities, that you will deliver a prospectus, as required by law, in connection with any resale of such exchange notes; and</li> <li>• you are not an "affiliate," as defined in Rule 405 of the Securities Act, of L-3 or, if you are an affiliate, you will comply with any applicable registration and prospectus delivery requirements of the Securities Act.</li> </ul>
Special Procedures for Beneficial Owners	If you are a beneficial owner of outstanding notes which are registered in the name of a broker, dealer, commercial bank, trust company or other nominee, and you wish to tender such outstanding notes in the exchange offer, you should contact such registered holder promptly and instruct such registered holder to tender on your behalf. If you wish to tender on your own behalf, you must, prior to completing and executing the letter of transmittal and delivering your outstanding notes, either make appropriate arrangements to register ownership of the outstanding notes in your name or obtain a properly completed bond power from the registered holder. The transfer of registered ownership may take considerable time and may not be able to be completed prior to the expiration date.
Guaranteed Delivery Procedures	If you wish to tender your outstanding notes and your outstanding notes are not immediately available or you cannot deliver your outstanding notes, the letter of transmittal or any other documents required by the letter of transmittal or comply with the applicable procedures under DTC's Automated Tender Offer Program prior to the expiration date, you must tender your outstanding notes according to the guaranteed delivery procedures set forth in this prospectus under "The Exchange Offer — Guaranteed Delivery Procedures."
Effect on Holders of Outstanding Notes	As a result of the making of, and upon acceptance for exchange of all validly tendered outstanding notes pursuant to the terms of the exchange offer, we will have fulfilled a covenant contained in the registration rights agreement and, accordingly, there will be no increase in the interest rate on the outstanding notes under the circumstances

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described in the registration rights agreement. If you are a holder of outstanding notes and you do not tender your outstanding notes in the exchange offer, you will continue to

hold such outstanding notes and you will be entitled to all the rights and limitations applicable to the outstanding notes in the indenture, except for any rights under the registration rights agreement that by their terms terminate upon the consummation of the exchange offer.

To the extent that outstanding notes are tendered and accepted in the exchange offer, the trading market for outstanding notes could be adversely affected.

Consequences of Failure to  
Exchange

All untendered outstanding notes will continue to be subject to the restrictions on transfer provided for in the outstanding notes and in the indenture. In general, the outstanding notes may not be offered or sold, unless registered under the Securities Act, except pursuant to an exemption from, or in a transaction not subject to, the Securities Act and applicable state securities laws. Other than in connection with the exchange offer, we do not currently anticipate that we will register the outstanding notes under the Securities Act.

Certain Income Tax Considerations

The exchange of outstanding notes for exchange notes in the exchange offer will not be a taxable event for United States federal income tax purposes. See "Material United States Federal Income Tax Considerations."

Use of Proceeds

We will not receive any cash proceeds from the issuance of exchange notes pursuant to the exchange offer.

Exchange Agent

The Bank of New York is the exchange agent for the exchange offer. The address and telephone number of the exchange agent are set forth in the section captioned "The Exchange Offer — Exchange Agent" of this prospectus.

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**Summary of Terms of the Exchange Notes**

Issuer	L-3 Communications Corporation
Securities Offered	\$400,000,000 in aggregate principal amount of 6 1/8% Series B Senior Subordinated Notes due 2014
Maturity	January 15, 2014
Interest Payment Dates	January 15 and July 15, beginning July 15, 2004. The initial interest payment will include accrued interest from December 22, 2003.
Interest Rate	6 1/8% per year
Ranking	<p>The outstanding notes are, and the exchange notes will be, unsecured senior subordinated obligations of L-3 Communications Corporation. They rank behind all of our and the guarantors' current and future indebtedness (other than trade payables), except indebtedness that expressly provides that it is on parity with or subordinated in right of payment to these notes and the guarantees. As of December 31, 2003, on a pro forma basis giving effect to the conversion of the L-3 Holdings 5.25% Convertible Senior Subordinated Notes due 2009 into common stock of L-3 Holdings and the subsequent redemption of all such notes that were not converted, the exchange notes and the related guarantees would:</p> <ul style="list-style-type: none"><li>• not have been subordinated to any senior debt (excluding outstanding letters of credit); and</li><li>• have ranked equally with \$1,770.0 million of other senior subordinated debt.</li></ul> <p>As of December 31, 2003, L-3 Communications Corporation had the ability to borrow up to \$665.9 million (after reductions for outstanding letters of credit of \$84.1 million) under its senior credit facilities, all of which if borrowed or drawn upon would be senior debt. See "Description of the Notes — Subordination."</p>
Subsidiary Guarantees	<p>The outstanding notes are, and the exchange notes will be, jointly and severally guaranteed on a senior subordinated basis by certain of our current and future domestic restricted subsidiaries as described under "Description of the Notes — Subsidiary Guarantees."</p> <p>The guarantees of the outstanding notes are, and the guarantees of the exchange notes will be, subordinated in right of payment to all existing and future senior debt of the guarantors. The guarantees of the outstanding notes are, and the guarantees of the exchange notes will be, <i>pari passu</i> with other senior subordinated indebtedness of the</p>

due 2008, the 7 5/8% Senior Subordinated Notes due 2012 and the 6 1/8% Senior Subordinated Notes due 2013, in each case issued by L-3 Communications Corporation and guaranteed by the guarantors and (2) the 4% Senior Subordinated Convertible Contingent Debt Securities (CODES) due 2011 issued by L-3 Communications Holdings and guaranteed by L-3 Communications Corporation and the other guarantors. Information regarding the guarantors is included in the notes to the financial statements included elsewhere herein.

As of December 31, 2003, we had \$2,468.4 million of indebtedness outstanding, none of which was senior debt. In addition, as of December 31, 2003, we had the ability to borrow up to \$665.9 million (after reductions for outstanding letters of credit of \$84.1 million) under our senior credit facilities, all of which if borrowed or drawn upon would be senior debt and would be guaranteed on a senior basis by the guarantors.

See "Description of the Notes — Subsidiary Guarantees" and "— Subordination."

Sinking Fund

None

Optional Redemption

On or after January 15, 2009, we may redeem some or all of the notes at the redemption prices set forth under "Description of the Notes — Optional Redemption."

Before January 15, 2007, we may redeem up to 35% of the outstanding notes and the exchange notes with the proceeds of certain equity offerings by L-3 Communications Corporation or L-3 Communications Holdings at the redemption prices set forth under "Description of the Notes — Optional Redemption."

Mandatory Offer to Repurchase

If we experience specific kinds of changes in control, we must offer to repurchase the outstanding notes and the exchange notes at the prices set forth under "Description of the Notes — Repurchase at Option of Holders."

Use of Proceeds

There will be no cash proceeds to us from the exchange offer.

Basic Covenants of Indenture

The indenture governing the outstanding notes and the exchange notes, among other things, restricts our ability and the ability of our restricted subsidiaries to:

- borrow money;
- pay dividends on or purchase our stock or our restricted subsidiaries' stock;
- make investments;

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- use assets as security in other transactions;
- sell certain assets or merge with or into other companies; and
- enter into transactions with affiliates.

Certain of our subsidiaries are not subject to the covenants in the indenture. In the event that the notes are assigned a rating of Baa3 or better by Moody's and BBB– or better by S&P and no event of default has occurred and is continuing, certain covenants in the indenture will be suspended. If the ratings should subsequently decline to below Baa3 or BBB–, the suspended covenants will be reinstituted. For more details, see the section "Description of the Notes — Certain Covenants."

Absence of a Public Market for the Exchange Notes

The exchange notes generally will be freely transferable but will also be new securities for which there will not initially be a market. Accordingly, we cannot assure you whether a market for the exchange notes will develop or as to the liquidity of any market. We do not intend to apply for a listing of the exchange notes on any securities exchange or automated dealer quotation system. The initial purchasers in the private offering of the outstanding notes have advised us that they currently intend to make a market in the exchange notes. However, they are not obligated to do so, and any market making with respect to the exchange notes may be discontinued without notice.

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## Summary Financial Data

We derived the summary financial data presented below from our financial statements. The statement of operations and other data presented below for the years ended December 31, 2003, 2002 and 2001 and the balance sheet data presented below at December 31, 2003 and 2002, are derived from our audited consolidated



financial statements included elsewhere in this prospectus. We derived the balance sheet data presented below at December 31, 2001 from our audited consolidated financial statements not included elsewhere in this prospectus. Our results of operations are impacted significantly by our acquisitions, which are described herein.

	Year Ended December 31,		
	2003	2002	2001
	(in millions)		
<b>Statement of Operations Data:</b>			
Sales	\$ 5,061.6	\$ 4,011.2	\$2,347.4
Operating income	581.0	454.0	275.3
Interest and other income	0.2	5.0	1.8
Interest expense	132.7	122.5	86.4
Minority interest	3.5	6.2	4.4
Loss on retirement of debt <sup>(1)</sup>	11.2	16.2	—
Provision for income taxes	156.2	111.6	70.8
Income before cumulative effect of a change in accounting principle	277.6	202.5	115.5
Income before cumulative effect of a change in accounting principle, as adjusted <sup>(2)</sup>	277.6	202.5	149.4
<b>Balance Sheet Data (at period end):</b>			
Cash and cash equivalents	\$ 134.9	\$ 134.9	\$ 361.0
Working capital	1,013.5	929.4	717.8
Total assets	6,492.9	5,242.3	3,339.2
Total debt	2,457.3	1,847.8	1,315.3
Minority interest	76.2	73.2	69.9
Shareholders' equity	2,574.5	2,202.2	1,213.9
<b>Other Data:</b>			
Net cash from operating activities	\$ 456.1	\$ 318.5	\$ 173.0
Net cash used in investing activities	(1,088.1)	(1,810.5)	(424.9)
Net cash from financing activities	632.0	1,265.9	580.3
Credit Facility EBITDA <sup>(3)</sup>	674.5	529.2	357.9
Depreciation	77.3	66.2	40.4
Goodwill amortization	—	—	42.3
Amortization of intangibles and other assets	18.1	9.7	4.2
Amortization of deferred debt issue costs (included in interest expense)	8.0	7.4	6.4
Capital expenditures	82.9	62.1	48.1
<b>Balance Sheet Data, as adjusted (at period end):<sup>(4)</sup></b>			
Cash and cash equivalents	\$ 134.7		
Total debt	2,158.9		

- (1) In accordance with the provisions of SFAS No. 145, beginning on January 1, 2003, we began reporting the loss on the retirement of our \$225.0 million in aggregate principal amount of 10 3/8% Senior Subordinated Notes due 2007, which we recorded in June 2002, as a component of income from continuing operations. The results of operations for the year ended December 31, 2002, have been revised to reclassify the loss on retirement of debt of \$9.9 million, net of the related tax benefit of \$6.3 million, which had originally been reported as an extraordinary item in 2002, to a component of income before cumulative effect of a change in accounting principle.
- (2) Income before cumulative effect of a change in accounting principle, as adjusted, excludes goodwill amortization expense, net of any income tax effects, recognized for the year ended December 31, 2001.
- (3) Credit Facility EBITDA is defined as consolidated net income (excluding (i) impairment losses incurred on goodwill and identifiable intangible assets or debt and equity investments, (ii) gains or losses incurred on the retirement of debt, (iii) extraordinary gains or losses, (iv) gains or losses in connection with asset dispositions, and (v) gains or losses from discontinued operations) for the most recent four quarters, plus consolidated interest expense (including consolidated interest expense of L-3 Holdings for permitted convertible securities guaranteed by L-3 Communications Corporation or its subsidiaries), income taxes, depreciation and amortization minus depreciation and amortization related to minority interest. We believe that the most directly comparable GAAP financial measure to Credit Facility EBITDA is net cash from operating activities. The table below presents a reconciliation of net cash from operating activities to Credit Facility EBITDA.

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	Year Ended December 31,		
	2003	2002	2001
	(in million)		
Net cash from operating activities	\$ 456.1	\$ 318.5	\$173.0
Less: Adjustments to reconcile net income to net cash from operating activities <sup>(a)</sup>	(178.5)	(140.4)	(57.5)
Net income	277.6	178.1	115.5
Add: Cumulative effect of a change in accounting principle, net of income taxes	—	24.4	—
Income before cumulative effect of a change in accounting principle	277.6	202.5	115.5
Less: Depreciation and amortization related to minority interest	(0.8)	(0.5)	(1.1)
Add: Provision for income taxes	156.2	111.6	70.8
Loss on retirement of debt	11.2	16.2	—
Interest expense	132.7	122.5	86.4
Depreciation and amortization	95.4	75.9	86.9
Losses (gains) in connection with asset dispositions	2.2	1.0	(0.6)
Credit Facility EBITDA	<u>\$ 674.5</u>	<u>\$ 529.2</u>	<u>\$357.9</u>

- (a) The aggregate adjustments reconciling net income to net cash from operating activities are detailed in our statement of cash flows.

Other than our amount of debt and interest expense, Credit Facility EBITDA is the major component in the calculation of the debt ratio and interest coverage ratio, which are part of the financial covenants for our debt. The debt ratio is defined as the ratio of consolidated total debt to Credit Facility EBITDA. The interest coverage ratio is equal to the ratio of Credit Facility EBITDA to consolidated cash interest expense. The higher our Credit Facility EBITDA is on a relative basis to our outstanding debt, the lower our debt ratio will be. A lower debt ratio indicates a higher borrowing capacity. Similarly, an increase in our Credit Facility EBITDA on a relative basis to consolidated cash interest expense results in a higher interest coverage ratio, which indicates a greater capacity to service debt.

Credit Facility EBITDA is presented as additional information because it is one measure used to determine financial covenant compliance under our senior credit facilities and we believe it to be a useful indicator of our debt capacity and our ability to service our debt. Credit Facility EBITDA is not a substitute for operating income, net income or net cash from operating activities as determined in accordance with generally accepted accounting principles in the United States of America. Credit Facility EBITDA is not a complete net cash flow measure because Credit Facility EBITDA is a financial measure that does not include reductions for cash payments for our obligation to service our debt, fund our working capital and capital expenditures and pay our income taxes. Rather, Credit Facility EBITDA is one potential indicator of our ability to fund these cash requirements. Credit Facility EBITDA is also not a complete measure of our profitability because it does not include costs and expenses for depreciation and amortization, interest and income taxes.

- (4) The as adjusted balance sheet data reflects the conversion of the 5.25% Convertible Senior Subordinated Notes due 2009 into common stock of L-3 Holdings and the subsequent redemption of all such notes that were not converted. See "— Recent Developments."

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### Ratio of Earnings to Fixed Charges

The ratio of earnings to fixed charges presented below should be read together with our consolidated financial statements and related notes and "Management's Discussion and Analysis of Results of Operations and Financial Condition" included elsewhere herein. In calculating the ratio of earnings to fixed charges, earnings consist of income before income taxes and cumulative effect of a change in accounting principle plus fixed charges. Fixed charges consist of interest on indebtedness plus the amortization of deferred debt issuance costs and that portion of lease rental expense representative of the interest element.

	Year Ended December 31,				
	2003	2002	2001	2000	1999
Ratio of Earnings to Fixed Charges:	3.8x	3.2x	2.8x	2.3x	2.4x

### RISK FACTORS

*You should carefully consider the following factors and other information contained in this prospectus before deciding to tender outstanding notes in the exchange offer. The risk factors set forth below are generally applicable to the outstanding notes as well as the exchange notes. Any of these risks could materially adversely affect our business, financial condition and results of operations, which could in turn materially adversely affect the price of the notes.*

#### Risks Related to the Exchange Offer

**If you choose not to exchange your outstanding notes, the present transfer restrictions will remain in force and the market price of your outstanding notes could decline.**

If you do not exchange your outstanding notes for exchange notes under the exchange offer, then you will continue to be subject to the transfer restrictions on the outstanding notes as set forth in the offering memorandum distributed in connection with the private offering of the outstanding notes. In general, the outstanding notes may not be offered or sold unless they are registered or exempt from registration under the Securities Act and applicable state securities laws. Except as required by the registration rights agreement, we do not intend to register resales of the outstanding notes under the Securities Act. You should refer to "Prospectus Summary — Summary of Terms of the Exchange Offer" and "The Exchange Offer" for information about how to tender your outstanding notes.

The tender of outstanding notes under the exchange offer will reduce the principal amount of the outstanding notes outstanding, which may have an adverse effect upon, and increase the volatility of, the market price of the outstanding notes due to reduction in liquidity.

#### Risks Related to L-3

**Our significant level of debt may adversely affect our financial and operating activity.**

We have incurred substantial indebtedness to finance our acquisitions. At December 31, 2003, we had \$2,468.4 million in aggregate principal amount of outstanding debt, excluding outstanding letters of credit (which aggregated approximately \$84.1 million) under our 364-day and five-year revolving credit facilities. In addition, available borrowings under our senior credit facilities, after reductions for outstanding letters of credit, were \$665.9 million at December 31, 2003. In the future we may borrow more money, subject to limitations imposed on us by our debt agreements.

Our ability to make scheduled payments of principal and interest on our indebtedness and to refinance our indebtedness depends on our future performance. We do not have complete control over our future performance because it is subject to economic, political, financial, competitive, regulatory and other factors affecting the aerospace and defense industry. It is possible that in the future our business may not generate sufficient cash flow from operations to allow us to service our debt and make necessary capital expenditures. If this situation occurs, we may have to sell assets, restructure debt or obtain additional equity capital. We may not be able to do so or do so without additional expense.

Our level of indebtedness has important consequences to you and your investment in the notes. These consequences may include:

- requiring a substantial portion of our net cash flow from operations to be used to pay interest and principal on our debt and therefore be unavailable for other purposes, including capital expenditures, research and development and other investments;
- limiting our ability to obtain additional financing for acquisitions or working capital to make investments or other expenditures, which may limit our ability to carry out our acquisition strategy;
- higher interest expenses due to increases in interest rates on our borrowings that have variable interest rates;

- heightening our vulnerability to downturns in our business or in the general economy and restricting us from making acquisitions, introducing new technologies and products or exploiting business opportunities; and
- covenants that limit our ability to borrow additional funds, dispose of assets or pay cash dividends. Failure to comply with such covenants could result in an event of default which, if not cured or waived, could result in the acceleration of our outstanding indebtedness.

Additionally, on December 31, 2003, we had \$3,788.7 million of contractual obligations, including outstanding indebtedness. These contractual obligations are described elsewhere herein.

**Our acquisition strategy involves risks, and we may not successfully implement our strategy.**

We seek to acquire companies that complement our businesses. We may not be able to continue to identify acquisition candidates on commercially reasonable terms or at all. If we make additional acquisitions, we may not realize the benefits anticipated from the acquisitions. Likewise, we may not be able to obtain additional financing for acquisitions. Such additional financing could be restricted by the terms of our debt agreements.

The process of integrating acquired operations, including those of our recent acquisitions, into our existing operations may result in unforeseen operating difficulties and may require significant financial and managerial resources that would otherwise be available for the ongoing development or expansion of our existing operations. Possible future acquisitions could result in the incurrence of additional debt and related interest expense and contingent liabilities, each of which could result in an increase to our already significant level of outstanding debt. We consider and execute strategic acquisitions on an ongoing basis and may be evaluating acquisitions or engaged in acquisition negotiations at any given time. We regularly evaluate potential acquisitions and joint venture transactions, and, except as disclosed elsewhere herein, we have not entered into any agreements with respect to any material transactions.

**We rely on sales to U.S. Government entities, and the loss of such contracts would have a material adverse effect on our results of operations and cash flows.**

Our sales are predominantly derived from contracts with agencies of, and prime system contractors to, the U.S. Government. All U.S. Government customers, including federal, state and local agencies, accounted for 76.3% of our sales for 2003. At December 31, 2003, we had approximately 1,000 contracts with a value exceeding \$1.0 million. Our largest program, a cost-reimbursable contract for U.S. Special Operations Forces Logistics Support, represented 4.4% of our sales for the year ended December 31, 2003. No other program represented more than 2.9% of sales for the year ended December 31, 2003. For the year ended December 31, 2003, sales from our five largest programs amounted to \$719.8 million, or 14.2% of our sales. The loss of all or a substantial portion of our sales to the U.S. Government would have a material adverse effect on our results of operations and cash flows.

**Our results of operations and cash flows, as well as our valuation of contracts in process are substantially affected by our fixed-price and cost reimbursable contracts.**

The substantial majority of our sales require us to design, develop, manufacture, modify, test and integrate complex aerospace and electronic equipment, and to provide related engineering and technical services according to specifications provided by our customers. These sales are transacted using written contractual arrangements or contracts, which are generally either fixed-price or cost-reimbursable. These contracts are within the scope of the American Institute of Certified Public Accountants Statement of Position 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts* (SOP 81-1) and Accounting Research Bulletin No. 45, *Long-term Construction-Type Contracts* (ARB 45). In addition, cost-reimbursable contracts are also specifically within the scope of Accounting Research Bulletin No. 43, Chapter 11, Section A, *Government Contracts, Cost-Plus-Fixed Fee Contracts* (ARB 43). For the year ended December 31, 2003, 63.1% of

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our sales were generated from fixed-price type contracts and 36.9% from cost-reimbursable type contracts. Substantially all of our cost-reimbursable type contracts are with the U.S. Government, primarily with the Department of Defense. Substantially all of our sales to commercial customers are transacted under fixed-price sales arrangements, and are included in our fixed-price contract sales.

Under a fixed-price type contract, we agree to perform the scope of work required by the contract for a predetermined contract price. Although a fixed-price type contract generally permits us to retain profits if the total actual contract costs are less than the estimated contract costs, we bear the risk that increased or unexpected costs may reduce our profit or cause us to sustain losses on the contract. Accounting for the sales on a fixed-price type contract requires the preparation of estimates of (1) the total contract revenue, (2) the total costs at completion, which is equal to the sum of the actual incurred costs to date on the contract and the estimated costs to complete the contract's statement of work, and (3) the measurement of progress towards completion. Adjustments to original estimates for a contract's revenue, estimated costs at completion and estimated profit or loss are often required as work progresses under a contract, as experience is gained and as more information is obtained, even though the scope of work required under the contract may not change, or if contract modifications occur.

Under a cost-reimbursable type contract we are paid our allowable incurred costs plus a profit which can be fixed or variable depending on the contract's fee arrangement up to predetermined funding levels determined by our customers. Therefore, on a cost-reimbursable type contract we do not bear the risks of unexpected cost overruns, provided that we do not incur costs that exceed the predetermined funded amounts.

The impact of revisions in profit estimates for all types of contracts are recognized on a cumulative catch-up basis in the period in which the revisions are made. Provisions for anticipated losses on contracts are recorded in the period in which they become evident. Amounts representing contract change orders or claims are included in sales only when they can be reliably estimated and their realization is reasonably assured. The revisions in contract estimates, if significant, can materially affect our results of operations and cash flows, as well as our valuations of contracts in process.

**Our government contracts entail certain risks.**

- *Our U.S. Government contracts are substantially dependent upon the U.S. defense budget.*

The U.S. Department of Defense (DoD) budget has increased for each fiscal year from fiscal year 1997 to fiscal year 2004, and, based on the Bush Administration's recently released future year defense plan, the DoD budget is expected to continue to increase through fiscal year 2009. However, the future DoD budgets after fiscal year 2004 could be negatively impacted by several factors, including, but not limited to, the U.S. Government's budget deficits and spending priorities, 2004 presidential election year politics, and the costs of sustaining the U.S. military presence and rebuilding operations in Iraq and Afghanistan, which could cause the DoD budget to remain unchanged or to decline. A significant decline in U.S. military expenditures in the future could result in a material decrease to our sales, earnings and cash flow. The loss or significant reduction in U.S. Government funding of a large program in which we participate could also result in a material decrease to our future sales, earnings and cash flows and thus limit our ability to satisfy our financial obligations, including those relating to the notes. U.S. Government contracts are also conditioned upon the continuing approval by Congress of the amount of necessary spending. Congress usually appropriates funds for a given program each fiscal year even though contract periods of performance may exceed one year. Consequently, at the beginning of a major program, the contract is usually partially funded, and additional monies are normally committed to the contract only if appropriations are made by Congress for future fiscal years.

- *Government contracts contain unfavorable termination provisions and are subject to audit and modification.*

Companies engaged primarily in supplying defense-related equipment and services to U.S. Government agencies are subject to certain business risks specific to the U.S. defense industry. These risks include the ability of the U.S. Government to unilaterally:

- suspend us from receiving new contracts pending resolution of alleged violations of procurement laws or regulations;
- terminate existing contracts;
- reduce the value of existing contracts;
- audit our contract-related costs and fees, including allocated indirect costs; and
- control and potentially prohibit the export of our products.

All of our U.S. Government contracts can be terminated by the U.S. Government either for its convenience or if we default by failing to perform under the contract. Termination for convenience provisions provide only for our recovery of costs incurred or committed, settlement expenses and profit on the work completed prior to termination. Termination for default provisions provide for the contractor to be liable for excess costs incurred by the U.S. Government in procuring undelivered items from another source. Our contracts with foreign governments generally contain similar provisions relating to termination at the convenience of the customer.

The U.S. Government may review our costs and performance on their contracts, as well as our accounting and general business practices. Based on the results of such audits, the U.S. Government may adjust our contract-related costs and fees, including allocated indirect costs. In addition, under U.S. Government purchasing regulations, some of our costs, including most financing costs, amortization of intangible assets, portions of research and development costs, and certain marketing expenses may not be reimbursable under U.S. Government contracts. Further, as a U.S. Government contractor, we are subject to investigation, legal action and/or liability that would not apply to a commercial company.

- *Government contracts are subject to competitive bidding and we are required to obtain licenses for non-U.S. sales.*

We obtain many of our U.S. Government contracts through a competitive bidding process. We may not be able to continue to win competitively awarded contracts. In addition, awarded contracts may not generate sales sufficient to result in our profitability. We are also subject to risks associated with the following:

- the frequent need to bid on programs in advance of the completion of their design, which may result in unforeseen technological difficulties and/or cost overruns;
- the substantial time and effort including the relatively unproductive design and development required to prepare bids and proposals for competitively awarded contracts that may not be awarded to us;
- design complexity and rapid technological obsolescence; and
- the constant need for design improvement.

In addition to these U.S. Government contract risks, we are required to obtain licenses from U.S. Government agencies to export many of our products and systems. Additionally, we are not permitted to export some of our products. Failure to receive required licenses would eliminate our ability to sell our products outside the United States.

#### **Our operations involve rapidly evolving products and technological change.**

The rapid change of technology is a key feature of all of the industries in which our businesses operate, including commercial communications in particular. To succeed in the future, we will need to

continue to design, develop, manufacture, assemble, test, market and support new products and enhancements on a timely and cost-effective basis. Historically, our technology has been developed through both customer-funded and internally funded research and development. We may not be able to continue to maintain comparable levels of research and development. In the past we have allocated substantial funds to capital expenditures, programs and other investments. This practice will continue to be required in the future. Even so, we may not be able to successfully identify new opportunities and may not have the needed financial resources to develop new products in a timely or cost-effective manner. At the same time, products and technologies developed by others may render our products and systems obsolete or non-competitive.

#### **We may not successfully implement our plan to increase our commercial sales.**

Our revenues have primarily come from business with the U.S. Department of Defense and other U.S. Government agencies. In addition to continuing to pursue these market areas, we will continue applying our technical capabilities and expertise to certain commercial markets. Some of our commercial products, such as airport, port and border security and surveillance systems, maritime voyage recorders, maritime automated identification systems and enhanced aviation collision avoidance products, have been recently introduced.

These new commercial products are subject to certain risks and may require us to:

- develop and maintain marketing, sales and customer support capabilities;
- spend additional research and development costs to sustain and enhance our existing products and to develop new products;
- secure sales and customer support capabilities;
- obtain customer and/or regulatory certification;
- respond to rapidly changing technologies including those developed by others that may render

our products and systems obsolete or non-competitive; and

- obtain customer acceptance of these products and product performance.

Our efforts to expand our presence in commercial and civil markets require significant resources, including additional working capital and capital expenditures, as well as the use of our management's time. Our ability to sell certain commercial products, particularly our broadband wireless communications products, depends to a significant degree on the efforts of independent distributors or communications service providers and on the financial viability of our existing and target customers, including their ability to obtain financing. Certain of our existing and target customers are agencies or affiliates of governments of emerging and under-developed countries or private business enterprises operating in those countries. In addition, we have made equity investments in entities that plan to commence operations as communications service providers using some of our commercial products. These distributors and service providers may not be able to market our products or their services successfully and we may not be able to realize a return on our investment in them. We may not be successful in addressing these risks or in developing these commercial and civil business opportunities.

**Consolidation and intense competition in the industries in which our businesses operate could limit our ability to attract and retain customers.**

We encounter intense competition in all of our businesses. We expect that the U.S. Department of Defense's increased use of commercial off-the-shelf products and components in military equipment will continue to encourage new competitors to enter the market. We also expect that competition for original equipment manufacturing business will increase due to the continued emergence of suppliers. Our ability to compete for defense contracts depends on a variety of factors, including:

- the effectiveness and innovation of our technologies and research and development programs;
- our ability to offer better program performance than our competitors at a lower cost; and

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- the capabilities of our facilities, equipment and personnel to undertake the programs for which we compete.

In some instances, we are the incumbent supplier or have been the sole provider for many years for certain programs. We refer to such contracts as "sole-source" contracts. In such cases, there may be other suppliers who have the capability to compete for the programs involved, but they can only enter or reenter the market if the customer chooses to reopen or recompute the particular program to competition. The majority of our sales are derived from contracts with the U.S. Government and its prime contractors, which are principally awarded on the basis of negotiations or competitive bids. Additionally, many of our competitors are larger than us and have substantially greater financial and other resources than we have.

**Our debt agreements restrict our ability to finance our future operations and, if we are unable to meet our financial ratios, could cause our existing debt to be accelerated.**

Our debt agreements contain a number of significant provisions that, among other things, restrict our ability to:

- sell assets;
- incur more indebtedness;
- repay certain indebtedness;
- pay dividends;
- make certain investments or acquisitions;
- repurchase or redeem capital stock;
- engage in mergers or consolidations; and
- engage in certain transactions with subsidiaries and affiliates.

These restrictions could hurt our ability to finance our future operations or capital needs or engage in other business activities that may be in our interest. In addition, some of our debt agreements also require us to maintain compliance with certain financial ratios, including total consolidated earnings before interest, taxes, depreciation and amortization to total consolidated cash interest expense and total consolidated debt to total consolidated earnings before interest, taxes, depreciation and amortization, and to limit our capital expenditures. Our ability to comply with these ratios and limits may be affected by events beyond our control. A breach of any of these agreements or our inability to comply with the required financial ratios or limits could result in a default under those debt agreements. In the event of any such default, the lenders under those debt agreements could elect to:

- declare all outstanding debt, accrued interest and fees to be due and immediately payable;
- require us to apply all of our available cash to repay our outstanding senior debt; and
- prevent us from making debt service payments on our other debt.

If we were unable to repay any of these borrowings when due, the lenders under our senior credit facilities could proceed against their collateral, which consists of a first priority security interest in our outstanding shares of common stock and the capital stock of our material subsidiaries. If the indebtedness under the existing debt agreements were to be accelerated, our assets may not be sufficient to repay such indebtedness in full.

**If we are unable to attract and retain key management and personnel, we may become unable to operate our business effectively.**

Our future success depends to a significant degree upon the continued contributions of our management, including Messrs. Lanza and LaPenta, and our ability to attract and retain other highly qualified management and technical personnel. We do not maintain any key person life insurance

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policies for members of our management. At February 27, 2004, Messrs. Lanza and LaPenta beneficially owned, in the aggregate, 9.6% of the outstanding common stock of L-3 Communications Holdings. We have an employment agreement with Mr. Lanza. We face competition for management and technical personnel from other companies and organizations. Failure to attract and retain such personnel would damage our prospects.

**Environmental laws and regulation may subject us to significant liability.**

Our operations are subject to various environmental laws and regulations within the countries in which we operate relating to the discharge, storage, treatment, handling, disposal and remediation of certain materials, substances and wastes used in our operations.

New laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements may require us to incur a significant amount of additional costs in the future and could decrease the amount of cash flow available to us for other purposes, including capital expenditures, research and development and other investments.

**Termination of our backlog of orders could negatively impact our sales.**

We currently have a backlog of orders, primarily under contracts with the U.S. Government. Our total funded backlog was \$3,893.3 million at December 31, 2003. The U.S. Government may unilaterally modify or terminate its contracts. Accordingly, most of our backlog could be modified or terminated by the U.S. Government and, therefore, may not result in sales.

**Risks Related to the Notes**

**We cannot assure you that an active trading market will develop for the exchange notes, which may reduce their market price.**

We are offering the exchange notes to the holders of the outstanding notes. The outstanding notes were offered and sold in December 2003 to a small number of institutional investors and are eligible for trading in the Private Offerings, Resale and Trading through Automatic Linkages (PORTAL) Market.

We do not intend to apply for a listing of the exchange notes on a securities exchange or on any automated dealer quotation system. There is currently no established market for the exchange notes and we cannot assure you as to the liquidity of markets that may develop for the exchange notes, your ability to sell the exchange notes or the price at which you would be able to sell the exchange notes. If such markets were to exist, the exchange notes could trade at prices that may be lower than their principal amount or purchase price depending on many factors, including prevailing interest rates and the markets for similar securities. The initial purchasers have advised us that they currently intend to make a market with respect to the exchange notes. However, the initial purchasers are not obligated to do so, and any market making with respect to the exchange notes may be discontinued at any time without notice. In addition, such market making activity may be limited during the pendency of the exchange offer or the effectiveness of a shelf registration statement in lieu thereof.

The liquidity of, and trading market for, the exchange notes also may be adversely affected by general declines in the market for similar securities. Such a decline may adversely affect such liquidity and trading markets independent of our financial performance and prospects.

**The notes are subordinated to all our existing and future senior indebtedness, which may inhibit our ability to repay you.**

The notes are contractually subordinated in right of payment to our existing and future senior indebtedness. At December 31, 2003, we had no outstanding senior debt, and had the ability to borrow up to \$665.9 million (after reductions for outstanding letters of credit of \$84.1 million) under our senior credit facilities, all of which, if borrowed or drawn upon, would be senior debt.

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Any incurrence of additional indebtedness may materially adversely impact our ability to service our debt, including the notes. Due to the subordination provisions of our senior subordinated indebtedness, including the notes, in the event of our insolvency, funds that would otherwise be used to pay the holders of the notes and other senior subordinated indebtedness will be used to pay the holders of senior indebtedness to the extent necessary to pay the senior indebtedness in full. As a result of these payments, general creditors may recover less, ratably, than the holders of senior indebtedness and the general creditors may recover more, ratably, than the holders of the notes or other subordinated indebtedness. In addition, the holders of senior indebtedness may, under certain circumstances, restrict or prohibit us from making payments on the notes.

**The terms of our indebtedness could restrict our flexibility and limit our ability to satisfy obligations under the notes.**

We are subject to operational and financial covenants and other restrictions contained in the bank loan documents evidencing our senior indebtedness and the indentures evidencing our senior subordinated notes. These covenants could limit our operational flexibility and restrict our ability to borrow additional funds, if necessary, to finance operations and to make principal and interest payments on the notes. Additionally, failure to comply with these operational and financial covenants could result in an event of default under the terms of this indebtedness which, if not cured or waived, could result in this indebtedness becoming due and payable. The effect of these covenants, or our failure to comply with them, could have a material adverse effect on our business, financial condition and results of operations.

**Our ability to repurchase notes with cash upon a change of control may be limited.**

In specific circumstances involving a change of control, you may require us to repurchase some or all of your notes. We may not have sufficient financial resources at such time or be able to arrange financing to pay the repurchase price of the notes in cash. Our ability to repurchase the notes in such event may be limited by law, by our indentures, by the terms of other agreements relating to our senior indebtedness and by such indebtedness and agreements as may be entered into, replaced, supplemented or amended from time to time. We may be required to refinance our senior indebtedness in order to make such payments. We may not have the financial ability to repurchase the notes in cash if payment for our senior indebtedness is accelerated.

**The guarantees may be unenforceable due to fraudulent conveyance statutes, and accordingly, you could have no claim against the guarantors.**

Although laws differ among various jurisdictions, a court could, under fraudulent conveyance laws, further subordinate or avoid the guarantees if it found that the guarantees were incurred with actual intent to hinder,

delay or defraud creditors, or the guarantor did not receive fair consideration or reasonably equivalent value for the guarantees and that the guarantor was any of the following:

- insolvent or rendered insolvent because of the guarantees;
- engaged in a business or transaction for which its remaining assets constituted unreasonably small capital; or
- intended to incur, or believed that it would incur, debts beyond its ability to pay at maturity.

If a court voided a guaranty by one or more of our subsidiaries as the result of a fraudulent conveyance, or held it unenforceable for any other reason, holders of the notes would cease to have a claim against the subsidiary based on the guaranty and would solely be creditors of L-3 Communications Corporation and any guarantor whose guarantee was not similarly held unenforceable.

**Not all of our subsidiaries are guarantors, and your claims will be subordinated to all of the creditors of the non-guarantor subsidiaries.**

Many, but not all, of our direct and indirect subsidiaries will guarantee the notes. In the event of a bankruptcy, liquidation or reorganization of any of the non-guarantor subsidiaries, holders of their

indebtedness and their trade creditors will generally be entitled to payment of their claims from the assets of those non-guarantor subsidiaries before any assets of the non-guarantor subsidiaries are made available for distribution to us. Assuming the exchange of the outstanding notes for the exchange notes was completed on December 31, 2003, the exchange notes would have been effectively junior to \$178.0 million of indebtedness and other liabilities (including trade payables) of these non-guarantor subsidiaries. The non-guarantor subsidiaries generated 8.8% of our sales, generated earnings of \$22.1 million and used cash in operating activities of \$4.5 million for the year ended December 31, 2003. The non-guarantor subsidiaries held 12.8% of our consolidated assets at December 31, 2003.

**The guarantees will be subordinated to the senior debt of the guarantors.**

The guarantees are subordinated to all existing and future senior debt of the guarantors, which shall consist of all of the indebtedness and other liabilities of the guarantors designated as senior, including guarantees of borrowings under the senior credit facilities. The guarantees issued in connection with the offering of the outstanding notes and the exchange of the exchange notes will be *pari passu* with the guarantees of the senior subordinated notes sold by L-3 Communications Corporation in December 1998, June 2002 and May 2003, and with the guarantees, including the guarantee by L-3 Communications Corporation, of the 4% Senior Subordinated Convertible Contingent Notes due 2011 sold by L-3 Communications Holdings in October 2001. At December 31, 2003, we had no senior debt outstanding under our senior credit facilities, but any future amounts outstanding under those facilities would be guaranteed by our subsidiaries on a senior basis. At December 31, 2003, L-3 Communications Corporation had availability of \$665.9 million (after reduction for outstanding letters of credit of \$84.1 million) under its senior credit facilities, all of which, if borrowed or drawn upon, would be senior debt. Any right of L-3 Communications Corporation to receive the assets of any of its subsidiaries upon their liquidation or reorganization (and the consequent right of the holders of the notes to participate in those assets) will be subject to the claims of that subsidiary's creditors, including trade creditors. To the extent that L-3 Communications Corporation is recognized as a creditor of that subsidiary, L-3 Communications Corporation may have such claim, but it would still be subordinate to any security interests in the assets of that subsidiary and any indebtedness and other liabilities of that subsidiary senior to that held by L-3 Communications Corporation.

**This prospectus contains forward-looking statements, which may not be correct.**

Certain of the matters discussed concerning our operations, cash flows, financial position, economic performance and financial condition, including in particular, the likelihood of our success in developing and expanding our business and the realization of sales from backlog, include forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Statements that are predictive in nature, that depend upon or refer to future events or conditions or that include words such as "expects," "anticipates," "intends," "plans," "believes," "estimates" and similar expressions are forward-looking statements. Although we believe that these statements are based upon reasonable assumptions, we can give no assurance that these predictions will be achieved.

## FORWARD-LOOKING STATEMENTS

Our disclosure and analysis in this prospectus contain some forward-looking statements. Certain of the matters discussed concerning our operations, cash flows, financial position, economic performance, and financial condition, including in particular, the likelihood of our success in developing and expanding our business and the realization of sales from backlog, include forward-looking statements within the meaning of section 27A of the Securities Act and Section 21E of the Exchange Act.

Statements that are predictive in nature, that depend upon or refer to events or conditions or that include words such as "expects," "anticipates," "intends," "plans," "believes," "estimates" and similar expressions are forward-looking statements. Although we believe that these statements are based upon reasonable assumptions, including projections of orders, sales, operating margins, earnings, cash flow, research and development costs, working capital, capital expenditures and other projections, they are subject to several risks and uncertainties, and therefore, we can give no assurance that these statements will be achieved. Such statements will also be influenced by factors such as:

- our dependence on the defense industry and the business risks peculiar to that industry, including changing priorities or reductions in the U.S. Government defense budget;
- our reliance on contracts with a limited number of agencies of, or contractors to, the U.S. Government and the possibility of termination of government contracts by unilateral government action or for failure to perform;
- our ability to obtain future government contracts on a timely basis;

- the availability of government funding and changes in customer requirements for our products and services;
- our significant amount of debt and the restrictions contained in our debt agreements;
- our ability to continue to retain and train our existing employees and to recruit and hire new qualified and skilled employees;
- our collective bargaining agreements and our ability to favorably resolve labor disputes should they arise;
- the business and economic conditions in the markets we operate in, including those for the commercial aviation and communications markets;
- economic conditions, competitive environment, international business and political conditions, timing of international awards and contracts;
- our extensive use of fixed-price type contracts as compared to cost-reimbursable type and time-and-material type contracts;
- our ability to identify future acquisition candidates or to integrate acquired operations;
- the rapid change of technology and high level of competition in the communication equipment industry;
- our introduction of new products into commercial markets or our investments in commercial products or companies;
- pension, environmental or legal matters or proceedings and various other market, competition and industry factors, many of which are beyond our control; and
- the fair values of our assets, including identifiable intangible assets and the estimated fair value of the goodwill balances for our reporting units, which can be impaired or reduced by the other factors discussed above.

Readers of this prospectus are cautioned that our forward-looking statements are not guarantees of future performance and the actual results or developments may differ materially from the expectations expressed in the forward-looking statements.

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As for the forward-looking statements that relate to future financial results and other projections, actual results will be different due to the inherent uncertainties of estimates, forecasts and projections and may be better or worse than projected. Given these uncertainties, you should not place any reliance on these forward-looking statements. These forward-looking statements also represent our estimates and assumptions only as of the date that they were made. We expressly disclaim a duty to provide updates to these forward-looking statements, and the estimates and assumptions associated with them, after the date of this prospectus to reflect events or changes or circumstances or changes in expectations or the occurrence of anticipated events.

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## USE OF PROCEEDS

We will not receive any cash proceeds from the issuance of the exchange notes. In consideration for issuing the exchange notes as contemplated in this prospectus, we will receive in exchange a like principal amount of outstanding notes, the terms of which are identical in all material respects to the exchange notes. The outstanding notes surrendered in exchange for the exchange notes will be retired and canceled and cannot be reissued. Accordingly, issuance of the exchange notes will not result in any change in our capitalization.

We received net proceeds of approximately \$390.0 million from the offering of the outstanding notes, after deducting the discounts, commissions and estimated expenses payable by us.

The net proceeds from the offering of the outstanding notes were used to: (1) repay approximately \$275.0 million outstanding under our senior credit facilities; (2) increase our cash and cash equivalents, which will be used for general corporate purposes, including business acquisitions; and (3) to redeem the \$0.2 million principal amount of L-3 Holdings' 5.25% Convertible Senior Subordinated Notes due 2009 that had not previously been converted by the holders thereof into L-3 Holdings' common stock.

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## CAPITALIZATION

The following table sets forth our capitalization: (1) on an actual basis at December 31, 2003 and (2) as adjusted for the conversion of L-3 Holdings' 5.25% Convertible Senior Subordinated Notes due 2009 into common stock of L-3 Holdings and the subsequent redemption of all such notes that were not converted.

	<u>As of December 31, 2003</u>	
	<u>Actual</u>	<u>As Adjusted</u>
	<i>(in millions)</i>	
Cash and cash equivalents	<u>\$ 134.9</u>	<u>\$ 134.7</u>
Long-term debt:		
Senior credit facilities <sup>(1)</sup>	\$ —	\$ —
8% Senior Subordinated Notes due 2008	200.0	200.0



7 5/8% Senior Subordinated Notes due 2012	750.0	750.0
6 1/8% Senior Subordinated Notes due 2013	400.0	400.0
6 1/8% Senior Subordinated Notes due 2014	400.0	400.0
5¼% Convertible Senior Subordinated Notes due 2009	298.4	—
4% Senior Subordinated Convertible Contingent Debt Securities due 2011 <sup>(2)</sup>	420.0	420.0
Principal amount of long-term debt	2,468.4	2,170.0
Less: Unamortized discounts	(11.1)	(11.1)
Total debt	<u>\$2,457.3</u>	<u>\$2,158.9</u>
Minority interest	76.2	76.2
Shareholders' equity:		
Common stock	1,893.5	2,185.8
Retained earnings	757.4	757.4
Unearned compensation	(3.6)	(3.6)
Accumulated other comprehensive loss	(72.8)	(72.8)
Total shareholders' equity	<u>2,574.5</u>	<u>2,866.8</u>
Total capitalization	<u>\$5,108.0</u>	<u>\$5,101.9</u>

(1) At December 31, 2003, our availability under the senior credit facilities at any given time was \$750.0 million (subject to compliance with covenants), less the amount of outstanding borrowings and outstanding letters of credit (which amounted to zero for outstanding borrowings and \$84.1 million for outstanding letters of credit at December 31, 2003).

(2) The 4% Senior Subordinated Convertible Contingent Debt Securities (CODES) due September 15, 2011 were issued by L-3 Holdings in October 2001. The CODES are, subject to adjustment, convertible into 7,804,878 shares of common stock of L-3 Holdings and are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally by L-3 Communications Corporation and substantially all of L-3 Communications Corporation's domestic restricted subsidiaries.

## SELECTED FINANCIAL DATA

We derived the selected financial data presented below at December 31, 2003 and 2002 and for each of the three years in the period ended December 31, 2003 from our audited consolidated financial statements included elsewhere herein. We derived the selected financial data presented below for the years ended December 31, 2000 and 1999 and at December 31, 2001, 2000 and 1999 from our audited consolidated financial statements not included elsewhere herein. You should read the selected financial data together with our "Management's Discussion and Analysis of Results of Operations and Financial Condition" and our audited consolidated financial statements. The results of operations are impacted significantly by our acquisitions.

	Year Ended December 31,				
	2003	2002	2001 (in millions)	2000	1999
<b>Statement of Operations Data:</b>					
Sales	<u>\$5,061.6</u>	<u>\$4,011.2</u>	<u>\$2,347.4</u>	<u>\$1,910.1</u>	<u>\$1,405.5</u>
Operating income	581.0	454.0	275.3 <sup>(1)</sup>	222.7 <sup>(1)</sup>	150.5 <sup>(1)</sup>
Interest and other income	0.2	5.0	1.8	4.4	5.5
Interest expense	132.7	122.5	86.4	93.0	60.6
Loss on retirement of debt	11.2	16.2	—	—	—
Minority interest	3.5	6.2	4.4	—	—
Provision for income taxes	<u>156.2</u>	<u>111.6</u>	<u>70.8</u>	<u>51.4</u>	<u>36.7</u>
Income before cumulative effect of a change in accounting principle	277.6	202.5	115.5	82.7	58.7
Cumulative effect of a change in accounting principle	—	(24.4)	—	—	—
Net income	<u>\$ 277.6</u>	<u>\$ 178.1</u>	<u>\$ 115.5</u> <sup>(2)</sup>	<u>\$ 82.7</u> <sup>(2)</sup>	<u>\$ 58.7</u> <sup>(2)</sup>
<b>Balance Sheet Data (at period end):</b>					
Working capital	\$1,013.5	\$ 929.4	\$ 717.8	\$ 360.9	\$ 255.5
Total assets	6,492.9	5,242.3	3,339.2	2,463.5	1,628.7
Long-term debt	2,457.3	1,847.8	1,315.3	1,095.0	605.0
Minority interest	76.2	73.2	69.9	—	—
Shareholders' equity	2,574.5	2,202.2	1,213.9	692.6	583.2

(1) Effective January 1, 2002, we ceased amortizing goodwill. Goodwill amortization expense recorded in years prior to 2002 was \$42.3 million in 2001, \$35.0 million in 2000 and \$20.6 million in 1999.

(2) Net income, as adjusted to exclude goodwill amortization expense, net of income tax expense, was \$149.4 million in 2001, \$112.3 million in 2000 and \$76.2 million in 1999.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION

### Overview

We are a leading supplier of a broad range of products used in a substantial number of aerospace and defense platforms. We also are a major supplier of subsystems on many platforms, including those for secure communication networks, mobile satellite communications, information security systems, shipboard communications, naval power systems, fuzes and safety and arming devices for missiles and munitions, microwave assemblies for radars and missiles, telemetry and instrumentation, and airport security systems. We also are a prime system contractor for aircraft modernization and maintenance, ISR collection platforms, simulation and training, and government systems support services. The substantial majority of our sales are generated using written contractual arrangements. The contracts require us to design, develop, manufacture, modify, test and integrate complex aerospace and electronic equipment and to provide related engineering and

technical services according to specifications provided by our customers. Our primary customer is the DoD. For the year ended December 31, 2003, sales directly to the DoD and indirect sales to the DoD through its prime contractors and subcontractors provided \$3,510 million, or 69.3% of our consolidated sales. Our other customers include certain U.S. Government intelligence agencies, major aerospace and defense contractors, foreign governments, commercial customers and certain other U.S. federal, state and local government agencies.

Our objective is to grow our sales organically and through acquisitions and to improve our profitability. To achieve these objectives we intend to expand our share of existing programs and participate in new programs by leveraging the strong relationships that we have developed with the DoD, several other U.S. Government agencies and all of the major U.S. defense prime contractors. We expect to continue to benefit from the outsourcing of subsystems, components and products by prime contractors. We plan to continue to align our research and development, manufacturing and new business efforts to complement our customers' requirements and to provide state-of-the-art products. We plan to maintain a diversified and broad business mix with limited reliance on any single program, a favorable balance of cost-reimbursable and fixed-price contracts, a significant follow-on business and an attractive customer profile. A significant portion of our growth strategy is to selectively acquire companies or assets that complement and enhance our existing businesses. See "Acquisitions" below.

We have four reportable segments: (1) Secure Communications & ISR; (2) Training, Simulation & Support Services; (3) Aviation Products & Aircraft Modernization; and (4) Specialized Products. Our Secure Communications & ISR segment provides products and services for the global ISR market as well as secure, high data rate communications systems and equipment primarily for military and other U.S. Government reconnaissance and surveillance applications. We believe our systems and products are critical elements for a substantial number of major communication, command and control, intelligence gathering and space systems. Our systems and products are used to connect a variety of airborne, space, ground and sea-based communication systems and are used in the transmission, processing, recording, monitoring and dissemination functions of these communication systems. Our Training, Simulation & Support Services segment produces training systems and related support services, and provides a wide range of engineering development services and integration support, a full range of teaching, training, logistics and communication software support services, crisis management software and custom ballistic targets. Our Aviation Products & Aircraft Modernization segment provides our TCAS products, cockpit voice, flight data and cruise ship hardened voyage recorders, ruggedized custom displays and specialized aircraft modernization, upgrade and maintenance services. Our Specialized Products segment provides naval warfare products, telemetry, instrumentation, space and navigation products, premium fuzing products, security and surveillance systems, training devices and motion simulators, electro-optic surveillance systems, ruggedized commercial off-the-shelf technology and microwave components.

In recent years, domestic and geo-political developments have significantly affected the markets for defense systems, products and services. The events of September 11, 2001 created uncertainty and

exposed vulnerabilities in the security and the overall defense of the U.S. homeland. In the conclusions of the U.S. Quadrennial Defense Review (QDR), completed during 2001, there was a fundamental and philosophical shift in focus from a "threat-based" model to one that emphasizes the capabilities needed to defeat a full spectrum of adversaries. Transforming the nation's defense posture to a capabilities-based approach involves creating the ability for a more flexible response, with greater force mobility, stronger space capabilities, missile defense, improved and network-centric communications and information systems security and an increased emphasis on homeland defense. The Afghanistan and Iraq wars have confirmed several of the conclusions reached in the QDR and have also resulted in increased DoD spending, primarily for war operations.

The fiscal year 2004 (fiscal year beginning October 1, 2003, or FY 2004) DoD budget, excluding the Iraq and Afghanistan war supplemental appropriations, was \$375.2 billion, an increase of 2.9% over the fiscal year 2003 (FY 2003) DoD budget. On February 2, 2004, the Bush Administration released its current Future Year Defense Plan (FYDP) for the fiscal year 2005 (FY 2005) to fiscal year 2009 (FY 2009), and its DoD budget request for FY 2005 of \$401.7 billion. The FY 2005 budget request indicates an increase of 7.1% over the FY 2004 budget. We believe the DoD investment account, which is comprised of the procurement and research, development, test and evaluation (RDT&E) components of the DoD budget, is a better indicator of DoD spending applicable to defense contractors than the total DoD budget because it generally represents the amounts that are expended for military hardware, services and technology. The investment account increased 10.1% in FY 2004 over FY 2003, and the current FYDP indicates a compounded annual growth rate of 5.8% from FY 2004 to FY 2009. However, the DoD investment account is not the only indicator of revenue growth potential for the defense industry, because (1) the DoD budget and DoD spending for all defense weapons platforms and programs do not grow or decline at the same rate, (2) there are timing differences between DoD budget authority and actual DoD spending, (3) an individual defense contractor's revenue growth potential will be affected by its participation on the various weapons platforms and programs, including its individual performance on specific programs, and (4) changing military needs and program performance can affect whether specific programs receive continued funding or whether they are cancelled. Additionally, the operations and maintenance (O&M) account of the DoD budget, which is \$127.6 billion for FY 2004, represents another source of funding applicable to defense contractors. We estimate that \$20 billion to \$25 billion of the O&M account is expended annually as awards to defense contractors. The table below presents a summary of the current FYDP for the total DoD budget and investment account, including actual amounts for FY 2003 and for FY 2004.

	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY04- FY09 CAGR</u>
				(\$ in billions)				
Total DoD budget <sup>(1)</sup>	<u>\$364.6</u>	<u>\$375.2</u>	<u>\$401.7</u>	<u>\$422.6</u>	<u>\$443.8</u>	<u>\$465.6</u>	<u>\$487.6</u>	5.4%
DoD Investment account <sup>(1)</sup>	<u>\$126.8</u>	<u>\$139.6</u>	<u>\$143.8</u>	<u>\$151.4</u>	<u>\$161.3</u>	<u>\$176.7</u>	<u>\$184.7</u>	5.8%

<sup>(1)</sup> Budget amounts exclude the FY 2003 and FY 2004 supplemental appropriations for the war operations in Iraq and Afghanistan.

Over the past several years, the DoD budgets have experienced increased focus on command, control, communications, intelligence, surveillance and reconnaissance (C<sup>3</sup>ISR), precision-guided weapons, unmanned aerial vehicles (UAVs), network-centric communications, Special Operations Forces (SOF) and missile defense. In addition, the DoD philosophy has focused on a transformation strategy that balances modernization and recapitalization (or upgrading existing platforms) while enhancing readiness and joint operations. As a result, defense budget program allocations continue to favor advanced information technologies related to command, control and communications (C<sup>3</sup>) and ISR. Furthermore, the DoD's emphasis on system interoperability, force multipliers and providing battlefield commanders with real-time data is increasing the electronic content of nearly all major military procurement and research programs. As a result, it is expected that the DoD's budget for communications and defense electronics will continue to grow. We believe L-3 is well positioned to benefit from the expected increased spending in those areas. While there is no assurance that the

requested DoD budget increases, particularly those for the investment account, will continue to be approved by Congress, the current outlook is one of increased DoD spending, which we believe will continue to positively affect L-3's future orders and sales and favorably affect our future operating profits and cash flows because of increased sale volumes. Conversely, a decline in the budget for the DoD investment account would generally have a negative affect on future orders, sales, operating profits and cash flows of defense contractors, including L-3, depending on the weapons platforms and programs affected by such budget reductions. However, L-3 believes that its businesses are significant participants in the sectors of the DoD investment account and DoD O&M account that are the highest priority for U.S. military transformation, and we believe that they will continue to be, even in a declining DoD budget environment.

In addition, increased emphasis on U.S. homeland security may increase demand for our capabilities in areas such as security systems, information security, crisis management, preparedness and prevention services, and civilian security operations.

All of our U.S. Government contracts are subject to audit and various cost controls, and include standard provisions for termination for the convenience of the U.S. Government. Multiyear U.S. Government contracts and related orders are subject to cancellation if funds for contract performance for any subsequent year become unavailable. Foreign government contracts generally include comparable provisions relating to termination for the convenience of the relevant foreign government.

## Acquisitions

A significant component of our growth strategy has been to enhance our existing product base through selective acquisitions that will add new products in areas that complement our present technologies. We intend to continue acquiring select smaller publicly and privately owned companies, as well as non-core aerospace and defense businesses of larger companies, that (1) exhibit significant market position(s) in their business area(s), (2) offer products that complement and/or extend our product offerings, and (3) display positive sales, earnings and cash flow prospects.

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The table below summarizes the more significant acquisitions that we have completed during 2001, 2002 and 2003. During 2003 we used cash of \$1,014.4 million to acquire businesses. See Statement of Cash Flows—Investing Activities below.

Acquired Business	Date Acquired	Purchase Price <sup>(1)</sup> (in millions)
KDI Precision Products	May 4, 2001	\$ 78.9
EER Systems	May 31, 2001	\$ 124.4
Spar Aerospace Limited	November 23, 2001	\$ 146.8
Emergent Government Services Group	November 30, 2001	\$ 39.0 <sup>(2)</sup>
BT Fuze Products	December 19, 2001	\$ 51.1
SY Technology (SY)	December 31, 2001	\$ 61.5
Aircraft Integration Systems (AIS) business of Raytheon Company	March 8, 2002	\$1,148.7 <sup>(3)</sup>
Detection Systems	June 14, 2002	\$ 110.0 <sup>(4)</sup>
Telos Corporation (a California Corporation)	July 19, 2002	\$ 22.3
ComCept, Inc.	July 31, 2002	\$ 30.1 <sup>(5)</sup>
Technology, Management and Analysis Corporation (TMA)	September 23, 2002	\$ 53.4 <sup>(6)(7)</sup>
Electron Devices and Displays-Navigation Systems – San Diego businesses of Northrop Grumman	October 25, 2002	\$ 135.6 <sup>(8)</sup>
Wolf Coach, Inc.	October 31, 2002	\$ 5.4 <sup>(9)</sup>
International Microwave Corporation (IMC)	November 8, 2002	\$ 41.1
Westwood Corporation	November 13, 2002	\$ 22.1
Wescam Inc.	November 21, 2002	\$ 124.3
Ship Analytics, Inc.	December 19, 2002	\$ 18.0 <sup>(10)</sup>
Avionics Systems business of Goodrich Corporation	March 28, 2003	\$ 188.7 <sup>(11)</sup>
Aeromet, Inc.	May 30, 2003	\$ 17.5 <sup>(6)</sup>
Klein Associates Inc.	September 30, 2003	\$ 30.0 <sup>(6)</sup>
Military Aviation Services business of Bombardier, Inc. (MAS)	October 31, 2003	\$ 87.4 <sup>(6)</sup>
Vertex Aerospace LLC (Vertex)	December 1, 2003	\$ 650.0 <sup>(6)(12)</sup>
Certain defense and aerospace assets of IPICOM, Inc.	December 10, 2003	\$ 27.5 <sup>(6)</sup>

(1) The purchase price represents the contractual consideration for the acquired business excluding adjustments for net cash acquired and acquisition costs.

(2) Following the acquisition, we changed Emergent Government Services Group's name to L-3 Communications Analytics.

(3) Includes \$18.7 million related to additional assets contributed by Raytheon Company (Raytheon) to AIS. Following the acquisition, we changed AIS's name to L-3 Communications Integrated Systems (IS). The purchase price is subject to adjustment based on actual closing date tangible net assets, as discussed in Note 3 to the consolidated financial statements.

(4) Includes a \$10.0 million preliminary purchase price adjustment. The purchase price is subject to further adjustment based on actual closing date net working capital.

(5) The purchase price consists of \$14.5 million of cash and 229,494 shares of L-3 Holdings common stock valued at \$10.6 million, which were paid on the closing date of the acquisition, plus an additional 109,514 shares of L-3 Holdings common stock valued at \$5.0 million issued in July 2003, which was based on Concept's financial performance for the fiscal year ended June 30, 2003. The purchase price excludes additional purchase price in the form of L-3 Holdings common stock not to exceed 109,544 shares, which is contingent upon the financial performance of ComCept for the fiscal year ending June 30, 2004.

(6) The purchase price is subject to adjustment based on actual closing date net assets or net working capital of the acquired business.

(7) Following the acquisition, we changed TMA's name to L-3 Communications TMA Corporation.

(8) Following the acquisition, we changed the name of the Displays-Navigation Systems – San Diego's business to L-3 Ruggedized Command & Control.

- (9) Excludes additional purchase price, not to exceed \$2.7 million, which is contingent upon the financial performance of Wolf Coach for the years ending December 31, 2004 and 2005.
- (10) Excludes additional purchase price, not to exceed \$9.0 million, which is contingent upon the financial performance of Ship Analytics for the years ending December 31, 2004 and 2005.
- (11) Following the acquisition, we changed the name of Avionics Systems to L-3 Communications Avionics Systems, Inc.
- (12) Excludes a \$3.3 million purchase price adjustment paid on the closing date.

Additionally, during 2001, 2002 and 2003 we purchased other businesses, which individually and in the aggregate were not material to our consolidated results of operations, financial position or cash flows during the year acquired. The aggregate purchase price for these businesses was \$24.0 million (all of which was paid in cash), and the increase to our sales from them for 2003 compared to 2002 was \$2.5 million and for 2002 compared to 2001 was \$14.5 million.

All of our acquisitions have been accounted for as purchase business combinations and are included in our consolidated results of operations from their effective dates of acquisition.

We regularly evaluate potential acquisitions and joint venture transactions, but we have not entered into any other agreements with respect to any material transactions at this time.

The table below presents L-3's contractual contingent commitments for additional purchase price or earnouts payable in cash for certain of L-3's acquisitions.

	2004	2005	2006	Total
<b>Acquired Businesses:</b>				
Coleman Research Corporation	\$2.3	\$ —	\$ —	\$ 2.3
Wolf Coach, Inc.	1.2	1.4	1.3	3.9
Ship Analytics, Inc.	4.5	4.5	4.5	13.5
SY Technology	1.5	—	—	1.5
Total	<u>\$9.5</u>	<u>\$5.9</u>	<u>\$5.8</u>	<u>\$21.2</u>

These earnouts represent potential additional purchase price amounts that are contingent upon the post-acquisition financial performance of the acquired business. The amounts payable in 2004 have been finalized as of December 31, 2003, and, accordingly, have been included in other current liabilities, with a corresponding increase to goodwill at December 31, 2003. The contingent amounts for periods after 2004 will be recorded as an increase to goodwill for the acquisition if they become payable. All earnout payments are reported as cash paid for acquisition of businesses within investing activities on the statement of cash flows in the period of the payment.

#### Critical Accounting Policies

Our significant accounting policies are described in Note 2 to the consolidated financial statements. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and costs and expenses during the reporting period. The most significant of these estimates and assumptions relate to (1) contract revenues and profit recognition, (2) market values for inventories reported at lower of cost or market, (3) pension and postretirement benefit obligations, (4) valuation of long-lived assets, including identifiable intangible assets and goodwill, (5) income taxes, including the valuations of deferred tax assets, (6) litigation reserves, and (7) environmental obligations. Actual amounts will differ from these estimates. We believe that critical accounting estimates have the following attributes: (1) we are required to make assumptions about matters that are uncertain at the time of the estimate; and (2) we could reasonably have used different estimates, or (3) changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations. We believe the following critical accounting policies contain the more significant judgements and estimates used in the preparation of our financial statements.

**Contract Revenue Recognition and Contract Estimates.** The substantial majority of our sales require us to design, develop, manufacture, modify, test and integrate complex aerospace and electronic equipment, and to provide related engineering and technical services according to specifications provided by our customers. These sales are transacted using written contractual arrangements or contracts, which are generally either fixed price, cost-reimbursable or time and material. These contracts are within the scope of the American Institute of Certified Public Accountants Statement of Position 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts* (SOP 81-1) and Accounting Research Bulletin No. 45, *Long-term Construction-Type Contracts* (ARB 45). In addition, cost-reimbursable contracts are also specifically within the scope of Accounting Research Bulletin No. 43, Chapter 11, Section A, *Government Contracts, Cost-Plus-Fixed Fee Contracts* (ARB 43). Substantially all of our cost-reimbursable and time and material contracts are with the U.S. Government, primarily with the Department of Defense. Certain of our contracts with the U.S. Government are multi-year contracts that are funded annually by the customer, and sales on these multi-year contracts are based on amounts appropriated (funded) by the U.S. Government.

Sales and profits on fixed-price contracts are recognized using percentage-of-completion methods of accounting. Sales and profits on fixed-price production contracts whose units are produced and delivered in a continuous or sequential process are recorded as units are delivered based on their selling prices (the "units-of-delivery" method). Sales and profits on other fixed-price contracts are recorded based on the ratio of total actual incurred costs to date to the total estimated costs at completion of the contract for each contract (the "cost-to-cost" method). Under the percentage-of-completion methods of accounting, a single estimated total profit margin is used to recognize profit for each contract over its entire period of performance, which can exceed one year.

Accounting for the sales on a fixed-price contract requires the preparation of estimates of (1) the total contract revenue, (2) the total costs at completion, which is equal to the sum of the actual incurred costs to date on the contract and the estimated costs to complete the contract's statement of work, and (3) the measurement of progress towards completion. The estimated profit or loss at completion on a contract is equal to the difference between the total estimated contract revenue and the total estimated cost at completion. Under the units-of-delivery percentage-of-completion method, sales on a fixed-price contract are recorded as the units are delivered during the period at an amount equal to the contractual selling price of those units. Under the cost-to-cost percentage-of-completion method, sales on a fixed-price contract are recorded at amounts equal to the ratio of

cumulative costs incurred and total estimated costs at completion, multiplied by (i) the total estimated contract revenue, less (ii) the cumulative sales recognized in prior periods. The profit recorded on a contract in any period using either the units-of-delivery method or cost-to-cost method is equal to (i) the current estimated total profit margin multiplied by the cumulative sales recognized, less (ii) the amount of cumulative profit previously recorded for the contract. In the case of a contract for which the total estimated costs exceed the total estimated revenues, a loss arises, and a provision for the entire loss is recorded in the period that it becomes evident, and the unrecoverable costs on a loss contract that are expected to be incurred in future periods are recorded as a component of other current liabilities entitled "Estimated cost in excess of estimated contract value to complete contracts in process." Adjustments to original estimates for a contract's revenue, estimated costs at completion and estimated profit or loss are often required as work progresses under a contract, as experience is gained and as more information is obtained, even though the scope of work required under the contract may not change, or if contract modifications occur.

Sales on cost-reimbursable type contracts are recognized as allowable costs are incurred on the contract and become billable to the customer, at an amount equal to the allowable costs plus the estimated profit on those costs. The estimated profit on a cost-reimbursable contract is generally fixed or variable based on the contract fee arrangement. Sales on time-and-material type contracts are recognized at an amount equal to the direct labor hours incurred multiplied by the contractual fixed rate per hour, plus the actual costs of material and other direct non-labor costs. On a time-and-material contract the fixed hourly rates include amounts for the cost of direct labor, indirect

contract costs and profit. Cost-reimbursable or time-and-material contracts generally contain less estimation risks than fixed-price contracts.

The impact of revisions in profit estimates for all types of contracts are recognized on a cumulative catch-up basis in the period in which the revisions are made. Provisions for anticipated losses on contracts are recorded in the period in which they become evident. Amounts representing contract change orders or claims are included in sales only when they can be reliably estimated and their realization is reasonably assured. The revisions in contract estimates, if significant, can materially affect our results of operations and cash flows, as well as our valuations of contracts in process.

For the year ended December 31, 2003: (1) sales on fixed-price contracts recognized using the units-of-delivery percentage-of-completion method accounted for approximately 20.8% of total sales, (2) sales on fixed-price contracts recognized using the cost-to-cost percentage of completion method accounted for approximately 30.6% of total sales, (3) sales on cost-reimbursable contracts accounted for approximately 29.8% of total sales, and (4) time-and-material contracts accounted for approximately 7.1% of total sales. The remaining 11.7% of sales for the year ended December 31, 2003, pertain to fixed-price revenue arrangements principally with commercial customers, which are not within the scope of SOP 81-1, ARB 43 or ARB 45 and are recorded as products are delivered or when services are performed, in accordance with SEC SAB No. 104, *Revenue Recognition* (SAB 104).

*Goodwill and Identifiable Intangible Assets.* In accordance with Statement of Financial Accounting Standards (SFAS) No. 141, *Business Combinations*, L-3 allocates the cost of its acquired businesses (commonly referred to as the purchase price allocation) to the assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. As part of the purchase price allocations for L-3's acquired businesses, identifiable intangible assets are recognized as assets apart from goodwill if they arise from contractual or other legal rights, or if they are capable of being separated or divided from the acquired business and sold, transferred, licensed, rented or exchanged, unless the intangible asset is comprised of the assembled workforce of the acquired business.

Generally, the substantial majority of the intangible assets from the businesses that L-3 acquires are derived from the intellectual capital of the management, administrative, scientific, engineering and technical employees of the acquired businesses. The success of L-3's businesses is primarily dependent on the management, contracting, engineering and technical skills and knowledge of L-3's employees, rather than productive capital (machinery and equipment). Generally, patents, trademarks and licenses are not material to our acquired businesses. Furthermore, our U.S. Government contracts generally permit other companies to use our patents in most domestic work performed by such other companies for the U.S. Government. Therefore, the substantial majority of the intangible assets for L-3's acquired businesses are recognized as goodwill.

The values assigned to acquired identifiable intangible assets for customer relationships and technology are determined, as of the date of acquisition, based on estimates and judgements regarding expectations for the estimated future after-tax cash flows from those assets over their lives, including the probability of expected future contract renewals and sales, less a cost-of-capital charge, all of which is discounted to present value. If actual future after-tax cash flows differ significantly from their estimates, we may be required to record an impairment charge to write down the identifiable intangible assets to their realizable values. The value assigned to goodwill equals the amount of the purchase price of the business acquired in excess of the sum of the amounts assigned to identifiable acquired assets, both tangible and intangible, less liabilities assumed. At December 31, 2003, L-3 had goodwill of \$3,652.4 million and identifiable intangible assets of \$162.2 million.

L-3 reviews goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable, and also reviews goodwill annually in accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 142 requires that goodwill be tested, at a minimum, annually for each reporting unit using a two-step process. A reporting unit is an operating segment, as defined in paragraph 10 of SFAS No. 131, *Disclosures About Segments of an Enterprise and Related Information*, or a component of an operating segment. A component of an operating segment is a reporting unit if the component

constitutes a business for which discrete financial information is available and is reviewed. Two or more components of an operating segment may be aggregated and deemed a single reporting unit if the components have similar economic characteristics. The first step is to identify any potential impairment by comparing the carrying value of the reporting unit to its fair value. If a potential impairment is identified, the second step is to compare the implied fair value of goodwill with the carrying value of the goodwill to measure the impairment loss. The fair value of a reporting unit is estimated using a discounted cash flow valuation approach, and is dependent on estimates for future sales, operating income, depreciation and amortization, income tax payments, working capital changes, and capital expenditures, as well as, expected growth rates for cash flows and long-term interest rates, all of which are impacted by economic conditions related to the industries in which we operate as well as conditions in the U.S. capital markets. A decline in estimated fair value of a reporting unit could result in

an unexpected impairment charge to goodwill, which could have a material adverse effect on our business, financial condition and results of operations.

*Pension Plan and Postretirement Benefit Plan Obligations.* The obligations for our pension plans and postretirement benefit plans and the related annual costs of employee benefits are calculated based on several long-term assumptions, including discount rates for employee benefit liabilities, rates of return on plan assets, expected annual rates for salary increases for employee participants in the case of pension plans, and expected annual increases in the costs of medical and other health care benefits in the case of postretirement benefit obligations. These long-term assumptions are subject to revision based on changes in interest rates, financial market conditions, expected versus actual returns on plan assets, participant mortality rates and other actuarial assumptions, including future rates of salary increases, benefit formulas and levels, and rates of increase in the costs of benefits. Changes in the assumptions, if significant, can materially affect the amount of annual net periodic benefit costs recognized in our results of operations from one year to the next, the liabilities for the pension plans and postretirement benefit plans, and our annual cash requirements to fund these plans.

*Valuation of Deferred Income Tax Assets and Liabilities.* At December 31, 2003, we had net deferred tax assets of \$253.3 million, including \$17.2 million for loss carryforwards and \$36.1 million for tax credit carryforwards which are subject to various limitations and will expire if unused within their respective carryforward periods. Deferred income taxes are determined separately for each of our tax-paying entities in each tax jurisdiction. The future realization of our deferred income tax assets ultimately depends on our ability to generate sufficient taxable income of the appropriate character (for example, ordinary income or capital gains) within the carryback and carryforward periods available under the tax law, and to a lesser extent, our ability to execute successful tax planning strategies. Based on our estimates of the amounts and timing of future taxable income and tax planning strategies, we believe that L-3 will be able to realize its deferred tax assets. A change in the ability of our operations to continue to generate future taxable income, or our ability to implement desired tax planning strategies, could affect our ability to realize the future tax deductions underlying our net deferred tax assets, and require us to provide a valuation allowance against our net deferred tax assets. The recognition of a valuation allowance would result in a reduction to net income and if significant, could have a material impact on our effective tax rate, results of operations and financial position in any given period.

Results of Operations

The following information should be read in conjunction with our consolidated financial statements. Our results of operations for the periods presented are impacted significantly by our acquisitions. See Note 3 to the consolidated financial statements for a discussion of our acquisitions.

*Presentation of Sales and Costs and Expenses.* L-3 presents its sales and costs and expenses in two categories on the statement of operations, "Contracts, primarily U.S. Government" and "Commercial, primarily products." This categorization is based on how revenue is recognized. Sales and costs and expenses for L-3's businesses that are primarily U.S. Government contractors are presented as "Contracts, primarily U.S. Government." The sales for L-3's U.S. Government contractor businesses are transacted using written contractual arrangements for products and services according to the specifications provided by the customer and are within the scope of SOP 81-1, ARB 43 and

ARB 45. Sales reported under "Contracts, primarily U.S. Government" also include certain sales by L-3's U.S. Government contractor businesses transacted using contracts for domestic and foreign commercial customers, which also are within the scope of SOP 81-1 and ARB 45. Sales and costs and expenses for L-3's businesses whose customers are primarily commercial business enterprises are presented as "Commercial, primarily products." These sales are recognized in accordance with SAB No. 104, and are not within the scope of SOP 81-1, ARB 43 or ARB 45. L-3's commercial businesses are substantially comprised of Aviation Communication & Surveillance Systems (ACSS), Aviation Recorders, Microwave Components, Detection Systems and Avionics Systems.

The tables below provide two presentations of selected statement of operations data for L-3. The first table presents the selected data segregated between L-3's U.S. Government contractor businesses and L-3's commercial businesses. See Note 2 to the audited consolidated financial statements. The second table presents the selected data by reportable segment. See Note 18 to the audited consolidated financial statements.

	Year Ended December 31,		
	2003	2002	2001
	(in millions)		
<b><u>U.S. Government Contractors and Commercial Businesses Presentation</u></b>			
Sales:			
Contracts, primarily U.S. Government	\$4,467.6	\$3,581.1	\$1,932.2
Commercial, primarily products	594.0	430.1	415.2
Consolidated	<u>\$5,061.6</u>	<u>\$4,011.2</u>	<u>\$2,347.4</u>
Operating income:			
Contracts, primarily U.S. Government	\$ 562.1	\$ 443.6	\$ 232.6 <sup>(1)</sup>
Commercial, primarily products	18.9	10.4	42.7 <sup>(1)</sup>
Consolidated	<u>\$ 581.0</u>	<u>\$ 454.0</u>	<u>\$ 275.3</u>
Operating margin <sup>(2)</sup> :			
Contracts, primarily U.S. Government	12.6%	12.4%	12.0%
Commercial, primarily products	3.2%	2.4%	10.3%
Consolidated	11.5%	11.3%	11.7%
<b><u>Reportable Segment Presentation</u></b>			
Sales <sup>(3)</sup> :			
Secure Communications & ISR	\$1,439.4	\$1,053.3	\$ 450.5
Training, Simulation & Support Services	980.2	806.3	596.8
Aviation Products & Aircraft Modernization	1,019.6	677.5	263.3
Specialized Products	1,622.4	1,474.1	1,036.8
Consolidated	<u>\$5,061.6</u>	<u>\$4,011.2</u>	<u>\$2,347.4</u>
Operating income:			
Secure Communications & ISR	\$ 172.9	\$ 103.5	\$ 32.0 <sup>(1)</sup>
Training, Simulation & Support Services	111.6	96.5	65.7 <sup>(1)</sup>
Aviation Products & Aircraft Modernization	147.8	105.7	85.6 <sup>(1)</sup>

Specialized Products	148.7	148.3	92.0(1)
Consolidated	<u>\$ 581.0</u>	<u>\$ 454.0</u>	<u>\$ 275.3</u>
Operating margin(2):			
Secure Communications & ISR	12.0%	9.8%	7.1%
Training, Simulation & Support Services	11.4%	12.0%	11.0%
Aviation Products & Aircraft Modernization	14.5%	15.6%	32.5%
Specialized Products	9.2%	10.1%	8.9%
Consolidated	11.5%	11.3%	11.7%

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- (1) Operating income includes goodwill amortization expense for the year ended December 31, 2001, of \$31.3 million for "Contracts, primarily U.S. Government," \$11.0 million for "Commercial, primarily products, \$42.3 million for L-3 on a consolidated basis, \$3.8 million for the Secure Communications & ISR segment, \$7.1 million for the Training, Simulation & Support Services segment, \$7.7 million for the Aviation Products & Aircraft Modernization segment and \$23.7 million for the Specialized Products segment.
  - (2) Operating margin is equal to operating income as a percentage of sales.
  - (3) Sales are after intersegment eliminations. See Note 18 to the consolidated financial statements.

***Year Ended December 31, 2003 Compared with Year Ended December 31, 2002***

Consolidated sales increased by \$1,050.4 million, or 26.2%, to \$5,061.6 million for 2003 from sales of \$4,011.2 million for 2002. The increase in consolidated sales from acquisitions was \$833.6 million, or 20.8%. Organic sales growth for our defense businesses was 15.4%, or \$500.2 million, and was driven by continued strong demand for secure communications and intelligence, surveillance and reconnaissance (ISR) systems and products, aircraft modernization, simulation and training services, government services, and an increase in shipments of naval power equipment. Organic sales for our commercial businesses declined by 10.7%, or \$45.8 million, due to the continued weakness in the aviation and communications markets. Sales for explosives detection systems (EDS) decreased \$237.6 million primarily because the initial installation of EDS at major U.S. airports by the U.S. Transportation Security Administration (TSA) was completed by the end of 2002. Consolidated organic sales growth, excluding the EDS business, from both periods was 12.4%. Consolidated organic sales growth for all of L-3's businesses, including the decline for the EDS business, was \$216.8 million, or 5.4%. We define "organic sales growth," as the increase or decrease in sales for the current period compared to the prior period, excluding the increase in sales attributable to acquired businesses to the extent the acquired businesses were not included in L-3's results of operations for the entire current period and prior period. Our "defense businesses" are comprised of our U.S. Government contractor businesses, other than our EDS business, all of which are presented under "Contracts, primarily U.S. Government."

Sales from "Contracts, primarily U.S. Government," which comprises our defense businesses and our EDS business, increased by \$886.5 million, or 24.8%, to \$4,467.6 million for 2003 from \$3,581.1 million for 2002. The increase in sales from acquired businesses was \$632.9 million, or 17.7%. The acquired businesses include IS, Telos, ComCept, TMA, Electron Devices, Ruggedized Command & Control, Westwood, Wescam and Ship Analytics, which were acquired in 2002 and Aeromet, Klein, MAS, Vertex and certain defense and aerospace assets of IPICOM, Inc., which were acquired during 2003. Organic sales growth for L-3's government businesses was \$253.6 million, or 7.1%, primarily because of higher sales volume from our defense businesses for ISR and secure communications systems and products, aircraft modernization, communications software and engineering support services, training services, navigation products and naval power equipment. These increases were partially offset by a decline in sales volume primarily from our EDS business, and to a lesser extent, from our fuzing products, training devices, undersea warfare products and display systems.

Sales from "Commercial, primarily products" increased by \$163.9 million, or 38.1%, to \$594.0 million for 2003 from \$430.1 million for 2002. The increase in sales from acquired businesses was \$200.7 million, or 46.7%. The acquired businesses include Detection Systems, IMC and Wolf Coach, which were acquired in 2002 and Avionics Systems, which was acquired during 2003. Organic sales for L-3's commercial businesses declined by 8.6%, or \$36.8 million, due primarily to the lower revenues for aviation and communications products caused by continued weak demand in those commercial markets.

Consolidated costs and expenses increased by \$923.4 million to \$4,480.6 million for 2003 from \$3,557.2 million for 2002, consistent with the increase in sales.

Costs and expenses for "Contracts, primarily U.S. Government" increased by \$768.0 million to \$3,905.5 million for 2003 from \$3,137.5 million for 2002. Approximately 73% of the increase is attributable to our acquired businesses. The remaining increase is primarily attributed to organic sales

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growth from our defense businesses for ISR and secure communications systems and products, aircraft modernization, communications software and engineering support services, training services, navigation products and naval power equipment. These increases were partially offset by declines from our EDS business, fuzing products, training devices and display systems due to lower volume.

Cost of sales for L-3's U.S. Government contractor businesses include selling, general and administrative (SG&A), independent research and development (IRAD) and bid and proposal (B&P) costs. These SG&A, IRAD and B&P costs are allowable indirect contract costs that are allocated to our U.S. Government contracts in accordance with U.S. Government regulations. We report SG&A, IRAD and B&P costs allocated to U.S. Government contracts as costs of sales when the related contract sales are recognized, rather than account for them as period expenses. SG&A, IRAD and B&P costs included in cost of sales for "Contracts, primarily U.S. Government" were \$509.3 million, or 11.4% of sales for 2003, compared to \$431.5 million, or 12.0% of sales for 2002 (See Notes 2 and 4 to our consolidated financial statements).

Costs and expenses for "Commercial, primarily products" increased by \$155.4 million to \$575.1 million for 2003 from \$419.7 million for 2002. The increase was primarily due to increased sales attributable to our acquired businesses, as well as a \$3.9 million provision for bad debt and inventory for the PrimeWave Communications business. SG&A expenses increased by \$23.6 million to \$137.6 million or 23.2% of sales for 2003 from \$114.0 million or 26.5% of sales for 2002. The increase was primarily attributable to acquired businesses and increased costs for security products due to maintenance costs associated with detection systems placed in service. This increase was partially offset by lower SG&A expenses at the PrimeWave Communications business and our commercial communications products businesses due to cost and expense reductions. Research and development (R&D) expenses increased by \$18.0 million to \$52.8 million for 2003 from \$34.8 million for 2002. The increase was primarily due to the Avionics Systems acquired business and development expenses for cargo security

products, partially offset by lower R&D expenses incurred at the PrimeWave Communications business because of cost and expense reductions.

Consolidated operating income increased by \$127.0 million to \$581.0 million for 2003 from \$454.0 million for 2002. The increase was primarily due to higher sales from all of our segments. Consolidated operating margin increased slightly by 0.2 percentage points to 11.5% for 2003 from 11.3% for 2002. The changes in the operating margins for our segments are discussed below.

Operating income for "Contracts, primarily U.S. Government" increased by \$118.5 million to \$562.1 million for 2003 from \$443.6 million for 2002. Operating margin increased by 0.2 percentage points to 12.6% for 2003 from 12.4% for 2002. The increase in operating margin is due to organic sales growth and cost improvements for ISR and secure communications systems and products and naval power equipment.

Operating income for "Commercial, primarily products" increased by \$8.5 million to \$18.9 million for 2003 from \$10.4 million for 2002. Operating margin improved by 0.8 percentage points to 3.2% for 2003 from 2.4% for 2002. The improvement was primarily due to lower losses from certain commercial businesses due to cost and expense reductions and higher margins from the Avionics Systems acquired business. These increases were partially offset by lower margins on commercial aviation products and microwave components due to lower sales volume and higher development expenses for cargo security products.

Interest expense increased by \$10.2 million to \$132.7 million for 2003 from \$122.5 million for 2002. The increase is attributable to the higher average outstanding debt during 2003 and lower savings from fixed-to-variable interest rate swap agreements of \$1.0 million.

Interest and other income decreased by \$4.7 million to \$0.2 million in 2003 from \$4.9 million in 2002. The decrease was due to lower interest income earned because of lower average cash and cash equivalents balances, a loss of \$2.2 million recorded related to the sale of the commercial broadband test equipment assets of our Celerity business and an increase in losses on our investments accounted for using the equity method during 2003 compared to 2002.

The 2003 period includes a charge of \$11.2 million (\$7.2 million after-tax, or \$0.07 per diluted share of L-3 Holdings common stock) for the early retirement of \$180 million of our 8½% Senior

Subordinated Notes due 2008. See "Liquidity and Capital Resources" below. The 2002 period includes a charge of \$16.2 million (\$9.9 million after-tax, or \$0.11 per diluted share of L-3 Holdings common stock) for the early retirement of \$225 million of our 10 3/8% Senior Subordinated Notes due 2007. In accordance with SFAS No. 145, the 2002 debt retirement charge, which was classified as an extraordinary item in the prior year presentation, has been reclassified as a component of income from continuing operations.

Minority interest decreased by \$2.7 million to \$3.5 million for 2003 from \$6.2 million for 2002 because of lower net income for Aviation Communications and Surveillance Systems (ACSS) due to lower sales caused by continued weakness in the commercial aviation market and higher product development expenses.

The income tax provision for 2003 is based on an effective income tax rate of 36.0%, compared with an effective income tax rate of 35.5% for 2002. With respect to the expected effective income tax rate for 2004 compared to 2003, the current U.S. federal research and experimentation (R&E) tax credit is scheduled to expire on June 30, 2004. If the R&E tax credit is not renewed, L-3's 2004 effective income tax rate would increase. The R&E tax credit lowered L-3's 2003 effective income tax rate by 1.9% points. Additionally, currently changes are being proposed to the U.S. federal tax laws for extra territorial income (ETI), and some alternative proposals, if enacted, could cause an increase in L-3's 2004 effective income tax rate. The ETI tax credit lowered L-3's 2003 effective income tax rate by 1.5% points.

L-3 Holdings' basic earnings per share (EPS) before cumulative effect of a change in accounting principle increased by \$0.56 to \$2.89 for 2003 from \$2.33 for 2002. L-3 Holdings' diluted EPS before cumulative effect of a change in accounting principle increased by \$0.53 to \$2.71 for 2003 from \$2.18 for 2002. Net income for 2002 includes a charge, net of income taxes, of \$24.4 million (\$0.28 per basic share and \$0.25 per diluted share) for the cumulative effect of a change in accounting principle for goodwill impairment in connection with the adoption of SFAS No. 142. Including the effect of a change in accounting principle, basic EPS for 2002 was \$2.05 and diluted EPS for 2002 was \$1.93.

L-3 Holdings' diluted weighted-average common shares outstanding increased by 8.9% to 106.1 million for 2003 from 97.4 million for 2002. The increase principally reflects the additional shares outstanding from the sale of 14.0 million shares of L-3 Holdings common stock on June 28, 2002.

The L-3 Holdings 2003 and 2002 diluted EPS computations did not include the effect of the 7.8 million shares of L-3 Holdings common stock that are issuable upon conversion of the \$420.0 million of 4% Senior Subordinated Convertible Contingent Debt Securities (CODES) because the conditions required for them to become convertible were not satisfied. However, if the CODES had been convertible, diluted EPS would have been \$0.09 lower than reported for 2003 and diluted EPS, before cumulative effect of a change in accounting principle would have been \$0.05 lower than reported for 2002.

**Secure Communications & ISR**

Sales within our Secure Communications & ISR segment increased by \$386.1 million, or 36.7%, to \$1,439.4 million for 2003 from \$1,053.3 million for 2002. Organic sales growth was \$250.4 million, or 23.8%, due to continued strong demand and increased spending by the DoD and other U.S. Government agencies for our secure communications and ISR systems and products, which were partially offset by a decline in sales of \$5.5 million for the PrimeWave Communications business. The increase in sales from acquired businesses was \$135.7 million. The acquired businesses include IS and ComCept, which were acquired during 2002, and Aeromet and certain defense and aerospace assets of IPICOM, Inc., which were acquired during 2003.

Operating income increased by \$69.4 million to \$172.9 million for 2003 from \$103.5 million for 2002 because of higher sales and operating margin. Operating margin increased to 12.0% for 2003 from 9.8% for 2002 because of higher organic sales growth for defense systems and products, cost improvements and lower losses at our PrimeWave Communications business.

**Training, Simulation & Support Services**

Sales within our Training, Simulation & Support Services segment increased by \$173.9 million, or 21.6%, to \$980.2 million for 2003 from \$806.3 million for 2002. Organic sales growth was \$81.7 million, or 10.1%, driven by training and government services, including communications software support and engineering support. The



increase in sales from the Telos, TMA and Ship Analytics acquired businesses, which were all acquired in 2002, was \$92.2 million.

Operating income increased by \$15.1 million to \$111.6 million for 2003 from \$96.5 million for 2002 because of higher sales, which were partially offset by lower operating margin. Operating margin declined by 0.6 percentage points to 11.4% for 2003 from 12.0% for 2002. The decrease was primarily due to higher sales from cost-reimbursable type and time and material type contracts, which generally are less profitable than fixed-priced type contracts. Margins increased by 0.2 percentage points from acquired businesses.

**Aviation Products & Aircraft Modernization**

Sales within our Aviation Products & Aircraft Modernization segment increased by \$342.1 million, or 50.5%, to \$1,019.6 million for 2003 from \$677.5 million for 2002. Organic sales growth was \$129.9 million, or 19.2%, primarily due to \$144.7 million for aircraft modernization and modification driven by DoD demand. This increase was partially offset by volume declines of \$10.8 million for commercial aviation products caused by the continued weakness in the commercial aviation markets and volume declines of \$4.0 million primarily for display systems due to the timing of contractual shipments. The increase in sales from acquired businesses was \$212.2 million. The acquired businesses include IS, which was acquired in 2002, and Avionics Systems, MAS and Vertex, which were acquired in 2003.

Operating income increased by \$42.1 million to \$147.8 million for 2003 from \$105.7 million for 2002 because of higher aircraft modernization sales, which were partially offset by lower sales for commercial aviation products and lower operating margin. Operating margin declined by 1.1 percentage points to 14.5% for 2003 from 15.6% for 2002. Volume declines for commercial aviation products, which have higher margins than aircraft modification sales, decreased operating margin by 0.9 percentage points. Similarly, margins decreased by 0.4 percentage points primarily due to volume growth for aircraft modernization, which earns lower margins than commercial aviation products. These decreases were partially offset by the Avionics Systems and MAS acquired businesses, which increased margin by 0.2 percentage points.

**Specialized Products**

Sales within our Specialized Products segment increased by \$148.3 million, or 10.1%, to \$1,622.4 million for 2003 from \$1,474.1 million for 2002. Organic sales declined 16.6%, or \$245.2 million, or \$7.6 million, or 0.5% excluding the decline for EDS. EDS sales declined by \$237.6 million (discussed below). Volume declined by \$46.4 million for fuzing and acoustic undersea warfare products and training devices because of certain contracts approaching their scheduled completion and the timing of sales on 2003 orders, which are expected to increase in 2004. Volume declined by \$22.3 million for telemetry products and microwave components due to the continued weakness in the commercial communications markets. These decreases were partially offset by an increase of \$46.6 million for naval power equipment due to higher shipments arising from the resolution of the production and quality control issues at the SPD Electrical Systems business and \$14.5 million primarily for FTSATs and guidance products due to strong demand from the DoD. The increase in sales from acquired businesses was \$393.5 million. The acquired businesses include Detection Systems, Ruggedized Command & Control, Electron Devices, Wolf Coach, IMC, Westwood and Wescam, all of which were acquired in 2002, and Klein, which was acquired in 2003.

Sales of EDS declined by \$237.6 million to \$101.5 million for 2003 compared with \$339.1 million for 2002, primarily because the initial installation of EDS at major U.S. airports by the TSA was completed by the end of 2002, which reduced the TSA's procurement requirements for new systems.

Operating income increased by \$0.4 million to \$148.7 million for 2003 from \$148.3 million for 2002. Operating margin decreased by 0.9 percentage points to 9.2% for 2003 from 10.1% for 2002. Lower sales for EDS reduced operating margin by 0.6 percentage points. Volume declines for telemetry, fuzing and undersea warfare products lowered operating margin by 0.4 percentage points. Lower margins from acquired businesses reduced operating margin by 0.6 percentage points. The resolution of production quality problems for naval power equipment caused increased shipments and reduced rework costs, which increased operating margin by 0.5 percentage points. The settlement of a claim increased operating margin by 0.2 percentage points.

***Year Ended December 31, 2002 Compared with Year Ended December 31, 2001***

Consolidated sales increased by \$1,663.8 million to \$4,011.2 million for 2002 from \$2,347.4 million for 2001. Sales from "Contracts, primarily U.S. Government" increased by \$1,648.9 million to \$3,581.1 million for 2002 from \$1,932.2 million for 2001. The L-3 Analytics, BT Fuze, ComCept, EER, Electron Devices, IS, KDI, Ruggedized Command & Control, Ship Analytics, Spar, SY, Telos, TMA, Wescam and Westwood acquired businesses contributed \$1,222.5 million of the increase in sales. Excluding these acquisitions, sales grew \$426.4 million, or 22.1%, in 2002. Volume increased by \$320.9 million for EDS, \$156.8 million for secure communication systems, \$20.6 million for training services and devices, \$20.1 million for navigation and guidance products and \$8.1 million for military displays products. These sales increases were partially offset by declines of \$17.3 million on naval power equipment and \$14.5 million on static transfer switches used for commercial applications. Sales of ballistic missile targets and services declined \$53.0 million. The remaining decline in sales of \$15.3 million was primarily related to acoustic undersea warfare products because of lower volume on spares. Sales from "Commercial, primarily products" increased \$14.9 million to \$430.1 million for 2002 from \$415.2 million for 2001. The Detection Systems, IMC and Wolf Coach acquired businesses contributed \$93.9 million of the increase in sales. Excluding these acquisitions, sales declined \$79.0 million or 19.0%. This decrease in sales was due to volume declines of \$49.2 million on commercial aviation products, \$31.7 million on microwave components and \$11.8 million on PrimeWave communication products. These declines were partially offset by increases of \$5.5 million for maritime voyage recorders and \$8.2 million primarily for technical and product support services for commercial customers.

"Commercial, primarily products" sales declined to 10.7% of total sales for 2002 from 17.7% for 2001. The decline was primarily attributable to the acquisitions we completed during 2002, including the IS acquisition, and to a lesser extent, the decline in our commercial sales. This decline was attributable to the continued weakness in the commercial aviation and communications markets.

Consolidated costs and expenses increased by \$1,485.1 million to \$3,557.2 million for 2002 from \$2,072.1 million for 2001, primarily as a result of the increase in sales. In accordance with SFAS No. 142, on January 1, 2002 we stopped amortizing our goodwill to expenses. Goodwill amortization expense was \$42.3 million for 2001. SFAS No. 142 also requires that we evaluate the fair value of our goodwill annually to determine if it has been impaired. We evaluated the carrying value of our goodwill as of January 1, 2002 in accordance with the transition provisions of SFAS No. 142 and wrote-off \$30.8 million of goodwill related to certain of our space and broadband commercial communications businesses, which has been reported as a \$24.4 million loss after income taxes for the cumulative effect of a change in accounting principle, as discussed below. If we experience any impairments to the carrying value of our goodwill after January 1, 2002, we will have to report them as a loss from operations. During 2002, we did not have any other goodwill impairments.

Costs and expenses for "Contracts, primarily U.S. Government" increased by \$1,437.9 million to \$3,137.5 million for 2002 from \$1,699.6 million for 2001. Approximately 75% of the increase is attributable to our acquired businesses. The remaining increase is primarily attributed to internal growth for EDS and secure communication systems. Goodwill amortization expense was \$31.3 million for 2001. SG&A costs allocated to our U.S. Government contracts were \$431.5 million for 2002 and \$304.3 million for 2001 (see Note 4 to our consolidated financial statements).

Costs and expenses for "Commercial, primarily products" increased by \$47.2 million to \$419.7 million for 2002 from \$372.5 million for 2001. The increase is primarily due to increased sales as a

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result of the Detection Systems acquired business, which was partially offset by lower expenses for microwave components products due to lower sales volume. Goodwill amortization expense was \$11.0 million for 2001. SG&A expenses, including R&D expenses, increased by \$29.2 million to \$148.9 million for 2002 from \$119.7 million for 2001, primarily because of SG&A expenses incurred by our acquired businesses.

Consolidated operating income increased by \$178.7 million to \$454.0 million for 2002 from \$275.3 million for 2001. The increase was due to higher sales for all of our segments. The impact of not amortizing goodwill increased consolidated operating income by \$42.3 million. Consolidated operating income as a percentage of sales (operating margin) declined by 0.4 percentage points to 11.3% for 2002 from 11.7% for 2001. The impact of not amortizing goodwill increased consolidated operating margin by 1.1 percentage points. Operating margins compared to operating margins for 2001, excluding goodwill amortization expense, declined for our Training, Simulation & Support Services, Aviation Products & Aircraft Modernization and Specialized Products segments, and increased for our Secure Communications & ISR segment. The changes in the operating margins for our segments are discussed below.

Operating income for "Contracts, primarily U.S Government" increased by \$211.0 million to \$443.6 million for 2002 from \$232.6 million for 2001. Operating margin increased by 0.4 percentage points to 12.4% for 2002, from 12.0% for 2001. The impact of not amortizing goodwill increased operating margin by 0.9 percentage points. Operating income for 2002 includes a loss of \$3.0 million for the settlement in June 2002 of certain litigations that we assumed in connection with a business we acquired in 1999, which reduced operating margin for 2002 by 0.1 percentage points. The remaining decline in operating margin was due to the absence in 2002 of a favorable performance adjustment recorded in 2001 on the AVCATT contract. Operating income included approximately \$20 million of losses in both 2002 and 2001 related to our naval power equipment business that were caused by production problems which reduced sales volume and related costs to fix manufacturing and quality control problems.

Operating income for "Commercial, primarily products" declined by \$32.3 million to \$10.4 million for 2002 from \$42.7 million for 2001. Operating margin declined by 7.9 percentage points to 2.4% for 2002 from 10.3% for 2001. The decline was principally attributable to lower gross margin contributions from commercial aviation products, microwave components, and space and broadband communication products because of volume declines, as well as continued marketing, selling and development expenses for the PrimeWave business. The impact of not amortizing goodwill partially offset these decreases in operating margin by 2.6 percentage points.

Interest expense increased by \$36.1 million to \$122.5 million for 2002 from \$86.4 million for 2001. The increase is attributable to higher outstanding debt for 2002 primarily related to the financing of the IS acquisition, which was partially offset by lower interest rates on our debt. Our interest rate swap agreements, which converted the fixed interest rates on \$580.0 million of our senior subordinated notes to variable interest rates, reduced our interest expense for 2002 by \$9.6 million because of declining interest rates. In June of 2002, we also redeemed our \$225.0 million 10 3/8% senior subordinated notes and replaced them with senior subordinated notes that have a 7 5/8% fixed interest rate which reduced our interest expense by \$3.1 million. See "Liquidity and Capital Resources – Financing Activities" below.

Interest and other income increased by \$3.2 million to \$4.9 million for 2002 from \$1.7 million for 2001, principally due to interest income earned on our cash and cash equivalents. Additionally, 2001 included a net gain of \$0.6 million, comprising a gain on the sale of a 30% interest in the ACSS business, largely offset by the write-down of the carrying value of an investment in the common stock of a telecommunications company because the decline in value for that common stock was determined to be other than temporary.

The income tax provision for 2002 is based on an effective income tax rate of 35.5%, compared with an effective income tax rate of 38.0% for the year ended December 31, 2001. The decrease in the effective income tax rate is primarily attributable to the adoption of SFAS No. 142. Amortization

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expense for goodwill that is not deductible for income tax purposes caused an increase in our effective income tax rate prior to the adoption of SFAS No. 142.

L-3 Holdings' basic EPS before cumulative effect of a change in accounting principle increased \$0.79 to \$2.33 for 2002 from \$1.54 for 2001. L-3 Holdings' diluted EPS before cumulative effect of a change in accounting principle increased \$0.71 to \$2.18 for 2002 from \$1.47 for 2001. The impact of not amortizing goodwill in 2002 increased L-3 Holdings' basic EPS before cumulative effect of a change in accounting principle by \$0.45 and diluted EPS before cumulative effect of a change in accounting principle by \$0.40. Excluding the increase in earnings attributable to not amortizing goodwill, basic EPS before cumulative effect of a change in accounting principle grew 17.1% and diluted EPS before cumulative effect of a change in accounting principle grew 16.6%. L-3 Holdings' basic EPS was \$2.05 and L-3 Holdings' diluted EPS was \$1.93 after an after-tax charge of \$9.9 million (\$0.11 per basic and diluted share) for the early retirement of \$225.0 million of our 10 3/8% senior subordinated notes and a loss of \$24.4 million (\$0.28 per basic share and \$0.25 per diluted share) for the cumulative effect of a change in accounting principle for a goodwill impairment, recorded effective as of January 1, 2002 in connection with the adoption of SFAS No. 142.

L-3 Holdings' diluted weighted-average common shares outstanding increased by 14.1% to 97.4 million for 2002 from 85.4 million for 2001. The increase principally reflects the additional shares outstanding from the sale of 9.2 million shares of L-3 Holdings common stock effective May 2, 2001, and the sale of 14.0 million shares of L-3 Holdings common stock effective June 28, 2002.

The L-3 Holdings diluted EPS computation for 2002 did not include the dilutive effect of the 7.8 million shares of L-3 Holdings common stock that are issuable upon conversion of the CODES (See Notes 8 and 12 to the consolidated financial statements) because the conditions for their conversion were not satisfied. However, if the CODES had been convertible, reported diluted EPS would have decreased by approximately \$0.03 for 2002.

Sales for the Secure Communications & ISR segment increased by \$602.8 million to \$1,053.3 million for 2002 from \$450.5 million for 2001. The IS and ComCept acquired businesses, contributed \$458.6 million of sales. Excluding these acquisitions, sales grew \$144.2 million, or 32.0%. Volumes on secure communication systems, secure data links and military communications products increased \$156.8 million because of greater demand for secure communications from the DoD and U.S. Government intelligence agencies. These increases were partially offset by a decrease in sales of \$12.6 million primarily due to lower volumes of PrimeWave communication products.

Operating income increased by \$71.5 million to \$103.5 million for 2002 from \$32.0 million for 2001 because of higher sales and operating margin. Operating margin improved by 2.7 percentage points to 9.8% for 2002 compared to 7.1% for 2001. The impact of not amortizing goodwill increased operating margin by 0.4 percentage points. Increased volume and cost improvements on secure communication systems increased margins by 1.7 percentage points. Higher losses for the PrimeWave business in 2002 due to lower sales, higher marketing, selling and development expenses and a provision to increase the allowance for doubtful accounts by \$3.0 million lowered operating margin by 0.9 percentage points. The remaining change in operating margins was principally attributable to margins from the IS acquired business, which was higher than the segment operating margin for 2001.

**Training, Simulation & Support Services**

Sales for the Training, Simulation & Support Services segment increased by \$209.5 million to \$806.3 million for 2002 from \$596.8 million for 2001. The L-3 Analytics, EER, Ship Analytics, SY Technologies, Telos and TMA acquired businesses contributed \$210.9 million of the increase in sales. Excluding these acquisitions, sales declined \$1.4 million, or 0.2%. Sales for ballistic missile targets and services at our Coleman Research business declined by \$53.0 million primarily because of a contract completed in 2002 and the delay in the award of its follow-on contract, which is related to the U.S. Missile Defense Agency's decision to consolidate the target requirements for all of its major missile

defense programs into a single contract for fiscal year 2003. The decline in ballistic missile targets and services was largely offset by volume increases for training services from new contracts with the DoD, contracts competitively awarded during 2001 and software and systems engineering services.

Operating income increased by \$30.8 million to \$96.5 million for 2002 from \$65.7 million for 2001 because of higher sales and operating margin. Operating margin increased by 1.0 percentage points to 12.0% for 2002 compared to 11.0% for 2001 principally because of the impact of not amortizing goodwill.

**Aviation Products & Aircraft Modernization**

Sales for the Aviation Products & Aircraft Modernization segment increased \$414.2 million to \$677.5 million for 2002 from \$263.3 million for 2001. The IS and Spar acquired businesses contributed \$446.5 million to sales. Excluding acquisitions, sales declined \$32.3 million, or 12.3%, because of lower volumes for commercial aviation recorders and TCAS products that were partially offset by sales increases for military displays products and commercial maritime voyage recorders. The decline in commercial aviation products sales was caused by a decline in orders and customer-directed deferrals of deliveries stemming from the continued downturn in the commercial aircraft industry that began in 2001 and which remained weak during 2002.

Operating income increased by \$20.1 million to \$105.7 million for 2002 from \$85.6 million for 2001, because of higher sales from acquired businesses. Operating margin declined by 16.9 percentage points to 15.6% for 2002 from 32.5% for 2001. The impact of not amortizing goodwill increased operating margin by 1.1 percentage points. Lower volumes on TCAS and aviation recorders, increased development expenses for a terrain awareness warning system and a commercial displays product-line reduced operating margin by 5.5 percentage points. The remaining decrease in operating margin of 12.5 percentage points was principally attributable to margins from the IS and Spar acquired businesses, which averaged 13.6% and were lower than the segment operating margin for 2001. Margins for our aircraft modification businesses are lower than the margins for our commercial aviation products businesses, and the aircraft modification businesses generated 68.1% of the segment's sales for 2002 compared with only 5.7% for 2001, which reduced the overall margin for the entire segment as we expected.

**Specialized Products**

Sales for the Specialized Products segment increased by \$437.3 million to \$1,474.1 million for 2002 from \$1,036.8 million for 2001. The BT Fuze, Detection Systems, Electron Devices, IMC, KDI, Ruggedized Command & Control, Wescam, Westwood and Wolf Coach acquired businesses contributed \$200.4 million of sales. Excluding these acquisitions, sales increased by \$236.9 million, or 22.8%. Sales of EDS used in airport security, principally relating to a contract from the Transportation Security Administration, contributed \$320.9 million of the increase in sales. Navigation and guidance products sales also increased by \$20.1 million. These increases to sales were partially offset by volume declines of \$17.3 million on naval power equipment arising from lower shipments caused by production capacity diverted to fixing quality control problems, \$16.8 million on training devices because certain contracts were completed in 2002, \$15.9 million for acoustic undersea warfare products primarily arising from lower spares volume, and \$14.5 million for commercial static transfer switches because of the deterioration of the internet service provider market. The remaining decline of \$39.6 million was principally on microwave components and telemetry and space products arising from continued softness and declining demand in the space, broadband and wireless commercial communications markets.

Operating income increased by \$56.3 million to \$148.3 million for 2002 from \$92.0 million for 2001 because of higher sales and operating margin. Operating margin improved by 1.2 percentage points to 10.1% for 2002 compared to 8.9% for 2001. The impact of not amortizing goodwill increased operating margin by 1.6 percentage points. Higher volumes for EDS caused an increase in operating margin of 2.6 percentage points. These increases were partially offset by declines in operating margin that was primarily related to lower volumes on naval power equipment, microwave components and training devices, and the absence in 2002 of a favorable performance adjustment recorded in 2001 on the AVCATT contract.

**Liquidity and Capital Resources**

**Balance Sheet**

Contracts in process increased by \$297.3 million to \$1,615.3 million at December 31, 2003 from \$1,318.0 million at December 31, 2002. The increase included \$176.9 million related to acquired businesses and \$120.4 million principally from:

- increases of \$148.1 million in unbilled contract receivables, net of unliquidated progress payments, due to sales of ISR systems and products, aircraft modernization and engineering support services, which were partially offset by amounts billed and collected for the EDS business;
- increases of \$10.6 million in inventories at lower of cost or market due to increases for security products, which were partially offset by reductions for the PrimeWave Communications business;
- decreases of \$24.6 million in inventoried contract costs due to deliveries of ISR systems and products, which were partially offset by increases for security products and secure communication equipment; and
- decreases of \$13.7 million in billed receivables because of collections for aircraft modernization, security products and the decline in EDS sales, which were partially offset by billings because of sales growth for our defense businesses.

L-3's days receivable outstanding (DRO) was 70.3 at December 31, 2003, compared with 68.9 at December 31, 2002. We calculate our DRO by dividing (i) our aggregate end of period billed receivables and net unbilled contract receivables, by (ii) our sales for the last twelve-month period adjusted on a pro forma basis to include the acquisitions that we completed as of the end of the period (which amounted to \$5,817.7 million), divided by 365.

L-3's billed receivables, net of uncollectible account allowances, increased by \$68.9 million to \$637.3 million at December 31, 2003, compared to \$568.4 million at December 31, 2002. The increase in billed receivables was from L-3's U.S. Government contractor businesses and related to organic sales growth, as well as the Vertex and MAS business acquisitions. The uncollectible accounts allowance increased by \$12.4 million to \$25.2 million at December 31, 2003, compared to \$12.8 million at December 31, 2002, and was for receivables from L-3's commercial businesses. Our U.S. Government and foreign government customers, which generated 86.3% of L-3's sales for 2003, present very low uncollectible account risks due to their high credit quality, and therefore, generally require no uncollectible account allowances.

L-3's days inventory held (DIH) was 36.3 at December 31, 2003, compared with 38.3 at December 31, 2002. We calculate DIH by dividing (i) our aggregate end of period net inventoried contract costs and inventories at lower of cost or market, by (ii) our cost of sales for the last twelve-month period adjusted on a pro forma basis to include the acquisitions that we completed as of the end of the period, divided by 365.

Included in contracts in process at December 31, 2003 are net billed receivables of \$6.7 million and net inventories of \$11.4 million related to our PrimeWave Communications business. At December 31, 2002, we had \$11.4 million of net billed receivables and \$18.2 million of net inventories related to our PrimeWave Communications business.

The increase in property, plant and equipment (PP&E) during 2003 was principally related to capital expenditures and the Avionics Systems, Vertex and MAS acquired businesses. The percentage of depreciation expense to average gross PP&E declined to 11.9% for 2003 from 13.0% for 2002. The decline was attributable to fully depreciated PP&E, which is continuing to be used in certain of our operations despite having net carrying amounts of zero (after accumulated depreciation) and which will not be removed from the balance sheet until they are retired or otherwise disposed. We did not change any of the depreciation methods or estimated useful lives for assets that L-3 uses to calculate its depreciation expense.

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Goodwill increased by \$857.9 million to \$3,652.4 million at December 31, 2003, from \$2,794.5 million at December 31, 2002. The increase was comprised of (1) \$796.2 million for acquisitions completed during 2003, (2) \$26.5 million for increases to purchase prices for certain acquisitions completed prior to January 1, 2003, related to final closing date net assets of the acquired businesses and contingent purchase price adjustments or earnouts, which were resolved during the period, and (3) \$35.2 million primarily related to final estimates of fair value for acquired assets and liabilities assumed on acquisitions completed prior to January 1, 2003.

The increase in accounts payable was primarily due to the Avionics Systems, Vertex and MAS acquired businesses, partially offset by a decrease in accounts payable due to the timing of payments. The increase in accrued expenses was due to the Vertex and MAS acquired businesses and to the timing of payments. The increase in accrued employment costs was due to the timing of payments of salaries and wages to employees, including those employees of newly acquired businesses. The increase in other current liabilities was primarily due to acquired businesses and an increase in collections for milestone billings in excess of costs incurred on contracts for training devices and services related to the completion of certain performance milestones, which were partially offset by cost incurred for accrued product warranties and for certain contracts in process in a loss position and a reduction for contracts in process with credit balances. The increase in pension and postretirement liabilities was primarily due to the timing of payments. The increase in other liabilities was primarily due to amounts from our acquired businesses and the deferred net gains recorded in connection with the termination of the interest rate swap agreements during 2003 and 2002, as discussed below.

Customer advances decreased by \$4.6 million because liquidations exceeded collections, primarily related to shipments and performance on contracts with foreign customers for acoustic undersea warfare products and aircraft modernization. The timing of collections and liquidation of customer advances are prescribed by contract terms, and generally do not coincide because collections mostly occur upon the award of a contract and during the earlier periods of performance. Conversely, liquidations mostly occur during later periods of performance as products are delivered and other work items are completed. Additionally, customer advances do not affect or determine the timing of revenue recognition for a contract because customer advances are a contract financing method.

#### **Pension Plans**

L-3 maintains defined benefit pension plans covering employees at certain of its businesses. At December 31, 2003, our balance sheet included a pension benefits liability of \$221.0 million, an increase of \$15.9 million from \$205.1 million at December 31, 2002. The increase is due to pension expense recognized exceeding our pension funding and an increase in the minimum liability of \$6.5 million. At the end of 2003, L-3's projected benefit obligation, which includes accumulated benefits plus the incremental benefits attributable to projected future salary increases for covered employees, was \$902.1 million and exceeded the fair value of L-3's pension plan assets of \$561.7 million by \$340.4 million. At the end of 2002, L-3's projected benefit obligation was \$713.9 million and exceeded the fair value of L-3's pension plan assets of \$431.7 million by \$282.2 million. The increase in the unfunded status of our pension plans of \$58.2 million from \$282.2 million at the end of 2002 to \$340.4 million at the end of 2003, was principally due to the \$76.9 million actuarial loss that we experienced in 2003. The substantial majority of our 2003 actuarial loss was due to the reduction in the discount rate of 50 basis points

that we made at the end of 2003 to 6.25% from 6.75% at the end of 2002, which increased the present value of L-3's projected benefit obligations at the end of 2003 by \$62.0 million. The difference between the unfunded status amount of \$340.4 million at the end of 2003 and the pension liability recorded on our balance sheet of \$221.0 million is attributable to net unrecognized actuarial losses partially offset by the minimum pension liability of \$114.9 million. In accordance with SFAS No. 87, *Employer's Accounting for Pensions*, the actuarial gains and losses that our pension plans experienced in 2003 were not recognized in pension expense for 2003. Instead, they were deferred and will be amortized to pension expense in future periods over the estimated average remaining service periods of the covered employees. (See Note 16 to our consolidated financial statements.)

L-3 uses a November 30 measurement date to determine its end of year (December 31) pension benefit obligations and fair value of pension plan assets, and a fiscal year ending November 30 to

determine its annual pension expense, including actual returns on plan assets. L-3's actual return on plan assets for 2003, based on the fiscal year ended November 30, 2003, was \$64.0 million or 14.8% on the fair value of plan assets at the beginning of the fiscal year. However, L-3's actual return on plan assets for the twelve months ended December 31, 2003 was approximately \$94.8 million, or 26.6%.

Our pension expense for 2003 was \$70.5 million. We expect pension expense for 2004 to be between \$70 million and \$75 million. As discussed above, at the end of 2003, we reduced our discount rate from 6.75% to 6.25%, which will increase the interest cost component of pension expense for 2004. The higher interest cost in our estimated 2004 pension expense is expected to be substantially offset by the increase of \$130.0 million in our pension plan assets during 2003, which will increase our expected return on plan assets by approximately \$12.0 million, and decrease our estimated pension expense by the same amount. Our actual pension expense for 2004 will be based upon a number of factors, including the effect of any additional acquired businesses for which we assume liabilities for pension benefits, actual pension plan contributions and changes (if any) to our pension assumptions for 2004, including the discount rate, expected long-term return on plan assets and salary increases.

Our contributions for the full year 2003 were \$60.8 million. During 2002 and 2003, the U.S. Congress granted plan sponsors an interest rate reduction for calculating minimum pension plan contributions. For 2004, we expect to contribute approximately \$55.0 million to our pension plans assuming the extension of such interest rate reduction, or \$75.0 million if the interest rate reduction is not extended. A substantial portion of our pension plan contributions for L-3's businesses that are U.S. Government contractors are recoverable as allowable indirect contract costs at amounts generally equal to the annual pension contributions.

Our projected benefit obligation and annual pension expense are significantly affected by the discount rate assumption we use. For example, an additional reduction to the discount rate of 25 basis points would have increased our projected benefit obligation at December 31, 2003 by approximately \$32 million, and our estimated pension expense for 2004 by approximately \$5 million. Conversely, an increase to the discount rate of 25 basis points would have decreased our projected benefit obligation at December 31, 2003 by approximately \$32 million, and our estimated pension expense for 2004 by approximately \$5 million.

Our shareholders' equity at December 31, 2003 reflects a non-cash charge of \$4.2 million (net of tax) to record the increase in the minimum pension liability for the year ended December 31, 2003 in accordance with SFAS No. 87. This non-cash charge had no effect on our compliance with the financial covenants of our debt agreements and did not impact our results of operations for 2003.

Statement of Cash Flows

Our cash position was \$134.9 million at December 31, 2003 and December 31, 2002 and \$361.0 million at December 31, 2001. The table below provides a summary of our cash flows for the periods indicated.

	Year Ended December 31,		
	2003	2002	2001
		(in millions)	
Net cash from operating activities	\$ 456.1	\$ 318.5	\$ 173.0
Net cash used in investing activities	(1,088.1)	(1,810.5)	(424.9)
Net cash from financing activities	632.0	1,265.9	580.3
Net increase (decrease) in cash	<u>\$ —</u>	<u>\$ (226.1)</u>	<u>\$ 328.4</u>

Operating Activities

We generated \$456.1 million of cash from operating activities during 2003, an increase of \$137.6 million from \$318.5 million generated during 2002. Net income adjusted for non-cash expenses and deferred income taxes increased by \$114.4 million to \$530.3 million for 2003 from \$415.9 million for

2002. Deferred income taxes increased primarily because of larger estimated tax deductions arising from our recent acquisitions. Non-cash expenses consist primarily of contributions of L-3 Holdings' common stock to employee savings plans and depreciation and amortization. During 2003, the use of cash from the change in operating assets and liabilities decreased to \$74.2 million, compared to \$97.4 million for 2002. The use of cash for contracts in process was driven by increases in unbilled receivables primarily for our defense businesses, partially offset by collections primarily for our EDS business. The use of cash for other assets was primarily due to capitalized software development costs for new products. The use of cash for accounts payable was due to the timing of payments. The timing of payments to employees for salaries and wages was a source of cash because costs and expenses for salaries and wages exceeded cash payments for them. The source of cash from the change in pension and postretirement benefits was due to expenses exceeding related cash contributions. Pension plan contributions in 2003 amounted to \$60.8 million, and exceeded our originally planned contributions for 2003 by more than \$10 million. The use of cash for other current liabilities was to fund certain contracts in a loss position for which estimated costs exceeded the estimated contract value, partially offset by cash collections for milestone billings in excess of cost incurred on contracts primarily for training devices.

The source of cash from other liabilities was generated primarily from terminating interest rate swap agreements. During 2003, we terminated interest rate swap agreements, which is discussed in "Derivative Financial Instruments", and generated cash proceeds related to deferred gains on them of \$19.9 million, of which \$2.1 million was recorded in other current liabilities and \$17.8 million was recorded in other liabilities. For 2002, we also terminated interest rate swap agreements and generated cash proceeds related to net deferred gains on them of \$16.8 million.

During 2002, we generated \$318.5 million of cash from operating activities, an increase of \$145.5 million from \$173.0 million generated during 2001. Net income adjusted for non-cash expenses and deferred income taxes increased by \$132.4 million to \$415.9 million in 2002 from \$283.5 million in 2001. During 2002, the use of cash from the change in operating assets and liabilities decreased to \$97.4 million, compared to \$110.5 million in 2001.

Our cash flows from operating activities during 2002 reflect increases in billed and unbilled receivables, other current assets and other assets. The use of cash related to customer advances was due to liquidations on certain foreign contracts. The use of cash for other current liabilities was to fund contracts in a loss position for which estimated costs exceed the estimated contract value, and was partially offset by an increase in accrued warranty costs primarily for explosive detection systems delivered in 2002. The timing of payments to employees for salaries and wages, as well as the timing of interest payments, was a source of cash. The source of cash in other liabilities was primarily due to deferred gains on the termination of our swap agreements. Pension plan contributions in 2002 amounted to \$47.4 million.

In 2001, we used cash for increases in inventories, receivables and negative operating margins related to our PrimeWave business and naval power equipment products, as well as for incurred contract costs in excess of billings for the continued effort on the AVCAATT contract. These uses of cash were partially offset by a settlement of certain items related to a services agreement and lower income tax payments.

Our cash from operating activities includes interest payments on debt of \$119.9 million for 2003, \$109.3 million for 2002 and \$81.6 million for 2001. Our interest expense also includes amortization of deferred debt issue costs and deferred gains on terminated interest swap agreements, which are non-cash items.

Our cash from operating activities includes income tax payments, net of refunds, of \$17.3 million for 2003, \$2.1 million for 2002, and \$4.9 million for 2001. Our income tax payments were substantially less than our provisions for income taxes reported on our statements of operations primarily because of income tax deductions from our acquired businesses structured as asset purchases and income tax deductions for compensation expense arising from the exercise of employee stock options. The income tax deductions from the exercise of employee stock options are accounted for as a reduction to current income taxes payable and an increase to shareholders' equity (see Note 13 to our consolidated

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financial statements). L-3 receives substantial income tax deductions from its acquisitions of businesses that are structured as asset purchases for income tax purposes. The effect of these income tax deductions is that our cash payments for income taxes are less than our provision for income taxes reported on the statement of operations. This difference is presented in the deferred income tax provision on our statement of cash flows. The deferred income tax provision primarily results from deducting amortization of tax intangibles, including goodwill, from the acquisitions structured as asset purchases on L-3's income tax returns over 15 years, in accordance with income tax rules and regulations, while no goodwill amortization is recorded for financial reporting purposes, in accordance with SFAS No. 142. We expect that the acquisitions L-3 has completed through December 31, 2003 will continue to generate substantial annual deferred tax benefits through 2017. While these income tax deductions are reported as changes to deferred income tax liabilities and assets, they are not differences that are scheduled to reverse in future periods from normal operations. Rather, they will only reverse if L-3 sells its acquired businesses or incurs a goodwill impairment loss for them, because in either case, L-3's financial reporting amounts for goodwill would be greater than the income tax basis for goodwill. L-3 also receives significant income tax deductions and deferred tax benefits from its acquired businesses structured as asset purchases for income tax purposes from accelerated depreciation of plant and equipment.

### ***Investing Activities***

During 2003, we used \$1,014.4 million of cash for acquisitions of businesses. We paid \$988.3 million to acquire Avionics Systems, Aeromet, MAS, Vertex and certain assets of IPICOM, Inc. We also paid \$26.1 million for certain acquisitions that we completed prior to January 1, 2003, for purchase price adjustments based on final closing date net assets of the acquired businesses and earnouts, which were resolved during the period. During 2002, we invested \$1,742.1 million to acquire businesses, primarily for Integrated Systems and Detection Systems. During 2001, we invested \$446.9 million to acquire businesses.

On May 31, 2001, we sold a 30% interest in ACSS to Thales Avionics for \$75.2 million in cash, which resulted in an after-tax gain of \$4.3 million.

### ***Financing Activities***

#### ***Debt***

**Senior Credit Facilities.** At December 31, 2003, the senior credit facilities were comprised of a \$500.0 million five-year revolving credit facility maturing on May 15, 2006 and a \$250.0 million 364-day revolving facility. On February 24, 2004, the maturity date of the 364-day revolving credit facility was extended to February 22, 2005.

At December 31, 2003, available borrowings under our senior credit facilities were \$665.9 million, after reductions for outstanding letters of credit of \$84.1 million. There were no outstanding borrowings under our senior credit facilities at December 31, 2003.

**Redemptions.** On December 22, 2003, L-3 Holdings announced a full redemption of \$300.0 million of its 5.25% Convertible Senior Subordinated Notes due 2009 (Convertible Notes), which expired on January 9, 2004. At December 31, 2003, holders of approximately \$1.6 million of the Convertible Notes had exercised their conversion rights and converted such notes into 40,000 shares of L-3 Holdings common stock. On January 9, 2004, holders of \$298.2 million of the Convertible Notes exercised their conversion rights and converted such notes into 7,317,327 shares of L-3 Holdings common stock. The remaining \$0.2 million of Convertible Notes were redeemed on January 12, 2004 for cash. As a result of these conversions and redemptions, our principal amount of long-term debt decreased by \$298.4 million and shareholders' equity increased by \$292.3 million in January 2004 compared to December 31, 2003.

On May 21, 2003, L-3 Communications initiated a full redemption of all the outstanding \$180.0 million aggregate principal amount of 8½% Senior Subordinated Notes due 2008 (May 1998 Notes). On June 20, 2003, we purchased and paid cash for all the outstanding May 1998 Notes, including

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accrued interest. During 2003, we recorded a pre-tax charge of \$11.2 million, comprising of premiums and other transaction costs of \$7.8 million and \$3.4 million to write-off the unamortized balance of debt issue costs and the

deferred loss on the terminated interest rate swap agreements related to the May 1998 Notes.

On June 6, 2002, L-3 Communications commenced a tender offer to purchase any and all of its \$225.0 million aggregate principal amount of 10 3/8% Senior Subordinated Notes due 2007. The tender offer expired on July 3, 2002. On June 25, 2002, L-3 Communications sent a notice of redemption for all of its 10 3/8% Senior Subordinated Notes due 2007 that remained outstanding after the expiration of the tender offer. Upon sending the notice, the remaining notes became due and payable at the redemption price as of July 25, 2002. During 2002, we recorded a pre-tax charge of \$16.2 million (\$9.9 million after-tax), comprised of premiums, fees and other transaction costs of \$12.5 million and \$3.7 million to write-off the remaining balance of unamortized debt issue costs relating to these notes.

**Debt Issuances.** The table below presents a summary of our issuances of debt obligations for 2001, 2002 and 2003. Our outstanding debt obligations, all of which are senior subordinated debt, were rated BB– by Standard & Poor's and Ba3 by Moody's at December 31, 2003. For additional details about the terms of our debt, see Note 8 to our consolidated financial statements.

Description of Debt Issuances	Issue Date	Principal Amount	Discount	Commissions and Other Offering Expenses	Net Proceeds	Semi-Annual Interest Payment Dates
<i>(in millions)</i>						
<b>L-3 Communications</b>						
6 1/8% Senior Subordinated Notes due January 15, 2014	December 22, 2003	\$400.0	\$7.4	\$ 1.6	\$391.0 <sup>(1)</sup>	January 15 and July 15
6 1/8% Senior Subordinated Notes due July 15, 2013	May 21, 2003	400.0	1.8	7.1	391.1 <sup>(2)</sup>	January 15 and July 15
7 5/8% Senior Subordinated Notes due June 15, 2012	June 28, 2002	750.0	—	18.5	731.5 <sup>(3)</sup>	June 15 and December 15
<b>L-3 Holdings</b>						
4% Senior Subordinated Convertible Contingent Debt Securities (CODES) due September 15, 2011 <sup>(4)</sup>	October 24, 2001	420.0	—	12.8	407.2 <sup>(5)</sup>	March 15 and September 15

- (1) The net proceeds from this offering were used to repay \$275.0 million of borrowings outstanding under our senior credit facilities and to increase cash and cash equivalents.
- (2) The net proceeds from this offering were used to redeem the 8 1/2% Senior Subordinated Notes due 2008 and to increase cash and cash equivalents.
- (3) The net proceeds from this offering and the concurrent sale of 14.0 million shares of L-3 Holdings' common stock, discussed below under "-Equity," were used to (a) repay \$500.0 million borrowed on March 8, 2002, under our senior subordinated bridge loan facility, (b) repay the indebtedness outstanding under our senior credit facilities, (c) repurchase and redeem the 10 3/8% Senior Subordinated Notes due 2007 (discussed above) and (d) increase cash and cash equivalents.
- (4) The CODES are convertible into L-3 Holdings' common stock at a conversion price of \$53.81 per share (7,804,878 shares) under certain circumstances as described in Note 8 to our consolidated financial statements. Additionally, holders of the CODES have a right to receive contingent interest payments, not to exceed a per annum rate of 0.5% of the outstanding principal amount of the CODES, which will be paid on the CODES during any six-month period following a six-month period in which the average trading price of the CODES is above 120% of the principal amount of the CODES. The contingent interest payment provision was triggered for the period beginning September 15, 2002 to March 14, 2003 and resulted in additional interest for that period of \$0.8 million.
- (5) The net proceeds from this offering were used to increase cash and cash equivalents.

**Debt Covenants.** The senior credit facilities, senior subordinated notes and CODES agreements contain financial covenants and other restrictive covenants which remain in effect so long as we owe any amount or any commitment to lend exists thereunder. See Note 8 to our consolidated financial statements for a description of our debt and related financial covenants at December 31, 2003. We are in compliance with those covenants in all material respects. The senior credit facilities limit the payment of dividends by L-3 Communications to L-3 Holdings except for payment of franchise taxes, fees to maintain L-3 Holdings' legal existence, income taxes up to certain amounts, interest accrued on

the CODES or to provide for operating costs of up to \$1.0 million annually. Under the covenant, L-3 Communications may also pay permitted dividends to L-3 Holdings:

- in an amount not to exceed \$25.0 million in any fiscal quarter, so long as no default or event of default has occurred and is continuing;
- in an amount not to exceed \$200.0 million to permit L-3 Holdings to repurchase its common stock, so long as those dividends are paid with the net proceeds of additional subordinated indebtedness issued by L-3 Communications after January 1, 2004. L-3 Holdings may repurchase its common stock in an amount not to exceed \$200.0 million, whether from the proceeds of dividends from L-3 Communications or of issuances of permitted convertible securities or capital stock of L-3 Holdings; and
- in an amount not to exceed \$10.0 million in any fiscal year to fund certain repurchases of common stock of L-3 Holdings from beneficiaries of equity compensation plans of L-3 Communications, L-3 Holdings or their subsidiaries. L-3 Holdings may make further payments of up to \$2.0 million from the proceeds of issuances of its common stock to repurchase common stock held by management.

The senior credit facilities contain cross default provisions that are triggered when a payment default occurs or certain other defaults occur that would allow the acceleration of indebtedness, guarantee obligations or certain other agreements of L-3 Communications or its subsidiaries in an aggregate amount of at least \$15.0 million and those defaults have not been cured after 10 days. The senior subordinated notes and CODES indentures contain cross acceleration provisions that are triggered when holders of the indebtedness of L-3 Holdings, L-3 Communications or their restricted subsidiaries (or the payment of which is guaranteed by such entities) accelerate at least \$10.0 million in aggregate principal amount of those obligations.

The borrowings under the senior credit facilities are guaranteed by L-3 Holdings and by substantially all of the material domestic subsidiaries of L-3 Communications on a senior basis. The payments of principal and premium, if any, and interest on the senior subordinated notes are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally, by substantially all of L-3 Communications' restricted subsidiaries other than its foreign subsidiaries. The guarantees of the senior subordinated notes are junior to the

guarantees of the senior credit facilities and rank pari passu with each other and the guarantees of the CODES. The CODES are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally, by L-3 Communications and substantially all of its restricted subsidiaries other than its foreign subsidiaries. These guarantees rank junior to the guarantees of the senior credit facilities and rank pari passu with each other and the guarantees of the senior subordinated notes.

Equity

On January 26, 2004, L-3 Holdings announced that its Board of Directors had declared L-3 Holdings' first quarterly cash dividend of \$0.10 per share, payable March 15, 2004, to shareholders of record at the close of business on February 17, 2004. On February 17, 2004, L-3 Holdings had 105,227,879 shares of common stock outstanding.

On June 28, 2002, L-3 Holdings sold 14.0 million shares of its common stock in a public offering for \$56.60 per share. Upon closing, we received net proceeds of \$766.8 million after deducting underwriting discounts and commissions and other offering expenses. The net proceeds from this sale and the concurrent sale of senior subordinated notes by L-3 Communications were used to (1) repay \$500.0 million borrowed on March 8, 2002, under our senior subordinated bridge loan facility, (2) repay the indebtedness outstanding under our senior credit facilities, (3) repurchase and redeem the 10 3/8% Senior Subordinated Notes due 2007 discussed above and (4) increase cash and cash equivalents.

On April 23, 2002, L-3 Holdings announced that its Board of Directors had authorized a two-for-one stock split on all shares of L-3 Holdings common stock. The stock split entitled all shareholders of record at the close of business on May 6, 2002 to receive one additional share of L-3 Holdings common stock for every share held on that date. The additional shares were distributed to shareholders in the form of a stock dividend on May 20, 2002. Upon completion of the stock split, L-3 Holdings had approximately 80 million shares of common stock outstanding.

On May 2, 2001, L-3 Holdings sold 9.2 million shares of its common stock in a public offering for \$40.00 per share. In addition, as part of the transaction, other selling stockholders, including affiliates of Lehman Brothers Inc., sold 4.7 million secondary shares. Upon closing, we received net proceeds of \$353.6 million, which we used to repay borrowings outstanding under our senior credit facilities, pay for the KDI and EER acquisitions and to increase cash and cash equivalents.

Based upon our current level of operations, we believe that our cash from operating activities, together with available borrowings under the senior credit facilities, will be adequate to meet our anticipated requirements for working capital, capital expenditures, commitments, research and development expenditures, contingent purchase prices, program and other discretionary investments, and interest payments for the foreseeable future. There can be no assurance, however, that our business will continue to generate cash flow at current levels, or that currently anticipated improvements will be achieved. If we are unable to generate sufficient cash flow from operations to service our debt, we may be required to sell assets, reduce capital expenditures, refinance all or a portion of our existing debt or obtain additional financing. Our ability to make scheduled principal payments or to pay interest on or to refinance our indebtedness depends on our future performance and financial results, which, to a certain extent, are subject to general conditions in or affecting the defense industry and to general economic, political, financial, competitive, legislative and regulatory factors beyond our control. There can be no assurance that sufficient funds will be available to enable us to service our indebtedness, to make necessary capital expenditures and to make discretionary investments.

Contractual Obligations

The table below presents our contractual obligations at December 31, 2003.

		Year(s) Ending December 31,			
Contractual Obligations:	Total	2004	2005-2006	2007-2008	2009 and thereafter
		(in millions)			
Principal amount of L-3 Communications Corporation long-term debt	\$1,750.0	\$ —	\$ —	\$200.0	\$1,550.0
Principal amount of L-3 Holdings Inc. long-term debt	718.4	—	—	—	718.4
Non-cancelable operating leases	574.8	82.6	158.3	106.6	227.3
Notes payable and capital lease obligations	10.8	9.3	1.5	—	—
Purchase obligations <sup>(1)</sup>	637.8	587.3	48.4	1.6	0.5
Other long-term liabilities <sup>(2)</sup>	96.9	68.0 <sup>(3)</sup>	11.2	3.7	14.0
Total	<u>\$3,788.7</u>	<u>\$747.2</u>	<u>\$219.4</u>	<u>\$311.9</u>	<u>\$2,510.2</u>

- (1) Represents open purchase orders at December 31, 2003 for amounts expected to be paid for goods or services that are legally binding on us.
- (2) Other long-term liabilities primarily consists of workers compensation, deferred compensation and litigation settlement accruals for the years ending December 31, 2005 and thereafter and also includes pension and postretirement benefit plan contributions that we expect to pay in 2004.
- (3) Our pension and postretirement benefit plan funding policy is generally to contribute in accordance with cost accounting standards that affect government contractors, subject to the Internal Revenue Code and regulations thereon. During 2002 and 2003, U.S. Congress had granted plan sponsors an interest rate reduction for calculating minimum pension plan contributions. For 2004, we expect to contribute approximately \$55.0 million to our pension plans, assuming the extension of such interest rate reduction, or \$75.0 million if the interest rate reduction is not extended and \$13.0 million to our postretirement benefit plans. Due to the current uncertainty of the amounts used to compute our expected pension and postretirement benefit plan funding, we believe it is not practicable to reasonably estimate such future funding for periods in excess of 1 year.

Off Balance Sheet Arrangements

On December 31, 2002, we entered into two real estate lease agreements, as lessee, with a third-party lessor, which expire on December 31, 2005 and are accounted for as operating leases. On or before the lease expiration date, we can exercise options under the lease agreements to either renew the leases, purchase both properties for \$28.0 million, or sell both properties on behalf of the lessor (the "Sale Option"). If we elect the Sale Option, we must pay the lessor a residual guarantee

amount of \$22.7 million for both properties, on or before the lease expiration date, and at the time both properties are sold, we must pay the lessor a supplemental rent equal to the gross sales proceeds in excess of the residual



guarantee amount not to exceed \$5.3 million.

We have a contract to provide and operate for the U.S. Air Force (USAF) a full-service training facility, including simulator systems near a USAF base. We acted as the construction agent on behalf of the third-party owner-lessors for procurement and construction for the simulator systems, which were completed and delivered in August 2002. On December 31, 2002, we, as lessee, entered into an operating lease agreement for a term of 15 years for one of the simulator systems with the owner-lessor. At the end of the lease term, we may elect to purchase the simulator system at fair market value, which can be no less than \$2.6 million and no greater than \$6.4 million. If we do not elect to purchase the simulator system, then on the date of expiration, we shall pay to the lessor, as additional rent, \$2.6 million and return the simulator system to the lessor. The aggregate non-cancelable rental payments under this operating lease are \$32.5 million, including the additional rent of \$2.6 million. On February 27, 2003, we, as lessee, entered into an operating lease agreement for a term of 15 years for the remaining simulation systems with the owner-lessor. At the end of the lease term, we may elect to purchase the simulator systems at fair market value, which can be no less than \$4.1 million and no greater than \$14.5 million. If we do not elect to purchase the simulator systems, then on the date of expiration, we shall return the simulator systems to the lessor. The aggregate non-cancelable rental payments under this operating lease are \$53.3 million.

Derivative Financial Instruments

Included in our derivative financial instruments are foreign currency forward contracts, interest rate swap agreements and the embedded derivatives related to the issuance of our CODES. All of our derivative financial instruments that are sensitive to market risk are entered into for purposes other than trading.

**Embedded Derivatives.** The contingent interest payment and contingent conversion features of the CODES are embedded derivatives which we bifurcated from the CODES and separately recorded on our balance sheet. On the date of issuance of the CODES, we ascribed \$2.5 million of the net proceeds from the CODES to those embedded derivatives which represented their aggregate fair value, and recorded it as a liability in accordance with SFAS No. 133. The subsequent increases (decreases) to the fair values of the embedded derivatives are recorded as losses (gains) in the statement of operations. Their fair values at December 31, 2003 were \$2.7 million, which represents a liability.

**Interest Rate Risk.** Our financial instruments that are sensitive to changes in interest rates include borrowings under the senior credit facilities all of which are denominated in U.S. dollars. At December 31, 2003, there were no outstanding borrowings under our senior credit facilities. The interest rates on the senior subordinated notes and CODES are fixed-rate and are not affected by changes in interest rates. Depending on the interest rate environment we may enter into interest rate swap agreements to convert the fixed interest rates on a portion of our outstanding debt to variable interest rates, or terminate any existing interest rate swap agreements. At December 31, 2003, we do not have any interest rate swap agreements in place. We may enter into interest rate swap agreements during 2004, depending on market interest rates and conditions. The table below presents the activity for our interest rate swap agreements through December 31, 2003.

Inception Date	Fixed Rate Debt Obligation		Notional Amount	Average Variable Rate Paid <sup>(1)</sup>	Termination Date	Cash Proceeds Received at Termination <sup>(2)</sup>				December 31, 2003	
						Interest Expense Reduction <sup>(3)</sup>	Deferred Gain (Loss) <sup>(4)</sup>	Total	Cumulative Recognized Deferred Gain (Loss) <sup>(5)</sup>	Balance of Unamortized Deferred Gain (Loss) <sup>(6)</sup>	
July 2003	\$400.0 million of 6 1/8% Senior Subordinated Notes due 2013	\$	400.0	2.1%	September 2003	\$ 2.7	\$ 8.0	\$ 10.7	\$ 0.2	\$ 7.8	
March 2003	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$	200.0	4.4%	June 2003	1.6	6.7	8.3	0.4	6.3	
January 2003	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$	200.0	4.0%	March 2003	1.2	5.2	6.4	0.4	4.8	
June 2002	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$	200.0	4.1%	September 2002	1.7	12.2	13.9	1.6	10.6	
November 2001	\$180.0 million of 8 1/2% Senior Subordinated Notes due 2008	\$	180.0	5.3%	August 2002	1.2	(0.6)	0.6	(0.6)	—	
July 2001	\$200.0 million of 8% Senior Subordinated Notes due 2008	\$	200.0	3.9%	June 2002	3.5	5.2	8.7	1.3	3.9	
						<u>\$ 11.9</u>	<u>\$36.7</u>	<u>\$48.6</u>	<u>\$ 3.3</u>	<u>\$33.4</u>	

- (1) Represents the average variable interest rate we paid prior to the termination of the interest rate swap agreement.
- (2) Cash proceeds received at termination are included in cash from operating activities on L-3's statement of cash flows in the period received.
- (3) Represents interest savings earned for the period prior to the termination of the interest rate swap agreements.
- (4) Represents the future value of the interest rate swap agreements at termination date, which is being amortized over the remaining term of the underlying debt instrument.
- (5) Represents the cumulative amount of deferred gain recognized as a reduction to interest expense through December 31, 2003.
- (6) The current portion of unamortized deferred gains at December 31, 2003, aggregating \$4.2 million, is included in other current liabilities. The remaining \$29.2 million is included in other liabilities.

When we enter into interest rate swap agreements, we attempt to manage exposure to counterparty credit risk by only entering into agreements with major financial institutions that are expected to be able to fully perform under the terms of such agreements. Cash payments between us and the counterparties are made in accordance with the terms of the interest rate swap agreements. Such payments are recorded as adjustments to interest expense. Additional data on our debt obligations, our applicable borrowing spreads included in the interest rates we pay on borrowings under the senior credit facilities and interest rate swap agreements are provided in Notes 8 and 9 to our consolidated financial statements.

**Foreign Currency Exchange Risk.** We conduct some of our operations outside the U.S. in functional currencies other than the U.S. dollar. Additionally, some of our U.S. and foreign operations have contracts with customers which are denominated in currencies other than the functional currencies of those operations. To mitigate the risk associated with certain of these contracts denominated in foreign currency we have entered into foreign currency forward contracts. At December 31, 2003, the notional value of foreign currency forward contracts was \$71.4 million and the fair value of these contracts was \$1.2 million, which represented an asset. We account for these contracts as cash flow hedges.

**Equity Price Risk.** Our equity investments in common stocks and limited partnerships are subject to equity price risk, including equity risk. The fair values of our investments are based on quoted market prices for investments which are readily marketable securities, and estimated fair value for nonreadily marketable securities, which is generally equal to historical cost unless such investment has experienced an other-than-temporary impairment. Both the carrying values and estimated fair values of such instruments amounted to \$20.0 million at the end of 2003.

**Backlog and Orders**

We define funded backlog as the value of funded orders received from customers, less the amount of sales recognized on those funded orders. We define funded orders as the value of contract awards

received from the U.S. Government, for which the U.S. Government has appropriated funds, plus the value of contract awards and orders received from customers other than the U.S. Government. Our funded backlog at December 31, 2003 was \$3,893.3 million and at December 31, 2002 was \$3,228.6 million. We expect to record as sales approximately 81.2% of our funded backlog as of December 31, 2003 during 2004. However, there can be no assurance that our funded backlog will become sales in any particular period, if at all. Funded orders received for the year ended December 31, 2003 were \$5,477.4 million, \$4,383.1 million for the year ended December 31, 2002 and \$2,456.1 million for the year ended December 31, 2001.

Our funded backlog does not include the full value of our contract awards including those pertaining to multi-year, cost-plus reimbursable contracts, which are generally funded on an annual basis. Funded backlog also excludes the sales value of unexercised contract options that may be exercised by customers under existing contracts and the sales value of purchase orders that we may receive under indefinite quantity contracts or basic ordering agreements.

**Research and Development**

The following table presents L-3's company-sponsored and customer-funded research and development costs for 2003, 2002 and 2001. See Note 2 to the consolidated financial statements for a discussion of L-3's accounting policies for research and development costs.

	For the Year Ended December 31,		
	2003	2002	2001
Company-Sponsored Research and Development Costs:			
U.S. Government Contractor Businesses	\$135.7	\$125.1	\$ 81.0
Commercial Businesses	52.8	34.8	26.5
Total	<u>\$188.5</u>	<u>\$159.9</u>	<u>\$107.5</u>
Customer-Funded Research and Development Costs	<u>\$573.1</u>	<u>\$480.9</u>	<u>\$319.4</u>

**Contingencies**

We are engaged in providing products and services under contracts with the U.S. Government and, to a lesser degree, under foreign government contracts, some of which are funded by the U.S. Government. All such contracts are subject to extensive legal and regulatory requirements, and, periodically, agencies of the U.S. Government investigate whether such contracts were and are being conducted in accordance with these requirements. Under government procurement regulations, an indictment by a federal grand jury could result in the suspension for a period of time from eligibility for awards of new government contracts. A conviction could result in debarment from contracting with the federal government for a specified term. Additionally, in the event that U.S. Government expenditures for products and services of the type we manufacture and provide are reduced and not offset by greater commercial sales or other new programs or products or acquisitions, there may be a reduction in the volume of contracts or subcontracts awarded to us.

We continually assess our obligations with respect to applicable environmental protection laws. While it is difficult to determine the timing and ultimate cost to be incurred in order to comply with these laws, based upon available internal and external assessments, with respect to those environmental loss contingencies of which we are aware, we believe that even without considering potential insurance recoveries, if any, there are no environmental loss contingencies that, individually or in the aggregate, would be material to our consolidated financial position, results of operations or cash flows. Also, we have been periodically subject to litigation, claims or assessments and various contingent liabilities incidental to our business. We accrue for these contingencies when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

In connection with the IS acquisition we assumed responsibility for implementing certain corrective actions required under federal law to remediate the Greenville, Texas site location, and to

pay a portion of those remediation costs. The hazardous substances requiring remediation have been substantially characterized, and the remediation system has been partially implemented. We have estimated that our share of the remediation cost will not exceed \$2.5 million, and will be incurred over a period of 25 years. We have established adequate reserves for these costs.

On August 6, 2002, Aviation Communications & Surveillance Systems, LLC (ACSS), a subsidiary of L-3 Communications Corporation, was sued by Honeywell International Inc. and Honeywell Intellectual Properties, Inc. (collectively, "Honeywell") for alleged infringement of patents that relate to terrain awareness avionics. The lawsuit was filed in the United States District Court for the District of Delaware. In December of 2002, Honeywell withdrew without prejudice the lawsuit against ACSS and agreed to proceed with non-binding arbitration. We had previously investigated the Honeywell patents and believe that ACSS has valid defenses against Honeywell's patent infringement suit. In addition, ACSS has been indemnified to a certain extent by

Thales Avionics, which provided ACSS with the alleged infringing technology. Thales Avionics owns 30% of ACSS. In the opinion of management, the ultimate disposition of Honeywell's pending claim will not result in a material liability to us.

L-3 Integrated Systems and its predecessors have been involved in a litigation with Kalitta Air (Kalitta Air) arising from a contract to convert Boeing 747 aircraft from passenger configuration to cargo freighters. The lawsuit was brought in the northern district of California on January 31, 1997. The aircraft were modified using Supplemental Type Certificates (STCs) issued in 1988 by the Federal Aviation Administration (FAA) to Hayes International, Inc. (Hayes/Pemco) as a subcontractor to GATX/Airlog Company (GATX). Between 1988 and 1990, Hayes/Pemco modified five aircraft as a subcontractor to GATX using the STCs. Between 1990 and 1994, Chrysler Technologies Airborne Systems, Inc. (CTAS), a predecessor to L-3 Integrated Systems, performed as a subcontractor to GATX and modified an additional five aircraft using the STCs. Two of the aircraft modified by CTAS were owned by American International Airways, the predecessor to Kalitta Air. In 1996, the FAA determined that the engineering data provided by Hayes/Pemco supporting the STCs was inadequate and issued an Airworthiness Directive that effectively grounded the ten modified aircraft. The Kalitta Air aircraft have not been in revenue service since that date. The matter was tried in January 2001 against GATX and CTAS with the jury finding fault on the part of GATX but rendering a unanimous defense verdict in favor of CTAS. Certain co-defendants had settled prior to trial. The Ninth Circuit Court of Appeals has reversed and remanded the trial court's summary judgment rulings in favor of CTAS regarding a negligence claim by Kalitta Air, which asserts that CTAS as an expert in aircraft modification should have known that the STCs were deficient, and excluding certain evidence at trial. Based on this ruling, it appears likely that the matter will have to be retried. In August of 2003, Kalitta Air has recalculated its damages based on consequential damage theories of lost revenues and income and diminution in value of the business and is asserting damages in excess of \$500 million. CTAS' insurance carrier has accepted defense of the matter with a reservation of rights. We continue to believe that we have meritorious defenses and intend to vigorously defend this matter.

L-3 and L-3 Communications Security and Detection Systems (L-3 SDS) have been named, along with many other defendants, including other security screening systems manufacturers, as defendants in a number of lawsuits brought in the Southern District of New York by or on behalf of the victims of the terrorist attacks on September 11, 2001. Counsel for the plaintiffs have represented to the court that they intend to amend some or all of their complaints to delete certain of the defendants, including L-3 and L-3 SDS, and to date, approximately 60 of the complaints have been amended to drop L-3 and L-3 SDS as a defendant. In addition, the court has ruled that the plaintiffs who complete their applications for relief under a federal fund may not pursue judicial action. The court has ordered that the plaintiffs file final amended complaints by March 31, 2004, at which time L-3 and L-3 SDS will know how many, if any, actions will be pending against them. The complaints allege various causes of action, including claims of wrongful death, negligence, strict liability and breach of contract, and seek compensatory and punitive damages. L-3 and L-3 SDS believe that they have meritorious defenses to these actions and intend to vigorously defend the lawsuits. L-3 purchased L-3 SDS from PerkinElmer, Inc. (PerkinElmer) on June 14, 2002. The actions have been tendered to our and PerkinElmer's insurance carriers, who have accepted the defense of these matters.

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On November 18, 2002, we initiated a proceeding against OSI Systems, Inc. (OSI) in the United States District Court sitting in the Southern District of New York seeking, among other things, a declaratory judgment that we had fulfilled all of our obligations under a letter of intent with OSI (the "OSI Letter of Intent"). Under the OSI Letter of Intent, we were to negotiate definitive agreements with OSI for the sale of certain businesses we acquired from PerkinElmer, Inc. on June 14, 2002. On February 7, 2003, OSI filed an answer and counterclaims in the New York action alleging, among other things, that we breached our obligations under the OSI Letter of Intent and seeking damages in excess of \$100 million, not including punitive damages. Under the OSI Letter of Intent, we proposed selling to OSI the conventional detection business and the ARGUS business that we recently acquired from PerkinElmer, Inc. Negotiations with OSI lasted for almost one year and ultimately broke down over issues regarding, among other things, intellectual property, product-line definitions, allocation of employees and due diligence. We believe that the claims asserted by OSI in its suit are without merit and intend to defend against the OSI claims vigorously.

L-3 Communications Vertex Aerospace LLC (formerly known as Vertex Aerospace LLC and acquired by the Company on December 1, 2003) ("L-3 Vertex") is named as a defendant in nine wrongful death lawsuits in the District Court, 17th Judicial District, Tarrant County, Texas; in the Circuit Court of the 17th Judicial Circuit, Broward County, Florida; and in the United States District Court, Western District of North Carolina arising from the crash of Air Midwest Flight 5481 at Charlotte-Douglas International Airport in Charlotte, North Carolina on January 8, 2003. The crash resulted in the deaths of nineteen passengers and two crewmembers. Each of the lawsuits alleges contributing factors including that the accident was caused by the improper maintenance of the aircraft by L-3 Vertex, and seeks to recover compensatory and punitive damages. No discovery has taken place in the lawsuits at this time. Eight claims resulting from this incident have previously settled. The National Transportation Safety Board (NTSB) investigated the cause of the crash and has concluded that the crash was caused by the incorrect rigging of the elevator control system compounded by the airplane's center of gravity, which was substantially aft of the certified limit, with several other contributing factors. L-3 Vertex believes that it has meritorious defenses to the pending lawsuits, and intends to defend the cases vigorously. The actions have been tendered to L-3 Vertex's insurance carrier, who has accepted the defense of each action served upon L-3 Vertex to date. L-3 Vertex was also indemnified by Air Midwest for losses L-3 Vertex incurred arising out of its provision of maintenance services to Air Midwest. Based on the availability of insurance and the indemnification from Air Midwest, we do not believe we will have a material liability in this matter.

With respect to those investigative actions, items of litigation, claims or assessments of which we are aware, we are of the opinion that the probability is remote that, after taking into account certain provisions that have been made with respect to these matters, the ultimate resolution of any such investigative actions, items of litigation, claims or assessments will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

#### Recently Issued Accounting Standards

In December of 2003, the Financial Accounting Standards Board (FASB) revised its FASB Interpretation No. 46, *Consolidation of Variable Interest Entities* (FIN 46R). FIN 46R clarifies the application of Accounting Research Bulletin No. 51, *Consolidated Financial Statements*. FIN 46R requires that a business enterprise review all of its legal structures used to conduct its business activities, including those to hold assets, and its majority-owned subsidiaries, to determine whether those legal structures are variable interest entities (VIEs) required to be consolidated for financial reporting purposes by the business enterprise. A VIE is a legal structure for which the holders of a majority voting interest may not have a controlling financial interest in the legal structure. FIN 46R provides guidance for identifying those legal structures and provides guidance for determining whether a business enterprise shall consolidate a VIE. FIN 46R requires that a business enterprise that holds a significant variable interest in a VIE make new disclosures in their financial statements. We are required to adopt the provisions of FIN 46R for our interim period ending March 31, 2004. We do not believe that L-3 holds any significant interests in VIEs that would require consolidation or additional disclosures.

In March of 2003, the Emerging Issues Task Force (EITF) issued EITF No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables*. EITF No. 00-21 addresses how to determine whether a revenue arrangement involving multiple deliverables contains more than one unit of accounting for revenue recognition purposes, and how consideration should be measured and allocated to the separate accounting units. EITF No. 00-21 applies to all deliverables within contractually binding arrangements in all industries, except to the extent that a deliverable in a contractual arrangement is subject to other existing higher-level authoritative literature. EITF 00-21 became effective for revenue arrangements entered into after July 1, 2003. The adoption of EITF No. 00-21 did not have a material effect on our financial position or results of operations.

In May of 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. This Statement applies to certain financial instruments including mandatorily redeemable financial instruments that, prior to SFAS No. 150 could have been accounted for as a component of equity. SFAS No. 150 requires that those instruments be classified as liabilities in statements of financial position. SFAS No. 150 also requires disclosures about alternative ways of settling the instruments and the capital structure of entities whose shares are all mandatorily redeemable. SFAS No. 150 is effective for these financial instruments entered into or modified after May 31, 2003. For these financial instruments entered into before May 31, 2003, SFAS No. 150 became effective for our interim period beginning July 1, 2003. We do not hold any financial instruments that are within the scope of SFAS No. 150. Accordingly, SFAS No. 150 is not expected to have a material effect on our consolidated results of operations or financial position.

On December 8, 2003, President Bush signed the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (DIMA). This Act introduces a federal subsidy to sponsors of retiree health care benefit plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. In January of 2002, the FASB issued FASB Staff Position 106-1, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (FSP 106). In accordance with FSP 106, we are electing to defer recognition of any potential savings on the measure of the accumulated postretirement benefit or net periodic benefit cost as a result of DIMA until specific authoritative guidance on the accounting of the federal subsidy is issued. Therefore, the consolidated financial statements and accompanying notes do not reflect the effects of the Act on our postretirement medical plans.

## Inflation

The effect of inflation on our sales and earnings has not been significant. Although a majority of our sales are made under long-term contracts, the selling prices of such contracts, established for deliveries in the future, generally reflect estimated costs to be incurred in these future periods. In addition, some of our contracts provide for price adjustments through cost escalation clauses.

## BUSINESS

### Overview

We are a leading supplier of a broad range of products used in a substantial number of aerospace and defense platforms. We also are a major supplier of subsystems on many platforms, including those for secure communication networks, mobile satellite communications, information security systems, shipboard communications, naval power systems, fuzes and safety and arming devices for missiles and munitions, microwave assemblies for radars and missiles, telemetry and instrumentation and airport security systems. We also are a prime system contractor for aircraft modernization and maintenance, Intelligence, Surveillance and Reconnaissance (ISR) collection platforms, simulation and training, and government systems support services. Our businesses employ proprietary technologies and capabilities, and we believe our businesses have leading positions in their respective primary markets. Our customers include the U.S. Department of Defense (DoD) and its prime contractors, certain U.S. Government intelligence agencies, major aerospace and defense contractors, foreign governments, commercial customers and certain other U.S. federal, state and local government agencies. For the year ended December 31, 2003, direct and indirect sales to the DoD provided 69.3% of our sales, and sales to commercial customers, foreign governments and U.S. federal, state and local government agencies other than the DoD provided 30.7% of our sales. For the year ended December 31, 2003, we had sales of \$5,061.6 million, of which U.S. customers accounted for 83.1% and foreign customers, including commercial export sales, accounted for 16.9%, and operating income of \$581.0 million.

We have four reportable segments: (1) Secure Communications & ISR; (2) Training, Simulation & Support Services; (3) Aviation Products & Aircraft Modernization; and (4) Specialized Products. Financial information for our reportable segments is included in Management's Discussion and Analysis of Results of Operations and Financial Condition and in Note 18 of our consolidated financial statements.

#### *Secure Communications & ISR*

Our businesses in this segment provide products and services for the global ISR market, specializing in signals intelligence and communications intelligence systems. These products and services provide the warfighter in real-time the unique ability to collect and analyze unknown electronic signals from command centers, communication nodes and air defense systems for real-time situation awareness and response. The businesses in this segment also provide secure, high data rate communications systems for military and other U.S. Government and foreign government reconnaissance and surveillance applications. We believe our systems and products are critical elements for a substantial number of major communication, command and control, intelligence gathering and space systems. Our systems and products are used to connect a variety of airborne, space, ground and sea-based communication systems and are used in the transmission, processing, recording, monitoring and dissemination functions of these communication systems. Our major secure communication programs and systems include:

- secure data links for airborne, satellite, ground and sea-based remote platforms, both manned and unmanned, for real-time information collection and dissemination to users;
- highly specialized fleet management and support, including procurement, systems integration, sensor development, modification and maintenance for signals intelligence and ISR special mission aircraft and airborne surveillance systems;
- strategic and tactical signals intelligence systems that detect, collect, identify, analyze and disseminate information;
- secure terminal and communication network equipment and encryption management; and

- communication systems for surface and undersea vessels and manned space flights.

#### *Training, Simulation & Support Services.*

Our businesses in this segment provide a full range of training, simulation and support services, including:

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- services designed to meet customer training requirements for aircrews, navigators, mission operators, gunners and maintenance technicians for virtually any platform, including military fixed and rotary wing aircraft, air vehicles and various ground vehicles;
  - communication software support, information technology services and a wide range of engineering development services and integration support;
  - high-end engineering and information support services used for command, control, communications and ISR architectures, as well as for air warfare modeling and simulation tools for applications used by the DoD, Department of Homeland Security and U.S. Government intelligence agencies, including missile and space systems, Unmanned Aerial Vehicles (UAVs) and military aircraft;
  - developing and managing extensive programs in the United States and internationally that focus on teaching, training and education, logistics, strategic planning, organizational design, democracy transition and leadership development; and
  - producing crisis management software and providing command and control for homeland security applications.

#### *Aviation Products & Aircraft Modernization.*

Our businesses in this segment provide aviation products and aircraft modernization services, including:

- airborne traffic and collision avoidance systems (TCAS) for commercial and military applications;
- commercial, solid-state, crash-protected cockpit voice recorders, flight data recorders and maritime hardened voyage recorders;
- ruggedized custom displays for military and high-end commercial applications;
- turnkey aviation life cycle management services that integrate custom developed and commercial off-the-shelf products for various military fixed and rotary wing aircraft, including heavy maintenance and structural modifications and interior completion for Head-of-State aircraft;
- engineering, modification, maintenance, logistics and upgrades for U.S. Special Operations Command aircraft, vehicles and personnel equipment;
- aerospace and other technical services related to large fleet support, such as aircraft and vehicle modernization, maintenance, repair and overhaul, logistics support, and supply chain management, primarily for military training, tactical, cargo and utility aircraft, and the Patriot Missile System and M1 Abrams Main Battle Tank; and
- advanced cockpit avionics products and specialized avionics repair and overhaul services for various segments of the aviation market.

#### *Specialized Products.*

Our businesses in this segment supply products, including components, subsystems and systems, to military and commercial customers in several niche markets. These products include:

- naval warfare products, including acoustic undersea warfare products for mine hunting, dipping and anti-submarine sonars and naval power distribution, conditioning, switching and protection equipment for surface and undersea platforms;
- ruggedization and integration of commercial-off-the-shelf technology for displays, computers and electronic systems for military and commercial applications;
- security and surveillance systems for aviation, port and border applications, including those for perimeter security and for detection of explosives, concealed weapons, contraband and illegal narcotics, and to inspect agricultural products and to examine cargo;

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- telemetry, instrumentation, space and navigation products, including tracking and flight termination;
  - premium fuzing products and safety and arming devices for missiles and munitions;
  - microwave components used in radar communication satellites, wireless communication equipment, electronic surveillance, communication and electronic warfare applications and countermeasure systems;
  - high performance antennas and ground based radomes;
  - training devices and motion simulators which produce advanced virtual reality simulation and high-fidelity representations of cockpits and mission stations for fixed and rotary wing aircraft and land vehicles; and
  - precision stabilized electro-optic surveillance systems, including high magnification lowlight, daylight and forward looking infrared sensors, laser range finders, illuminators and designators, and digital and wireless communication systems.

## Industry Overview

The U.S. defense industry has undergone dramatic consolidation over the past decade resulting in the emergence of five dominant prime system contractors: The Boeing Company, Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company and General Dynamics Corporation. We believe that one outcome of this consolidation is that the DoD must ensure that vertical integration does not diminish the fragmented, yet critical DoD vendor base. Additionally, we believe it has become uneconomical for the prime contractors to design, develop and manufacture numerous essential products, components and subsystems for their own use. As the prime contractors continue to evaluate their core competencies and competitive positions, focusing their resources on larger programs and platforms, we expect the prime contractors to continue to exit non-strategic business areas and procure these needed elements on more favorable terms from independent, commercially oriented suppliers. Examples of this trend include recent divestitures of certain non-core defense-related businesses by several of the prime contractors.

The focus on cost reduction by the prime contractors and the DoD is also driving increased use of commercial off-the-shelf products for upgrades of existing systems and in new systems. We believe the prime contractors will continue to apply their resources and capabilities on major platforms and systems, utilizing commercially oriented "best of breed" suppliers to produce subsystems, components and products. We believe successful suppliers will continue to use their resources to complement and support, rather than compete with, the prime contractors. We anticipate that several relationships between the major prime contractors and their primary suppliers will continue to evolve in a fashion similar to those employed in the automotive and commercial aircraft industries. We expect that these relationships will be defined by critical partnerships encompassing increasingly greater outsourcing of non-core products and systems by the prime contractors to their key merchant suppliers and increasing supplier participation in the development of future programs. We believe that early involvement in the upgrading of existing systems and the design and engineering of new systems incorporating the prime contractor outsourced products will provide merchant suppliers, including us, with a competitive advantage in securing new business and provide the prime contractors with significant cost reduction opportunities through the coordination of the design, development and manufacturing processes. However, notwithstanding these defense industry outsourcing trends, all of the dominant prime system contractors have some vertically integrated businesses, which causes suppliers of defense products and subsystems, including L-3, to compete directly against the prime system contractors in certain business areas.

## Business Strategy

We intend to grow our sales, improve our profitability and build on our position as a leading supplier of systems, products and services to the major contractors in the aerospace and defense industry, as well as the U.S. Government. We also intend to continue to leverage our expertise and

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products into selected new commercial and civil business areas where we can adapt our existing products and technologies. Our strategy to achieve these objectives includes:

**Expand Supplier Relationships.** We have developed strong relationships with the DoD, several other U.S. Government agencies and all of the major U.S. defense prime contractors, enabling us to identify new business opportunities and anticipate customer needs. As an independent supplier, we anticipate that our growth will be driven by expanding our share of existing programs and by participating in new programs. We identify opportunities where we are able to use our strong relationships to increase our business presence and allow customers to reduce their costs. We also expect to benefit from continued outsourcing of subsystems, components and products by prime contractors, which positions us to be a supplier to multiple bidders on prime contract bids.

**Support Customer Requirements.** A significant portion of our sales is derived from strategic, long-term programs and from programs for which we have been the incumbent supplier, and in many cases acted as the sole provider over many years. Our customer satisfaction and excellent performance record are evidenced by our receipt of performance-based award fees exceeding 90% of the available award fees on average during the year ended December 31, 2003. We believe that prime contractors will increasingly award long-term, outsourcing contracts to the best-of-breed merchant suppliers they believe to be most capable on the basis of quality, responsiveness, design, engineering and program management support as well as cost. We intend to continue to align our research and development, manufacturing and new business efforts to complement our customers' requirements and provide state-of-the-art products.

**Improve Operating Margins.** We have a history of improving the operating performance of the businesses we acquire by reducing their overhead costs, administrative expenses and facilities costs, increasing sales, improving contract bidding and proposals controls and practices and increasing competitive contract award win rates. We intend to continue to improve our operating performance by continuing to reducing overhead expenses, consolidating certain of our businesses and business processes and increasing the productivity of our businesses.

**Leverage Technical and Market Leadership Positions.** We have developed strong, proprietary technical capabilities that have enabled us to capture the number one or number two market position in most of our key business areas, including secure, high data rate communications systems, solid state aviation recorders, security systems, telemetry, instrumentation and space products, advanced antenna products and high performance microwave components. We continue to invest in company-sponsored independent research and development, including bid and proposal costs, in addition to making substantial investments in our technical and manufacturing resources. Further, we have a highly skilled workforce, including approximately 19,100 engineers. We are applying our technical expertise and capabilities to several closely aligned commercial business markets and applications such as transportation and broadband wireless communications and we expect to continue to explore other similar commercial opportunities.

**Maintain Diversified Business Mix.** We have a diverse and broad business mix with limited reliance on any single program, a favorable balance of cost-reimbursable and fixed-price contracts, a significant follow-on business and an attractive customer profile. Our largest program, a cost-reimbursable contract for U.S. Special Operations Forces Logistics Support, represented 4.4% of our sales for the year ended December 31, 2003. No other program represented more than 2.9% of sales for the year ended December 31, 2003. Furthermore, 36.9% of our sales for 2003 were from cost reimbursable contracts and time-and-material contracts, and 63.1% were from fixed-price contracts, providing us with a mix of predictable profitability (cost-reimbursable and time-and-material) and higher margin (fixed-price) business. We also enjoy a favorable mix of defense and non-defense business, with direct and indirect sales to the DoD accounting for 69.3%, and sales to commercial customers, foreign governments and U.S. federal, state and local government agencies other than the DoD accounting for the remaining 30.7% of our sales for the year ended December 31, 2003. We intend to leverage this business profile to expand our merchant supplier business base.

**Capitalize on Strategic Acquisition Opportunities.** Recent U.S. defense industry consolidation has dramatically reduced the number of traditional middle-tier aerospace and defense companies, which

are smaller than the five dominant prime system contractors and larger than the many smaller publicly and privately owned companies, as well as the non-core aerospace and defense businesses of the prime contractors. We intend to enhance our existing product base through internal research and development efforts and selective acquisitions that will add new products in areas that complement our present technologies. We intend to continue acquiring select, smaller publicly and privately owned companies, as well as non-core aerospace and defense businesses of larger companies, that exhibit the following criteria:

- significant market position(s) in their business area(s);
- product offerings which complement and/or extend our product offerings; and
- positive sales, earnings and cash flow prospects.

Selected Recent Acquisitions

During the year ended December 31, 2003, we used cash of \$1,014.4 million to acquire businesses (See Management's Discussion and Analysis of Results of Operations and Financial Condition—Statement of Cash Flows—Investing Activities). The table below summarizes the contractual purchase price for the more significant businesses that we acquired in 2003. The purchase prices disclosed below do not include adjustments for net cash acquired and acquisition costs. For certain of these acquisitions, the purchase price may be subject to adjustment based on actual closing date net assets, net working capital of the acquired business and/or the post-acquisition financial performance of the acquired business.

Business	Date Acquired	Acquired From	Purchase Price (\$ millions)	Business Description
Avionics Systems	March 28, 2003	Goodrich Corporation	\$188.7	Develops and manufactures innovative avionics solutions for substantially all segments of the aviation market, and sells its products to the military, business jet, general aviation, rotary wing aircraft and air transport markets.
Aeromet, Inc.	May 30, 2003	Aeromet, Inc. Shareholders	\$17.5	Designs, develops and integrates infrared and optical systems for airborne ISR.
Klein Associates	September 30, 2003	OYO Corporation of Japan	\$30.0	Designs, manufactures and supports side-scan sonar, sub-bottom profilers and related instruments and accessories for undersea search and survey, including intrusion detection systems for port security applications.

Business	Date Acquired	Acquired From	Purchase Price (\$ millions)	Business Description
Military Aviation Services	October 31, 2003	Bombardier, Inc.	\$ 87.4	Provides systems engineering support and avionics modernization, and provides a full range of technical services in the areas of aircraft maintenance, repair and upgrade for military aircraft and business and regional jets and the refurbishment and modernization of selected commercial aircraft.
Vertex Aerospace LLC	December 1, 2003	Veritas Capital	\$650.0	Provider of aerospace and other technical services to the U.S. Department of Defense and other government agencies. Services include logistics support, fixed and rotary wing aircraft modernization and maintenance, supply chain management and pilot training. Support for tactical, cargo and utility aircraft and other defense-related platforms.

Products and Services

Secure Communications & ISR

The systems and products, selected applications and selected platforms or end users of our Secure Communications & ISR segment at December 31, 2003 are summarized in the table below.

Systems/Products	Selected Applications	Selected Platforms/End Users
Signals Intelligence		
• Prime mission systems integration and sensor development	• Signal processing, airborne radio frequency applications, antenna technology, real-time process control and software development	• USAF Big Safari Fleet, Rivet Joint, Combat Sent, Cobraball and subsystems for U-2 and EP-3

High Data Rate Communications

- Wideband data links and ground terminals
- High performance, wideband secure communication links for relaying of intelligence and reconnaissance information
- Manned aircraft, UAVs, naval ships, terminals and satellites

Satellite Communication Terminals

- Ground-based satellite communication terminals and payloads
- Interoperable, transportable ground terminals
- Remote personnel provided with communication links to distant forces

Systems/Products	Selected Applications	Selected Platforms/End Users
Satellite Communication Terminals		
• Satellite communication and tracking system	• On-board satellite external communications, video systems, solid state recorders and ground support equipment	• International Space Station, Space Shuttle and various satellites
• Satellite command and control sustainment and support	• Software integration, test and maintenance support satellite control network and engineering support for satellite launch system	• U.S. Air Force Satellite Control Network and rocket launch system
Military Communications		
• Shipboard communications systems	• Internal and external communications (radio room)	• Naval vessels
Information Security Systems		
• Secure communication terminals and equipment	• Secure and non-secure voice, data and video communication for office and battlefield utilizing Integrated Services Digital Network (ISDN)	• U.S. Armed services, intelligence and security agencies

We believe that we are an established leader in the development, construction and installation of communication systems for high performance intelligence collection, imagery processing and ground, air, sea and satellite communications for the DoD and other U.S. Government agencies. We provide secure, high data rate, real-time communication systems for surveillance, reconnaissance and other intelligence collection systems. We also design, develop, produce and integrate communication systems and support equipment for space, ground and naval applications, as well as provide communication software support services to military and related government intelligence markets. Businesses of the Secure Communications & ISR segment include high data rate communications links, satellite communications terminals, naval vessel communication systems, space communications and satellite control systems, signal intelligence information processing systems, information security systems, tactical battlefield sensor systems and commercial communication systems.

Signals Intelligence (SIGINT)

We believe that we are a world leader in SIGINT and ISR systems providing unique, highly specialized fleet management and support for special mission aircraft, including prime mission systems integration, sensor development, aircraft modernization and maintenance and procurement for a range of customers, primarily under classified contracts. Our primary mission in this area is to support the USAF Big Safari fleet, including the Rivet Joint, Combat Sent and Cobra Ball RC-135 aircraft, through long-term sole-source contracts.

High Data Rate Communications

We believe that we are a technology leader in high data rate, covert, jam-resistant microwave communications used in military and other national agency reconnaissance and surveillance applications. Our product line covers a full range of tactical and strategic secure point-to-point and relay data transmission systems, products and support services that conform to military and intelligence specifications. Our systems and products are capable of providing battlefield commanders with real-time, secure surveillance and targeting information and were used extensively by U.S. armed forces in the war operations in Bosnia and Kosovo, and are being used for Operation Iraqi Freedom in Iraq and Operation Enduring Freedom in Afghanistan.

Our current family of strategic and tactical data links or CDL (Common Data Link) systems are considered DoD standards for data link hardware. Our primary focus is spread spectrum secure communication links technology, which involves transmitting a data signal with a high-rate noise signal

making it difficult to detect by others, and then re-capturing the signal and removing the noise. Our data links use point-to-point and point-to-multipoint architectures.

We provide these secure high bandwidth products to the U.S. Air Force, the U.S. Navy, the U.S. Army and various U.S. Government agencies, many through long-term programs. The scope of these programs include air-to-ground, air-to-air, ground-to-air and satellite communications such as the U-2 Support Program, GUARDRAIL, ASTOR and major UAV (unmanned aerial vehicle) programs, such as Predator, Global Hawk and Fire Scout.

We remain the industry leader in the mobile airborne satellite terminal product market, delivering mobile satellite communication services to many airborne platforms. These services provide real-time connectivity between the battlefield and non-local exploiters of ISR data.



### Satellite Communication Terminals

We provide ground-to-satellite, high availability, real-time global communications capability through a family of transportable field terminals used to communicate with commercial, military and international satellites. These terminals provide remote personnel with constant and effective communication capability and provide communication links to distant forces. Our TSS (TriBand SATCOM Subsystem) employs a 6.25 meter dish with a single point feed that provides C, Ku and X band communication to support the U.S. Army. We also offer an 11.3 meter antenna satellite terminal which is transportable on two C-130 aircraft. The SHF (Super High Frequency) PTS (Portable Terminal System) is a lightweight (28 pounds), portable terminal, which communicates through DSCS, NATO or SKYNET satellites and brings connectivity to small military tactical units and mobile command posts.

We provide System Engineering and Software/Life-cycle support to the Air Force Satellite control network as well as the eastern and western test ranges. These contracts were recently won and are scheduled to remain in effect beyond 2010.

### Space Communications and Satellite Control

We have produced and are delivering three communication subsystems for the ISS (International Space Station). These systems will control all ISS radio frequency communications and external video activities. We also provide solid-state recorders and memory units for data capture, storage, transfer and retrieval for space applications. Our standard NASA tape recorder has completed over five million hours of service without a mission failure. Our recorders are on National Oceanic & Atmospheric Administration weather satellites, the Earth Observing Satellite, AM spacecraft and Landsat-7 Earth-monitoring spacecraft. We have extended this technology to our Strategic Tactical Airborne Recorder (S/TAR™) which was selected for the new Shared Reconnaissance Port (SHARP) Program. We also provide space and satellite system simulation, satellite operations and computer system training, depot support, network engineering, resource scheduling, launch system engineering, support, software integration and test through cost-plus contracts with the U.S. Air Force.

### Military Communications

We provide integrated, computer controlled switching systems for the interior and exterior voice and data needs of naval vessels. Our products include the *MarCom* Integrated Voice Communication Systems for Aegis class destroyers and for the LPD amphibious ship class. We produced the *MarCom* Baseband Switch for Los Angeles class submarines. Our *MarCom* secure digital switching system provides an integrated approach to the specialized voice and data communications needs of shipboard environments, for internal and external communications, command and control and air traffic control. Along with the Keyswitch Integrated Terminals, *MarCom* provides automated switching of radio/cryptocircuits, which results in significant time savings. Without *MarCom* it would take approximately one hour to switch twelve radio/cryptocircuits using the previously existing switching system. Our *Marcom* secure digital switching system is able to switch the same number of radio/cryptocircuits in approximately twelve seconds. We also offer on-board, high data rate communications systems, which provide a data link for carrier battle groups, which are interoperable with the U.S. Air Force's Surveillance/reconnaissance terminals. We supply the "communications on the move" capability needed for the digital battlefield by packaging advanced communications into the U.S. Army's Interim Brigade Combat Team Commander's Vehicle.

### Information Security Systems

We believe that we are a leader in the development of secure communications equipment for both military and commercial applications. We are producing the next generation digital, ISDN-compatible STE (secure terminal equipment). STE provides clearer voice and approximately thirteen-times faster data/fax transmission capabilities than the previous generation of secure telecommunications equipment. STE also supports secure conference calls and secure video teleconferencing. STE uses a CryptoCard security system which consists of a small, portable, cryptographic module holding the algorithms, keys and personalized credentials to identify its user for secure communications access. We also provide the workstation component of the U.S. Government's EKMS (Electronic Key Management System), the next generation of information security systems. EKMS is the government's system to replace current "paper" encryption keys that are used to secure government communications with "electronic" encryption keys. The work-station component we provide produces and distributes the electronic keys. We also develop specialized strategic and tactical signal intelligence systems to detect, acquire, collect, and process information derived from electronic sources. These systems are used by classified customers for intelligence gathering and require high-speed digital signal processing and high-density custom hardware designs.

### Training, Simulation & Support Services

The products and services, selected applications and selected platforms or end users of our Training, Simulation & Support Services segment at December 31, 2003 are summarized in the table below.

Products/Services	Selected Applications	Selected Platforms/End Users
<i>Training and Simulation</i>		
• Battlefield and Weapon Simulation	• Missile system modeling and simulation • Design and manufacture custom ballistic missile targets that are ground launched and air launched for threat replication targets	• U.S. Army Missile Command  • U.S. Army Missile Command
• Training	• Training for soldiers on complex command and control systems • Training and logistics services and training device support	• DoD  • DoD and foreign governments
• Human Patient Simulators	• Medical Training	• Medical schools, nursing schools, and DoD
<i>Engineering Development and Integration Support</i>		
• System Support	• C <sup>3</sup> ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance), modeling and simulation	• U.S. Armed services, intelligence and security agencies, MDA, NASA and other U.S. Government agencies
• Communication software support services	• Value-added, critical software support for C <sup>3</sup> I (Command, Control, Communication and	• DoD, FAA and NASA

	Intelligence) systems and other engineering and technical services	
<ul style="list-style-type: none"> <li>• Crisis Incident Management System</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency operations support associated with natural disasters, industrial accidents and acts of terrorism</li> </ul>	<ul style="list-style-type: none"> <li>• Federal, state and local government agencies for homeland defense</li> </ul>

Training and Simulation

We believe that we are a leading provider of training, simulation and support services to the U.S. and foreign military agencies.

Our products and services are designed to meet customer training requirements for aircrews, navigators, mission operators, gunners and maintenance technicians for virtually any platform, including military fixed and rotary wing aircraft, air vehicles and various ground vehicles. As one of the leading suppliers of training services, we believe that we are able to leverage our unique full-service capabilities to develop fully integrated, innovative solutions for training systems, to propose and provide program upgrades and modifications, and to provide hands-on, best-in-class training operations in accordance with customer requirements in a timely manner. In addition, we are developing, demonstrating, evaluating and transitioning training technologies and methods for use by warfighters at the U.S. Air Force's Fighter Training Research Division.

We also design and develop prototypes of ballistic missile targets for present and future threat scenarios. We provide high-fidelity custom targets to the DoD that are complementary to the U.S. Government's growing focus and priority on national missile defense and space programs. We are the only provider of ballistic missile targets that has successfully launched a ballistic missile target from an Air Force Cargo Aircraft.

We also develop and manage extensive programs in the United States and internationally, focusing on training and education, strategic planning, organizational design, democracy transition and leadership development. To provide these services, we utilize a pool of experienced former armed service, law enforcement and other national security professionals. In the United States, our personnel are instructors in the U.S. Army's Force Management School and other schools and courses and are also involved in recruiting for the U.S. Army. In addition, we own approximately 40% of Medical Education Technologies, Inc., which has developed and is producing human patient simulators for sale to medical teaching and training institutions and the DoD.

We also produce incident management software to support Emergency Management and Homeland Security applications for first responders to crisis situations.

Engineering Development and Integration Support

We believe that we are a premier provider of numerous air campaign modeling and simulation tools for applications, such as Thunder, Storm and Brawler, for the U.S. Air Force Studies and Analysis Agency, and of space science research for NASA. We also provide high-end systems support for the HAWK and PATRIOT missile systems, Unmanned Aerial Vehicles (UAVs), the Cooperative Engagement Capacity (CEC) Program, and the F/A-18.

Our products and services specialize in communication systems, training and simulation equipment and a broad range of hardware and software for the U.S. Army, Air Force and Navy, the Federal Aviation Administration and the Missile Defense Agency (MDA). As one of the leading suppliers of high-end engineering and information support, we believe we are able to provide value-added C<sup>3</sup>ISR engineering support, wargames simulation and modeling of battlefield communications.

Our Ilex Systems business provides systems and software engineering products and services for military applications. We specialize in the innovative application of state-of-the-art software technology and software development methodologies to produce comprehensive real-time solutions satisfying our customers' systems and software needs. We specialize in providing engineering services to the U.S. Army military intelligence community, including the Communications-Electronics Command (CECOM) Software Engineering Center. These engineering services include the development and maintenance of Intelligence, Electronic Warfare, Fusion and Sensor systems and software.

Aviation Products & Aircraft Modernization

The systems and products, selected applications and selected platforms or end users of our Aviation Products & Aircraft Modernization segment at December 31, 2003, are summarized in the table below.

Systems/Products	Selected Applications	Selected Platforms/End Users
<i>Aviation Products</i>		
<ul style="list-style-type: none"> <li>• Solid state crash protected cockpit voice and flight data recorders</li> </ul>	<ul style="list-style-type: none"> <li>• Voice recorders that continuously record the most recent 30-120 minutes of voice and sounds from cockpit and aircraft inter- communications. Flight data recorders record the last 25 hours of flight parameters</li> </ul>	<ul style="list-style-type: none"> <li>• Business and commercial aircraft and certain military transport aircraft; sold to both aircraft manufacturers and airlines under the Fairchild brand name</li> </ul>
<ul style="list-style-type: none"> <li>• TCAS (Traffic Alert and Collision Avoidance System)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the potential for midair aircraft collisions by providing visual and audible warnings and maneuvering instructions to pilots</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial and business regional and military transport aircraft</li> </ul>
<ul style="list-style-type: none"> <li>• Advanced cockpit avionics</li> </ul>	<ul style="list-style-type: none"> <li>• Design, manufacture and supply quality pilot safety and situation awareness products</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial and business regional and military transport aircraft</li> </ul>
<i>Display Products</i>		
<ul style="list-style-type: none"> <li>• Cockpit and mission displays and controls</li> </ul>	<ul style="list-style-type: none"> <li>• High performance, ruggedized flat panel and cathode ray tube displays and processors</li> </ul>	<ul style="list-style-type: none"> <li>• Military aircraft, including surveillance, fighters and bombers, attack helicopters, transport aircraft and land vehicles</li> </ul>

*Aircraft Modernization*

- High end aviation product modernization services
- Turnkey aviation life cycle management services, including installation of special mission equipment, aircraft navigation and avionics products
- Various military and commercial wide body and rotary wing aircraft

*Aviation and Maritime Recorders*

We manufacture commercial, solid-state, crash-protected recorders, commonly known as black boxes, under the *Fairchild* brand name for the aviation and maritime industries, and have delivered approximately 59,100 flight recorders to aircraft manufacturers and airlines around the world. We believe we are the leading manufacturer of commercial cockpit voice recorders and flight data recorders. The hardened voyage recorder, launched from our state-of-the-art aviation technology, and expanded to include cutting edge internet communication protocols, has taken an early leadership position within the maritime industry. We offer three types of recorders:

- the cockpit voice recorder, which records the last 30 to 120 minutes of crew conversation and ambient sounds from the cockpit;
- the flight data recorder, which records the last 25 hours of aircraft flight parameters, such as speed, altitude, acceleration and thrust from each engine and direction of the flight in its final moments; and
- the hardened voyage recorder, which stores and protects 12 hours of voice, radar, radio and shipboard performance data on solid state memory.

Recorders are highly ruggedized instruments, designed to absorb the shock equivalent to that of an object traveling at 268 knots and stopping in 18 inches, resist fire to 1,100 degrees centigrade and resist pressure to 20,000 feet undersea for 30 days. Our recorders are mandated and regulated by

various worldwide agencies for use in commercial airlines and many business aviation aircraft. In addition, our aviation recorders are certified and approved for installation at many of the world's leading aircraft original equipment manufacturers (OEMs), while our maritime recorders are an integral component of a mandated recording system for numerous vessels that travel on international waters. The U.S. military has required the installation of black boxes in military transport aircraft.

We have completed development of a combined voice and data recorder and we are developing an enhanced recorder that monitors engine and other aircraft parameters for use in maintenance and safety applications.

*Traffic Alert and Collision Avoidance Systems (TCAS)*

TCAS is an avionics safety system that was developed to reduce the potential for mid-air collisions. The system is designed to operate independently from the air traffic control (ATC) system to provide a complementary supplement to the existing ATC system. TCAS operates by transmitting interrogations that elicit replies from transponders in nearby aircraft. The system tracks aircraft within certain range and altitude bands to determine whether they have the potential to become a collision threat.

There are two levels of TCAS protection currently in operation: TCAS I and TCAS II. In the United States, passenger aircraft with 10 to 30 seats must be equipped with a TCAS I system. The TCAS II system is required for passenger aircraft with more than 30 seats. These aircraft, as well as aircraft used in all-cargo operations, must also be equipped with either Mode S or Mode C transponders. The transponder provides altitude and airplane identification to TCAS-equipped aircraft as well as to the ATC system.

If the TCAS I system calculates that an aircraft may be a threat, it provides the pilot with a visual and audible traffic advisory. The advisory information provides the intruder aircraft's range and relative altitude/bearing. In addition to traffic advisories, a TCAS II system will provide the pilot a resolution advisory (RA). This resolution advisory recommends a vertical maneuver to provide separation from the intruder aircraft.

TCAS systems have proven to be very effective, with many documented successful RAs. TCAS II has been in worldwide operation in many aircraft types since 1990. Today, over 16,700 airline, corporate and military aircraft are equipped with TCAS II-type systems, logging over 100 million hours of operation. The number of reported near mid-air collisions in the U.S. has decreased significantly since 1989, a period during which both passenger and cargo air traffic has increased substantially.

We have introduced our Traffic and Terrain Collision Avoidance System (T<sup>2</sup>CAS™), a safety avionics system that integrates aircraft performance-based Terrain Awareness Warning System (TAWS) capability into our TCAS. Unlike our competitors' products, T<sup>2</sup>CAS is a true terrain avoidance system that bases its operator alerts on an aircraft's actual ability to climb at a given moment, instead of using predetermined computations. T<sup>2</sup>CAS reduces weight, power consumption, space requirements, and wiring because it's a combined TCAS and TAWS solution. Our TCAS customers can simply swap out the TCAS box for the new T<sup>2</sup>CAS box and use existing power and wiring. T<sup>2</sup>CAS was certified by the FAA on February 11, 2003.

All of our TCAS products, including T<sup>2</sup>CAS, are sold by our consolidated subsidiary, Aviation Communications & Surveillance Systems L.L.C. (ACSS). We own 70% of ACSS.

*Advanced Cockpit Avionics*

We manufacture advanced cockpit avionics and provide specialized avionics repair and overhaul services for the general, business, regional, military and commercial aviation markets. We offer a family of products specializing in electro-mechanical and solid-state gyros, collision avoidance systems, lightning detection systems, terrain awareness and warning systems, emergency power supplies and flat panel multifunction displays.

*Display Products*

We design, develop and manufacture ruggedized displays for military and high-end commercial applications. Our current product lines include a family of high performance display processing

systems, which use either a cathode ray tube or an active matrix liquid crystal display. Our displays are used in numerous airborne, ship-board and ground-based platforms and are designed to survive in military and harsh

environments.

Aircraft Modernization

We are dedicated to providing solutions that integrate custom-developed and commercial off-the-shelf products to satisfy military and commercial aviation requirements. We have a broad range of capabilities in the design, development, manufacturing, installation and integration of complex special purpose airborne systems, aircraft modifications and related services on numerous types of multi-engine aircraft, various rotary platforms and logistics support for government and commercial customers. We believe that we are a leader in maritime patrol aircraft (MPA) upgrades and maintenance, for both domestic and international customers.

Specialized Products

The products, selected applications and selected platforms or end users of our Specialized Products segment at December 31, 2003 are summarized in the table below.

Products	Selected Applications	Selected Platforms/ End Users
<i>Naval Warfare Products</i>		
<ul style="list-style-type: none"><li>Airborne dipping sonars</li><li>Side scan sonars</li><li>Submarine and surface ship towed arrays</li><li>Naval and commercial power delivery and switching products</li><li>Commercial transfer switches, uninterruptible power supplies and power products</li><li>Shipboard electronics racks, rugged computers, rugged displays and communication terminals</li></ul>	<ul style="list-style-type: none"><li>Submarine detection and localization</li><li>Submerged mine countermeasures</li><li>Submarine and surface ship detection and localization</li><li>Switching, distribution and protection, as well as frequency and voltage conversion</li><li>Production and maintenance of systems and high-speed switches for power interruption prevention</li><li>Ruggedized displays, computers and electronic systems</li></ul>	<ul style="list-style-type: none"><li>Various military helicopters</li><li>U.S. Navy and foreign navies</li><li>U.S. Navy and foreign navies</li><li>All naval combatants: submarines, surface ships and aircraft carriers</li><li>Federal Aviation Administration, internet service providers, financial institutions and rail transportation</li><li>Naval Vessels and other DoD applications</li></ul>
<i>Security Systems</i>		
<ul style="list-style-type: none"><li>Explosives detection systems</li><li>Surveillance products</li></ul>	<ul style="list-style-type: none"><li>Rapid scanning of passenger checked baggage and carry-on luggage, scanning of large cargo containers</li><li>Remote surveillance for U.S. border and naval products</li></ul>	<ul style="list-style-type: none"><li>Airports, embassies, federal and state facilities, customs, border patrol</li><li>Border Patrol, Immigration and Naturalization Service, U.S. Customs and U.S. Navy</li></ul>
<i>Telemetry, Instrumentation and Space Products</i>		
<ul style="list-style-type: none"><li>Aircraft, missile and satellite telemetry and instrumentation systems</li><li>Global satellite communications systems</li></ul>	<ul style="list-style-type: none"><li>Real-time data acquisition, measurement, processing, simulation, distribution, display and storage for flight testing</li><li>Satellite transmission of voice, video and data</li></ul>	<ul style="list-style-type: none"><li>Aircraft, missiles and satellites</li><li>Rural telephony or private networks, direct to home uplinks, satellite news gathering and wideband applications</li></ul>
<i>Navigation Products</i>		
<ul style="list-style-type: none"><li>GPS (Global Positioning Systems) receivers</li><li>Navigation systems and subsystems, gyroscopes, reaction wheels, star sensor</li></ul>	<ul style="list-style-type: none"><li>Location tracking</li><li>Space navigation</li></ul>	<ul style="list-style-type: none"><li>Guided projectiles and precision munitions</li><li>Hubble Space Telescope, Delta IV launch vehicle and satellites</li></ul>
<i>Premium Fuzing Products</i>		
<ul style="list-style-type: none"><li>Fuzing Products</li></ul>	<ul style="list-style-type: none"><li>Munitions and electronic and electro-mechanical safety and arming devices (ESADs)</li></ul>	<ul style="list-style-type: none"><li>Various DoD and foreign military customers</li></ul>

Products	Selected Applications	Selected Platforms/ End Users
<i>Microwave Components</i>		
<ul style="list-style-type: none"><li>Passive components, switches and wireless assemblies</li><li>Safety products</li></ul>	<ul style="list-style-type: none"><li>Radio transmission, switching and conditioning, antenna and base station testing and monitoring, broad-band and narrow-band applications (wireless, Specialized Mobile Radio (SMR) and paging infrastructure)</li><li>Radio frequency</li></ul>	<ul style="list-style-type: none"><li>DoD, telephony service providers and original equipment manufacturers</li><li>Monitor cellular base station and</li></ul>

<ul style="list-style-type: none"> <li>Satellite and wireless components (channel amplifiers, transceivers, converters, filters and multiplexers)</li> <li>Amplifiers and amplifier based components (amplifiers, up/down converters and Ka assemblies)</li> </ul>	<ul style="list-style-type: none"> <li>monitoring and measurement for safety</li> <li>Satellite transponder control, channel and frequency separation</li> <li>Automated test equipment military electronic warfare, ground and space communications</li> <li>Microwave vacuum electron devices and power modules to military and commercial markets</li> </ul>	<ul style="list-style-type: none"> <li>industrial radio frequency emissions</li> <li>Communications satellites and wireless communications equipment</li> <li>DoD and commercial satellite operators</li> </ul>
<ul style="list-style-type: none"> <li>Traveling wave tubes, power modules, klystrons and digital broadcast</li> </ul>		<ul style="list-style-type: none"> <li>DoD/Foreign, military-manned/unmanned platforms, various missile programs and commercial broadcast</li> </ul>
<i>Antenna Products</i>		
<ul style="list-style-type: none"> <li>Ultra-wide frequency and advanced radar antennas and rotary joints</li> </ul>	<ul style="list-style-type: none"> <li>Surveillance and radar detection</li> </ul>	<ul style="list-style-type: none"> <li>Military aircraft including surveillance, fighters and bombers, attack helicopters and transport</li> </ul>
<ul style="list-style-type: none"> <li>Precision antennas serving major military and commercial frequencies, including Ka band</li> </ul>	<ul style="list-style-type: none"> <li>Antennas for high frequency, millimeter satellite communications</li> </ul>	<ul style="list-style-type: none"> <li>Various military and commercial customers including scientific astronomers</li> </ul>
<i>Training Devices and Motion Simulators</i>		
<ul style="list-style-type: none"> <li>Military Aircraft Flight Simulators</li> </ul>	<ul style="list-style-type: none"> <li>Training for pilots, navigators, flight engineers, gunners and operators</li> </ul>	<ul style="list-style-type: none"> <li>Military fixed and rotary winged aircraft and ground vehicles</li> </ul>
<i>Electro-Optical Sensors</i>		
<ul style="list-style-type: none"> <li>Targeted stabilized camera systems with integrated sensors and wireless communication systems</li> </ul>	<ul style="list-style-type: none"> <li>Intelligence, Data Collection, Surveillance and Reconnaissance</li> </ul>	<ul style="list-style-type: none"> <li>DoD, intelligence and security agencies, law enforcement, manned and unmanned platforms</li> </ul>

*Naval Warfare Products*

We believe that we are one of the world's leading suppliers of acoustic undersea warfare systems. Our experience spans a wide range of platforms, including helicopters, submarines and surface ships. Our products include towed array sonar, hull mounted sonar, airborne dipping sonar, ocean mapping sonar and side scan sonar for navies around the world.

We believe that we are also a leading provider of state-of-the-art power electronics systems and electrical power delivery systems and subsystems. We provide communications and control systems for the military and commercial customers. We offer the following:

- military power propulsion, distribution and conversion equipment and components, each of which focus on motor drives switching, distribution and protection, and also provide engineering design and development, manufacturing and overhaul and repair services; and
- ship control and interior communications equipment.

*Telemetry, Instrumentation and Space Products*

We believe that we are a leader in the development and marketing of component products and systems used in telemetry and instrumentation for airborne applications such as satellites, aircraft, UAVs, launch vehicles, guided missiles, projectiles and targets. Telemetry involves the collection of data for various equipment performance parameters and is required when the object under test is moving too quickly or is of too great a distance to use a direct connection to collect such data. Telemetry products measure, process, receive and collect thousands of parameters of a platform's operation, including heat, vibration, stress and operational performance and transmit this data to the ground.

Additionally, our satellite telemetry equipment transmit data necessary for ground processing. These applications demand high reliability of their components because of the high cost of satellite repair and the need for uninterrupted service. Telemetry products also provide the data used to terminate the flight of missiles and rockets under errant conditions and/or at the end of a mission. These telemetry and command/control products are currently used for a variety of missile and satellite programs.

We offer value-added solutions that provide our customers with complex product integration and comprehensive support. Within the satellite ground segment equipment market, we focus on the telephony, video broadcasting and multimedia niches. Our customers include foreign communications companies, domestic and international prime communications infrastructure contractors, telecommunications and satellite service providers, broadcasters and media-related companies. We also provide space products for advanced guidance and control systems, including gyroscopes, controlled momentum devices and star sensors. These products are used on satellites, launch vehicles, the Hubble Telescope, the Space Shuttle and the International Space Station.

### *Navigation Products*

We provide airborne equipment and data link systems that gather critical information and then process, format and transmit the data to the ground from communications satellites, spacecraft, aircraft and missiles. These products are available in both commercial off-the-shelf and custom configurations and include software and software engineering services. Our primary customers include many of the major defense contractors who manufacture aircraft, missiles, warheads, launch vehicles and munitions. Our ground station instrumentation receives, encrypts and/or decrypts the serial stream of combined data in real-time as it is received from the airborne platform. We believe that we are a leader in digital GPS receiver technology for high performance military applications. These GPS receivers are currently in use on aircraft, cruise missiles and precision guided bombs and provide highly accurate positioning and navigational information. Additionally, we provide navigation systems for high performance weapon pointing and positioning systems for programs such as Multiple Launch Rocket System (MLRS) and Mortar Fire Control System (MFCFS).

### *Premium Fuzing Products*

We believe that we are a leading provider of premium fuzing products, including proximity fuzes, electronic and electro-mechanical safety and arming devices (ESADs) and self-destruct/sub-munition grenade fuzes. ESADs prevent the inadvertent firing and detonation of guided missiles during handling, flight operations and the initial phases of launch. Our proximity fuzes are used in smart munitions. All of these are considered to be critical safety and arming products. Additionally, during missile flight the ESAD independently analyzes flight conditions and determines safe separation distance after a missile launch.

### *Microwave Components*

We are a premier worldwide supplier of commercial off-the-shelf and custom, high performance radio frequency (RF) microwave components, assemblies and instruments supplying the wireless communications, industrial and military markets. We are also a leading provider of state-of-the-art space-qualified commercial satellite and strategic military RF products and millimeter amplifier based products. We sell many of these components under the well-recognized *Narda* brand name through a

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comprehensive catalog of standard, stocked hardware. We also sell our products through a direct sales force and an extensive network of market representatives. Specific catalog offerings include wireless products, electro-mechanical switches, power dividers and hybrids, couplers/detectors, attenuators, terminations and phase shifters, isolators and circulators, adapters, control products, sources, mixers, waveguide components, RF safety products, power meters/monitors and custom passive products. Passive components are generally purchased in both narrow and broadband frequency configurations by wireless equipment manufacturers, wireless service providers and military equipment suppliers. Commercial applications include cellular and PCS base station automated test equipment, and equipment for the paging industry. Military applications include electronic surveillance and countermeasure systems.

Our space-qualified and wireless components separate various signals and direct them to sections of the satellites' payload. Our main satellite products are channel amplifiers and linearizers, payload products, transponders and antennas. Channel amplifiers amplify the weak signals received from earth stations, and then drive the power amplifier tubes that broadcast the signal back to earth. Linearizers, used either in conjunction with a channel amplifier or by themselves, pre-distort a signal to be transmitted back to earth before it enters a traveling wave tube for amplification. This pre-distortion is exactly the opposite of the distortion created at peak power by the traveling wave tube and, consequently, has a cancellation effect that keeps the signal linear over a much larger power band of the tube. The traveling wave tube and area covered by the satellite is significantly increased.

Narda is the world's largest supplier of non-ionizing radiation safety detection equipment. These devices are used to quantify and alarm of exposure to excessive RF radiation. This equipment is used by wireless tower operators and the military to protect personnel, and insure compliance to various published standards. We design and manufacture both broad and narrow band amplifiers and amplifier-based products in the microwave and millimeter wave frequencies. We use these amplifiers in defense and communications applications. These devices can be narrow band for communication needs or broadband for electronic warfare.

We offer standard packaged amplifiers for use in various test equipment and system applications. We design and manufacture millimeter range (at least 20 to 38GHz) amplifier products for use in emerging communication applications such as back haul radios, LMDS (Local Multipoint Distribution Service) and ground terminals for LEO satellites. Narda filters are sold to some of the world's leading service providers and base station OEMs. Robust demand continues for Narda filters due to ongoing system upgrades by service providers for 2.5G and 3.0G applications geared toward providing higher data rate capabilities for the commercial cellular and PCS marketplace.

We also design, manufacture and market solid state, broadband wireless communications infrastructure equipment, subsystems and modules used to provide point-to-multipoint (PMP) and point-to-point (PTP) terrestrial and satellite-based distribution services in frequency bands from 24 to 38 Gigahertz. Our products include solid-state power amplifiers, hub transmitters, active repeaters, cell-to-cell relays, Internet access systems and other millimeter wave-based modules and subsystems. These products are used in various applications, such as broadband communications, local loop services and Ka-band satellite communications.

We also provide microwave vacuum electron devices and power modules for manned and unmanned airborne radars, F-14, F-16, Predator and Global Hawk platforms and for missile applications for the AMRAAM and Patriot. In addition, we provide modules for VHF TV transmitters.

### *Antenna Products*

We produce high performance antennas under the *Randtron* brand name that are designed for:

- surveillance of high-resolution, ultra-wide frequency bands;
- detection of low radar cross-section targets and low radar cross-section installations;
- severe environmental applications; and
- polarization diversity.

Our primary product is a sophisticated 24-foot diameter antenna used on all E-2C surveillance aircraft. This airborne antenna is a rotating aerodynamic radome containing a UHF surveillance radar antenna, an IFF antenna, and forward and aft auxiliary antennas. We have been funded to begin the development of the next generation for this antenna. We also produce broadband antennas for a variety of tactical aircraft, and rotary joints for the AWAC antenna. We have delivered over 2,000 sets of antennas for aircraft in 2003 and have a backlog of orders through 2005.

We are a leading supplier of ground based radomes used for air traffic control, weather radar, defense and scientific purposes. These radomes enclose an antenna system as a protective shield against the environment and are intended to enhance the performance of an antenna system.

#### *Training Devices and Motion Simulators*

Our training devices and motion simulators business designs, develops and manufacturers advanced virtual reality simulation and high-fidelity representations of cockpits and mission stations for aircraft and land vehicles. We have developed flight simulators for most of the U.S. military aircraft in active operation. We have numerous proprietary technologies and fully-developed systems integration capabilities that provide us with a competitive advantage. Our proprietary software is used for visual display systems, high-fidelity system models, database production, digital radar land mass image simulation and creation of synthetic environments. We are also a leader in developing training systems that allow multiple trainees at multiple sites to engage in networked group, unit and task force training and combat simulations.

#### *Security Systems*

We also design, manufacture and install screening systems to screen packages for explosives, firearms and contraband in airports, security check points, cruise lines, government and, commercial and military buildings. In addition, we provide cargo-screening systems for rapid inspection of incoming goods through rapidly deployable mobile systems to high-throughput, high-penetration fixed systems. We also provide remote robust video surveillance systems (Watch Tower) to monitor the U.S./Canada and U.S./Mexico border and Naval ports.

#### *Electro Optical Cameras*

We also design and manufacture wireless visual information systems that capture images from mobile platforms and transmit them in real time to tactical command centers for interpretation or to production facilities for broadcast.

### **Developing Commercial and Civil Opportunities**

Part of our growth strategy is to identify applications for commercial customers and U.S. Government agencies (other than the DoD) from select products and technologies that we currently sell to our defense customers. We believe our largest opportunities are in the transportation market, where we offer:

- an explosives detection system for screening checked baggage at airports;
- X-ray screening products for cargo, air freight, port and border security applications;
- maritime voyage recorders;
- a maritime automatic identification system (which is a collision avoidance tool used to improve situational awareness for the bridge crew while facilitating communication between vessels and vessel identification); and
- an enhanced aviation collision avoidance product that adds ground proximity warning to airborne collision avoidance.

We are also offering a broad range of components and products used in commercial communications networks.

We have developed the majority of our commercial and civil products employing technology used in our defense businesses. Except for our explosives detection systems, sales generated from our

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developing commercial and civil opportunities have not been material to us. These new commercial products are subject to certain risks and may require us to:

- develop and maintain marketing, sales and customer support capabilities;
- spend additional research and development costs to sustain and enhance our an existing products and to develop new products;
- secure sales and customer support capabilities;
- obtain customer and/or regulatory certification;
- respond to rapidly changing technologies including those developed by others that may render our products and systems obsolete or non-competitive; and
- obtain customer acceptance of these products and product performance.

Our efforts to expand our presence in commercial and civil markets require significant resources, including additional working capital and capital expenditures, as well as the use of our management's time. Our ability to sell certain commercial products, particularly our broadband wireless communications products, depends to a significant degree on the efforts of independent distributors or communications service providers and on the financial viability of our existing and target customers, including their ability to obtain financing. Certain of our existing and target customers are agencies or affiliates of governments of emerging and under-developed countries or private business enterprises operating in those countries. In addition, we have made equity investments in entities that plan to commence operations as communications service providers using some of our commercial products. We can give no assurance that these distributors or service providers will be able to market our products or their services successfully or that we will be able to realize a return on our investment in them. We also cannot assure you that we will be successful in addressing these risks or in developing these commercial and civil business opportunities.

### **Backlog and Orders**

We define funded backlog as the value of funded orders received from customers, less the amount of sales recognized on those funded orders. We define funded orders as the value of contract awards received from the

U.S. Government, for which the U.S. Government has appropriated funds, plus the value of contract awards and orders received from customers other than the U.S. Government. For additional information on our backlog and orders, see Management's Discussion and Analysis of Results of Operations and Financial Condition — Backlog and Orders.

Major Customers

For the year ended December 31, 2003, direct and indirect sales to the DoD provided approximately 69.3% of our sales. Approximately 61.2% of our sales to the DoD were directly to the customer, and approximately 38.8% of our sales to the DoD were indirect to its prime contractors and subcontractors. All U.S. Government customers, including federal, state and local agencies, accounted for 76.3% of our sales for 2003. For the year ended December 31, 2003, foreign governments provided 10.0% of our sales, and commercial customers provided 13.7% of our sales.

Our U.S. Government sales are predominantly derived from contracts with agencies of, and prime contractors to, the U.S. Government. Various U.S. Government agencies and contracting entities exercise independent and individual purchasing decisions, subject to annual appropriations by the U.S. Congress. As of December 31, 2003, we had approximately 1,000 contracts with a value exceeding one million. Our largest program represented 4.4% of our sales for the year ended December 31, 2003. No other program represented more than 2.9% of sales for the year ended December 31, 2003. For the year ended December 31, 2003, sales from our five largest programs amounted to \$719.8 million, or 14.2% of our sales.

Research and Development

We conduct research and development activities that consist of projects involving basic research, applied research, development, and systems and other concept studies. We employ scientific,

engineering and other personnel to improve our existing product-lines and develop new products and technologies. As of December 31, 2003, we employed approximately 19,100 engineers, a substantial portion of whom hold advanced degrees. For an analysis of L-3's research and development costs, see Management's Discussion and Analysis of Results of Operations and Financial Condition—Research and Development.

Competition

We encounter intense competition in all of our businesses. We believe that we are a significant supplier for many of the products that we manufacture and services we provide in our DoD, government and commercial businesses.

Defense and Government Business

- Our ability to compete for defense contracts depends on a variety of factors, including:
- the effectiveness and innovation of our technologies and research and development programs;
  - our ability to offer better program performance than our competitors at a lower cost; and
  - the capabilities of our facilities, equipment and personnel to undertake the programs for which we compete.

In some instances, we are the incumbent supplier or have been the sole provider for many years for certain programs. We refer to such contracts as "sole-source" contracts. In such cases, there may be other suppliers who have the capability to compete for the programs involved, but they can only enter or reenter the market if the customer chooses to reopen or re-compete the particular program to competition. Sole-source contracts accounted for 63.3% and competitive contracts accounted for 36.7% of our total sales for the year ended December 31, 2003. The majority of our sales are derived from contracts with the U.S. Government and its prime contractors, which are principally awarded on the basis of negotiations or competitive bids.

We believe that the U.S. defense industry structure contains three tiers of defense contractors. The first tier is dominated by five large prime system contractors: The Boeing Company, Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company and General Dynamics Corporation, all of whom compete for major platform programs. The second tier defense contractors are generally smaller products and niche subsystems contractors and is comprised of traditional aerospace and defense companies, as well as the non-core aerospace and defense businesses of certain larger industrial conglomerates. Some of the defense contractors in the second tier also compete for platform programs. We believe the second tier includes L-3, Honeywell International Inc., Rockwell Collins Inc., Harris Corporation, ITT Industries, Inc., the North American operations of BAE Systems PLC, Alliant Techsystems Inc., United Technologies Corporation, Computer Science Corporation, Science Applications International Corporation, and United Defense Industries Inc. The third tier, represents the vendor base and supply chain for niche products and is comprised of numerous smaller publicly and privately owned aerospace and defense contractors.

We believe we are the aerospace and defense supplier with the broadest and most diverse product portfolio. We supply our products and services to all of the five prime system contractors and in several cases directly to the end customers. We primarily compete with third tier contractors and certain of the second tier contractors. However, we also compete directly with the large prime system contractors for certain products and subsystems where they have vertically integrated businesses, and in the areas of aircraft modernization and maintenance, ISR, simulation and training, and government services, where L-3 is a system supplier. We are larger than all of the third tier contractors and believe we have greater resources than all of them. We believe that most of our businesses enjoy the number one or number two competitive position in their respective market niches. We believe that the primary competitive factors for our businesses are technology, research and development capabilities, quality, cost, market position and past performance. In addition, our ability to compete for non "sole source" contracts often requires us to "team" with one or more of the prime system contractors that bid and compete for major platform programs. Furthermore, our ability to "team" with a prime

system contractor is often dependent upon the outcome of a competitive process for subcontracts awarded by the prime contractors. We believe that we will continue to be a successful participant in the business areas in which we compete, based upon the quality and cost competitiveness of our products and services.

Commercial Activities



Our commercial sales increased to 11.7% of our total sales for the year ended December 31, 2003 compared with 10.7% for the year ended December 31, 2002. We do not expect our commercial sales to appreciably increase on a relative basis in the future. Our ability to compete for commercial business depends on a variety of factors, including:

- Pricing;
- Product features and performance;
- Reliability, scalability and compatibility;
- Customer relationships, service and support; and
- Brand recognition.

In these markets, we compete with various companies, several of which are listed below:

- |                           |                                 |
|---------------------------|---------------------------------|
| • Rockwell Collins, Inc.; | • Honeywell International Inc.; |
| • Globecom Systems, Inc.; | • Smiths Industries; and        |
| • ViaSat, Inc.;           | • Airspan Networks, Inc.        |

We believe that our sales in these business areas will remain relatively constant as a percentage of our total sales.

#### Patents and Licenses

We do not believe that our patents, trademarks and licenses are material to our operations. Furthermore, our U.S. Government contracts generally permit us to use patents owned by other government contractors. Similar provisions in U.S. Government contracts awarded to other companies make it impossible for us to prevent the use of our patents in most domestic work performed by other companies for the U.S. Government.

#### Raw Materials

In manufacturing our products, we use our own production capabilities as well as a diverse base of third party suppliers and subcontractors. Although aspects of certain of our businesses require relatively scarce raw materials, we have not experienced difficulty in our ability to procure raw materials, components, sub-assemblies and other supplies required in our manufacturing processes.

#### Contracts

A significant portion of our sales are derived from strategic, long-term programs and from sole-source contracts. For the year ended December 31, 2003, approximately 63.3% of our sales were generated from sole-source business and 36.7% from competitive business. Our customer satisfaction and performance record are evidenced by our receipt of performance-based award fees exceeding 90% of the available award fees on average during the year ended December 31, 2003. We believe that our customers will award long-term, sole-source, outsourcing contracts to the most capable merchant supplier in terms of quality, responsiveness, design, engineering and program management support, as well as cost. As a consequence of our strong competitive position, for the year ended December 31, 2003, we won contract awards at a rate in excess of 55% on new competitive contracts that we bid on, and at a rate in excess of 95% on the contracts we rebid for which we were the incumbent supplier.

Generally, our contracts are either fixed-price or cost-reimbursable. On a fixed-price contract, we agree to perform the scope of work required by the contract for a predetermined contract price.

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Although a fixed-price contract generally permits us to retain profits if the total actual contract costs are less than the estimated contract costs, we bear the risk that increased or unexpected costs may reduce our profit or cause us to sustain losses on the contract. Conversely, on a cost-reimbursable contract we are paid our allowable incurred costs plus a profit which can be fixed or variable depending on the contract's fee arrangement up to predetermined funding levels determined by our customers. Therefore, on a cost-reimbursable contract we do not bear the risks of unexpected cost overruns, provided that we do not incur costs that exceed the predetermined funded amounts. Generally, a fixed-price contract offers higher profit margins than a cost-reimbursable contract, which is commensurate with the greater levels of risk assumed on a fixed-price contract. Our operating profit margins on fixed-price contracts generally range between 10% and 15%, while our profit margins on cost-reimbursable contracts generally range between 7% and 10%.

We have a diverse business mix with limited reliance on any single program, a balance of cost-reimbursable and fixed-price type contracts, a significant sole-source follow-on business and an attractive customer profile. For the year ended December 31, 2003, 63.1% of our sales were generated from fixed-price type contracts and 36.9% from cost-reimbursable type contracts and time-and-material type contracts, providing us with a sales mix of higher profit margin (fixed-price) business and predictable profitability (cost-reimbursable and time-and-material). See Management's Discussion and Analysis of Results of Operations and Financial Condition – Critical Accounting Policies. Substantially all of our cost-reimbursable type contracts are with the U.S. Government, including the DoD. Substantially all of our sales to commercial customers are transacted under fixed-price sales arrangements, and are included in our fixed-price contract sales.

#### Regulatory Environment

Most of our U.S. Government business is subject to unique procurement and administrative rules based on both laws and regulations, including the U.S. Federal Acquisition Regulation (FAR) that provide various profit and cost controls, rules for allocations of costs, both direct and indirect, to contracts and non-reimbursement of unallowable costs such as lobbying expenses, interest expenses and certain costs related to business acquisitions, including for example the incremental depreciation and amortization expenses arising from fair value increases to the historical carrying values of acquired assets. Our contract administration and cost accounting policies and practices are also subject to oversight by government inspectors, technical specialists and auditors.

Companies supplying defense-related equipment to the U.S. Government are subject to certain additional business risks specific to the U.S. defense industry. Among these risks are the ability of the U.S. Government to unilaterally suspend a company from new contracts pending resolution of alleged violations of procurement laws or regulations. In addition, U.S. Government contracts are conditioned upon the continuing availability of Congressional appropriations. Congress usually appropriates funds for a given program on a September 30 fiscal year basis, even though contract performance may take several years. Consequently, at the outset of a major

program, the contract is usually partially funded, and additional monies are normally committed to the contract by the procuring agency only as appropriations are made by Congress for future fiscal years.

U.S. Government contracts are, by their terms, subject to unilateral termination by the U.S. Government either for its convenience or default by the contractor if the contractor fails to perform the contracts' scope of work. Upon termination other than for a contractor's default, the contractor will normally be entitled to reimbursement for allowable costs and an allowance for profit. Foreign defense contracts generally contain comparable provisions permitting termination at the convenience of the government. To date, none of our significant fixed-price contracts have been terminated.

As is common in the U.S. defense industry, we are subject to business risks, including changes in the U.S. Government's procurement policies (such as greater emphasis on competitive procurement), governmental appropriations, national defense policies or regulations, service modernization plans, and availability of funds. A reduction in expenditures by the U.S. Government for products and services of the type we manufacture and provide, lower margins resulting from increasingly

competitive procurement policies, a reduction in the volume of contracts or subcontracts awarded to us or the incurrence of substantial contract cost overruns could materially adversely affect our business.

Certain of our sales are under foreign military sales (FMS) agreements directly between the U.S. Government and foreign governments. In such cases, because we serve only as the supplier, we do not have unilateral control over the terms of the agreements. These contracts are subject to extensive legal and regulatory requirements and, from time to time, agencies of the U.S. Government investigate whether our operations are being conducted in accordance with these laws and regulations. Investigations could result in administrative, civil, or criminal liabilities, including repayments, disallowance of certain costs, or fines and penalties.

Certain of our sales are direct commercial sales to foreign governments. These sales are subject to U.S. Government approval and licensing under the Arms Export Control Act. Legal restrictions on sales of sensitive U.S. technology also limit the extent to which we can sell our products to foreign governments or private parties.

## Environmental Matters

Our operations are subject to various environmental laws and regulations relating to the discharge, storage, treatment, handling, disposal and remediation of certain materials, substances and wastes used in our operations. We continually assess our obligations and compliance with respect to these requirements.

In connection with the acquisition on March 8, 2002 of the Aircraft Integration Systems business from Raytheon, we assumed responsibility for implementing certain corrective actions, required under federal law to remediate the Greenville, Texas site location, and to pay a portion of those remediation costs. The hazardous substances requiring remediation have been substantially characterized, and the remediation system has been partially implemented. We have estimated that our share of the remediation cost will not exceed \$2.5 million, and will be incurred over a period of 25 years. We have established adequate reserves for these costs.

We have also assessed the risk of environmental contamination for the various manufacturing facilities of our other acquired businesses and, where appropriate, have obtained indemnification, either from the sellers of those acquired businesses or through pollution liability insurance. We believe that our current operations are in substantial compliance with all existing applicable environmental laws and permits. We believe our current expenditures will allow us to continue to be in compliance with applicable environmental laws and regulations. While it is difficult to determine the timing and ultimate cost to be incurred in order to comply with these laws, based upon available internal and external assessments, with respect to those environmental loss contingencies of which we are aware, we believe that even without considering potential insurance recoveries, if any, there are no environmental loss contingencies that, individually or in the aggregate, would be material to our consolidated results of operations, financial position or cash flows.

Despite our current level of compliance, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements may require us to incur costs in the future that could have a negative effect on our financial condition, results of operations or cash flows.

## Pension Plans

In connection with our 1997 acquisition of the ten business units from Lockheed Martin and the formation of L-3, we assumed certain defined benefit pension plan liabilities for present and former employees and retirees of certain businesses which were transferred from Lockheed Martin to us. Prior to this acquisition, Lockheed Martin received a letter from the Pension Benefit Guaranty Corporation (the "PBGC") which requested information regarding the transfer of such pension plans and indicated that the PBGC believed certain of such pension plans were underfunded using the PBGC's actuarial assumptions. The PBGC assumptions result in a larger liability for accrued benefits

than the assumptions used for financial reporting under Statement of Financial Accounting Standards No. 87. The PBGC underfunding is related to the Communication Systems -- West and Aviation Recorders pension plans (the "Subject Plans").

With respect to the Subject Plans, Lockheed Martin entered into an agreement (the "Lockheed Martin Commitment") among Lockheed Martin, L-3 Communications and the PBGC dated as of April 30, 1997. The material terms and conditions of the Lockheed Martin Commitment include a commitment by Lockheed Martin to the PBGC to, under certain circumstances, assume sponsorship of the Subject Plans or provide another form of financial support for the Subject Plans. The Lockheed Martin Commitment will continue with respect to any Subject Plan until such time as such Subject Plan is no longer underfunded on a PBGC basis for two consecutive years or, at any time after May 31, 2002, if we achieve investment grade credit ratings.

Upon the occurrence of certain events, Lockheed Martin, at its option, has the right to decide whether to cause us to transfer sponsorship of any or all of the Subject Plans to Lockheed Martin, even if the PBGC has not sought to terminate the Subject Plans. If Lockheed Martin did assume sponsorship of these plans, it would be primarily liable for the costs associated with funding the Subject Plans or any costs associated with the termination of the Subject Plans, but we would be required to reimburse Lockheed Martin for these costs. To date, there has been no impact on pension expense and funding requirements resulting from this arrangement. In the event Lockheed Martin assumes sponsorship of the Subject Plans we would be required to reimburse Lockheed Martin for all amounts that it contributes to, or costs it incurs with respect to, the Subject Plans. For the year ended December 31, 2003, we contributed \$4.8 million to the Subject Plans. For subsequent years, our

funding requirements will depend upon prevailing interest rates, return on pension plan assets and underlying actuarial assumptions.

We have performed our obligations under the letter agreement with Lockheed Martin and the Lockheed Martin Commitment and have not received any communications from the PBGC concerning actions which the PBGC contemplates taking in respect of the Subject Plans.

## Employees

As of December 31, 2003, we employed approximately 38,700 full-time and part-time employees, the majority of whom are located in the United States. Of these employees, approximately 21.4% are covered by 56 separate collective bargaining agreements with various labor unions. Our ability to retain and train our employees is critical to the continued success of L-3's businesses. We have a continuing need for skilled and professional personnel to meet contract schedules and obtain new and ongoing orders for our products. We believe that relations with our employees are positive.

## Available Information

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance therewith, file reports and other information with the SEC. Such reports and other information can be inspected and copied at the Public Reference Section of the SEC located at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington D.C. 20549 and at a regional public reference facility maintained by the SEC located at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of such material can be obtained from the Public Reference Section of the SEC at prescribed rates. Such material may also be accessed electronically by means of the SEC's home page on the Internet at <http://www.sec.gov>.

You may also obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports on the day of filing with the SEC or through our website on the Internet at <http://www.l-3com.com>.

## Properties

The table below provides information about our significant facilities and properties at December 31, 2003.

Location	Owned	Leased
	<i>(thousands of square feet)</i>	
L-3 Corporate Offices, New York, NY	—	51.2
Washington Operations, Arlington, VA	—	8.3
<b>Secure Communication &amp; ISR:</b>		
Camden, NJ	—	575.0
Greenville, TX	—	3,043.5
Salt Lake City, UT	—	561.6
<b>Training, Simulation &amp; Support Services:</b>		
Huntsville, AL	—	101.6
Colorado Springs, CO	—	77.0
Orlando, FL	—	175.1
Kirkwood, NY	—	428.0
Arlington, TX	21.3	47.5
Alexandria, VA	—	94.5
Arlington, VA	—	84.7
Chantilly, VA	—	88.8
<b>Aviation Products &amp; Aircraft Modernization:</b>		
Selma, AL	—	205.5
Phoenix, AZ	—	90.3
Sarasota, FL	—	143.7
Alpharetta, GA	93.0	—
Rolling Meadows, IL	45.0	6.7
Lexington, KY	—	273.2
Grand Rapids, MI	110.0	—
South Madison, MS	—	164.0
Waco, TX	761.8	221.1
Calgary, Canada	65.5	—
Edmonton, Canada	—	366.3
Mirabel, Canada	397.2	81.2
<b>Specialized Products:</b>		
Anaheim, CA	—	474.2
Menlo Park, CA	—	97.5
San Carlos, CA	191.6	—
San Diego, CA	196.0	202.6
Sylmar, CA	—	253.0
Largo, FL	46.4	—
Ocala, FL	111.7	—
St. Petersburg, FL	—	112.0
Budd Lake, NJ	—	114.0
Hauppauge, NY	90.0	150.0
Cincinnati, OH	222.6	—
Tulsa, OK	—	129.9
Lancaster, PA	—	143.8
Philadelphia, PA	—	210.5
Williamsport, PA	208.6	—
Arlington, TX	60.7	135.1
Grand Prairie, TX	—	125.0
Burlington, Canada	—	124.0

At December 31, 2003, in the aggregate, we owned approximately 2.7 million square feet and leased approximately 11.5 million square feet of manufacturing facilities and properties.

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## Legal Proceedings

From time to time we are involved in legal proceedings arising in the ordinary course of our business. We believe that we are adequately reserved for these liabilities and that there is no litigation that will have a material adverse effect on our consolidated results of operations, financial condition or cash flows.

On August 6, 2002, Aviation Communications & Surveillance Systems, LLC (ACSS), a subsidiary of L-3 Communications Corporation, was sued by Honeywell International Inc. and Honeywell Intellectual Properties, Inc. (collectively, "Honeywell") for alleged infringement of patents that relate to terrain awareness avionics. The lawsuit was filed in the United States District Court for the District of Delaware. In December of 2002, Honeywell withdrew without prejudice the lawsuit against ACSS and agreed to proceed with non-binding arbitration. We had previously investigated the Honeywell patents and believe that ACSS has valid defenses against Honeywell's patent infringement suit. In addition, ACSS has been indemnified to a certain extent by Thales Avionics, which provided ACSS with the alleged infringing technology. Thales Avionics owns 30% of ACSS. In the opinion of management, the ultimate disposition of Honeywell's pending claim will not result in a material liability to us.

L-3 Integrated Systems and its predecessors have been involved in a litigation with Kalitta Air (Kalitta Air) arising from a contract to convert Boeing 747 aircraft from passenger configuration to cargo freighters. The lawsuit was brought in the northern district of California on January 31, 1997. The aircraft were modified using Supplemental Type Certificates (STCs) issued in 1988 by the Federal Aviation Administration (FAA) to Hayes International, Inc. (Hayes/Pemco) as a subcontractor to GATX/Airlog Company (GATX). Between 1988 and 1990, Hayes/Pemco modified five aircraft as a subcontractor to GATX using the STCs. Between 1990 and 1994, Chrysler Technologies Airborne Systems, Inc. (CTAS), a predecessor to L-3 Integrated Systems, performed as a subcontractor to GATX and modified an additional five aircraft using the STCs. Two of the aircraft modified by CTAS were owned by American International Airways, the predecessor to Kalitta Air. In 1996, the FAA determined that the engineering data provided by Hayes/Pemco supporting the STCs was inadequate and issued an Airworthiness Directive that effectively grounded the ten modified aircraft. The Kalitta Air aircraft have not been in revenue service since that date. The matter was tried in January 2001 against GATX and CTAS with the jury finding fault on the part of GATX but rendering a unanimous defense verdict in favor of CTAS. Certain co-defendants had settled prior to trial. The Ninth Circuit Court of Appeals has reversed and remanded the trial court's summary judgment rulings in favor of CTAS regarding a negligence claim by Kalitta Air, which asserts that CTAS as an expert in aircraft modification should have known that the STCs were deficient, and excluding certain evidence at trial. Based on this ruling, it appears likely that the matter will have to be retried. In August of 2003, Kalitta Air has recalculated its damages based on consequential damage theories of lost revenues and income and diminution in value of the business and is asserting damages in excess of \$500 million. CTAS' insurance carrier has accepted defense of the matter with a reservation of rights. We continue to believe that we have meritorious defenses and intend to vigorously defend this matter.

L-3 and L-3 Communications Security and Detection Systems (L-3 SDS) have been named, along with many other defendants, including other security screening systems manufacturers, as defendants in a number of lawsuits brought in the Southern District of New York by or on behalf of the victims of the terrorist attacks on September 11, 2001. Counsel for the plaintiffs have represented to the court that they intend to amend some or all of their complaints to delete certain of the defendants, including L-3 and L-3 SDS, and to date, approximately 60 of the complaints have been amended to drop L-3 and L-3 SDS as a defendant. In addition, the court has ruled that the plaintiffs who complete their applications for relief under a federal fund may not pursue judicial action. The court has ordered that the plaintiffs file final amended complaints by March 31, 2004 at which time L-3 and L-3 SDS will know how many, if any, actions will be pending against them. The complaints allege various causes of action, including claims of wrongful death, negligence, strict liability and breach of contract, and seek compensatory and punitive damages. L-3 and L-3 SDS believe that they have meritorious defenses to these actions and intend to vigorously defend the lawsuits. L-3 purchased L-3 SDS from PerkinElmer,

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Inc. (PerkinElmer) on June 14, 2002. The actions have been tendered to our and PerkinElmer's insurance carriers, who have accepted the defense of these matters.

On November 18, 2002, we initiated a proceeding against OSI Systems, Inc. (OSI) in the United States District Court sitting in the Southern District of New York seeking, among other things, a declaratory judgment that we had fulfilled all of our obligations under a letter of intent with OSI (the "OSI Letter of Intent"). Under the OSI Letter of Intent, we were to negotiate definitive agreements with OSI for the sale of certain businesses we acquired from PerkinElmer, Inc. on June 14, 2002. On February 7, 2003, OSI filed an answer and counterclaims in the New York action alleging, among other things, that we breached our obligations under the OSI Letter of Intent and seeking damages in excess of \$100 million, not including punitive damages. Under the OSI Letter of Intent, we proposed selling to OSI the conventional detection business and the ARGUS business that we recently acquired from PerkinElmer, Inc. Negotiations with OSI lasted for almost one year and ultimately broke down over issues regarding, among other things, intellectual property, product-line definitions, allocation of employees and due diligence. We believe that the claims asserted by OSI in its suit are without merit and intend to defend against the OSI claims vigorously.

L-3 Communications Vertex Aerospace LLC (formerly known as Vertex Aerospace LLC and acquired by the Company on December 1, 2003) ("L-3 Vertex") is named as a defendant in nine wrongful death lawsuits in the District Court, 17th Judicial District, Tarrant County, Texas; in the Circuit Court of the 17th Judicial Circuit, Broward County, Florida; and in the United States District Court, Western District of North Carolina arising from the crash of Air Midwest Flight 5481 at Charlotte-Douglas International Airport in Charlotte, North Carolina on January 8, 2003. The crash resulted in the deaths of nineteen passengers and two crewmembers. Each of the lawsuits alleges contributing factors including that the accident was caused by the improper maintenance of the aircraft by L-3 Vertex, and seeks to recover compensatory and punitive damages. No discovery has taken place in the lawsuits at this time. Eight claims resulting from this incident have previously settled. The National Transportation Safety Board (NTSB) investigated the cause of the crash and has concluded that the crash was caused by the incorrect rigging of the elevator control system compounded by the airplane's center of gravity, which was substantially aft of the certified limit, with several other contributing factors. L-3 Vertex believes that it has meritorious defenses to the pending lawsuits, and intends to defend the cases vigorously. The actions have

been tendered to L-3 Vertex's insurance carrier, who has accepted the defense of each action served upon L-3 Vertex to date. L-3 Vertex was also indemnified by Air Midwest for losses L-3 Vertex incurred arising out of its provision of maintenance services to Air Midwest. Based on the availability of insurance and the indemnification from Air Midwest, we do not believe we will have a material liability in this matter.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In connection with our incorporation, L-3 Holdings, Messrs. Lanza and LaPenta and certain other parties entered into a Stockholders Agreement, which has terminated except for the terms relating to registration rights.

Pursuant to the Stockholders Agreement, at this time Messrs. Lanza and LaPenta have the right, subject to certain conditions, to require L-3 Holdings to register their shares of its common stock under the Securities Act of 1933. Each of Messrs. Lanza and LaPenta have one demand registration right.

In addition, the Stockholders Agreement provides Messrs. Lanza and LaPenta with piggyback registration rights. The Stockholders Agreement provides, among other things, that L-3 Holdings will pay expenses incurred in connection with:

- the two demand registrations requested by each of Messrs. Lanza and LaPenta; and
- any registration in which those parties participate through piggyback registration rights granted under the agreement.

MANAGEMENT

Directors, Executive Officers and Key Employees

The following table provides information concerning the directors, executive officers and key employees of L-3 Communications as of February 27, 2004:

Name	Age	Position
Frank C. Lanza	72	Chairman, Chief Executive Officer and Director
Robert V. LaPenta	58	President, Chief Financial Officer and Director
Michael T. Strianese	47	Senior Vice President, Finance
Christopher C. Cambria	45	Senior Vice President, General Counsel and Secretary
Charles J. Schafer	56	Senior Vice President — Business Operations and President, Products Group
Jimmie V. Adams	67	Vice President — Washington D.C. Operations
David T. Butler III	47	Vice President — Planning
Ralph G. D'Ambrosio	36	Vice President — Controller
Kenneth R. Goldstein	57	Vice President — Taxes
Joseph S. Paresi	48	Vice President — Product Development
Robert W. RisCassi	68	Vice President — Washington D.C. Operations
Stephen M. Souza	51	Vice President — Treasurer
Dr. Jill J. Wittels	54	Vice President — Business Development
Claude R. Canizares <sup>(1)</sup>	58	Director
Thomas A. Corcoran <sup>(1)</sup>	59	Director
Robert B. Millard <sup>(2)</sup>	53	Director
John M. Shalikashvili <sup>(2)(3)</sup>	67	Director
Arthur L. Simon <sup>(1)(3)</sup>	71	Director
Alan H. Washkowitz <sup>(2)(3)</sup>	63	Director

(1) Member of the Audit Committee.  
(2) Member of the Compensation Committee.  
(3) Member of Nominating/Corporate Governance Committee.

Frank C. Lanza, Chairman and Chief Executive Officer and Director since April 1997. From April 1996, when Loral Corporation was acquired by Lockheed Martin Corporation, until April 1997, Mr. Lanza was Executive Vice President of Lockheed Martin, a member of Lockheed Martin's Executive Council and Board of Directors and President and Chief Operating Officer of Lockheed Martin's command, control, communications and intelligence ("C<sup>3</sup>I") and Systems Integration Sector, which comprised many of the businesses Lockheed Martin acquired from Loral. Prior to the April 1996 acquisition of Loral, Mr. Lanza was President and Chief Operating Officer of Loral, a position he held since 1981. He joined Loral in 1972 as President of its largest division, Electronic Systems. His earlier experience was with DalmoVictor and Philco Western Development Laboratory.

Robert V. LaPenta, President and Chief Financial Officer and Director since April 1997. From April 1996, when Loral was acquired by Lockheed Martin, until April 1997, Mr. LaPenta was a Vice President of Lockheed Martin and was Vice President and Chief Financial Officer of Lockheed Martin's C<sup>3</sup>I and Systems Integration Sector. Prior to the April 1996 acquisition of Loral, he was Loral's Senior Vice President and Controller, a position he held since 1981. He joined Loral in 1972 and was named Vice President and Controller of its largest division in 1974. He became Corporate Controller in 1978 and was named Vice President in 1979. Mr. LaPenta is on the Board of Trustees of Iona College, the Board of Trustees of The American College of Greece and the Board of Directors of Core Software Technologies.

Michael T. Strianese, Senior Vice President—Finance. Mr. Strianese became a Senior Vice President in March 2001. He joined us in April 1997 as Vice President—Finance and Controller and

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was our Controller until July 2000. From April 1996, when Loral was acquired by Lockheed Martin, until April 1997, Mr. Strianese was Vice President and Controller of Lockheed Martin's C<sup>3</sup>I and Systems Integration Sector. From 1991 to the April 1996 acquisition of Loral, he was Director of Special Projects at Loral. Mr. Strianese is a Certified Public Accountant.

*Christopher C. Cambria*, Senior Vice President—Secretary and General Counsel. Mr. Cambria became a Senior Vice President in March 2001. He joined us in June 1997 as Vice President—General Counsel and Secretary. From 1994 until joining us, Mr. Cambria was an associate with Fried, Frank, Harris, Shriver & Jacobson. From 1986 until 1993, he was an associate with Cravath, Swaine & Moore. Mr. Cambria is a director of Core Software Technologies.

*Charles J. Schafer*, Senior Vice President—Business Operations and President of the Products Group. Mr. Schafer became a Senior Vice President in April 2002. Mr. Schafer was appointed President of the Products Group in September 1999. He joined us in August 1998 as Vice President—Business Operations. Prior to August 1998, he was President of Lockheed Martin's Tactical Defense Systems Division, a position he also held at Loral since September 1994. Prior to the April 1996 acquisition of Loral, Mr. Schafer held various executive positions with Loral, which he joined in 1984.

*Jimmie V. Adams*, Vice President—Washington, D.C. Operations. General Jimmie V. Adams (U.S.A.F.-ret.) joined us in May 1997. From April 1996 until April 1997, he was Vice President of Lockheed Martin's Washington Operations for the C<sup>3</sup>I and Systems Integration Sector. Prior to the April 1996 acquisition of Loral, he had held the same position at Loral since 1993. Before joining Loral in 1993, he was Commander in Chief, Pacific Air Forces, Hickam Air Force Base, Hawaii, capping a 35-year career with the U.S. Air Force. He was also Deputy Chief of Staff for plans and operation for U.S. Air Force headquarters and Vice Commander of Headquarters Tactical Air Command and Vice Commander in Chief of the U.S. Air Forces Atlantic at Langley Air Force Base. He is a command pilot with more than 141 combat missions.

*David T. Butler III*, Vice President—Planning. Mr. Butler became a Vice President in December 2000. He joined us in 1997 as our corporate Director of Planning and Strategic Development. Prior to joining us, he was the Controller for Lockheed Martin Fairchild Systems from 1996 to 1997. Prior to the acquisition of Loral, Mr. Butler was Controller of Loral Fairchild Systems from 1992 to 1996. From 1981 to 1992, Mr. Butler held a number of financial positions with Loral Electronic Systems.

*Ralph G. D'Ambrosio*, Vice President and Controller. Mr. D'Ambrosio became a Vice President in July 2001 and Controller in August 2000. He joined us in August 1997, and until July 2000 was our Assistant Controller. Prior to joining us, he was a senior manager at Coopers & Lybrand L.L.P., where he held a number of positions since 1989. Mr. D'Ambrosio is a Certified Public Accountant.

*Kenneth R. Goldstein*, Vice President—Taxes. Mr. Goldstein became a Vice President in October 2003. He joined us in 1997 as our corporate director of taxes. From April 1996, when Loral was acquired by Lockheed Martin, until April 1997, Mr. Goldstein was a director of taxes at Lockheed Martin Corporation. From 1981 to 1996, Mr. Goldstein was the director of taxes at Loral Corporation. Mr. Goldstein joined Loral Corporation in 1978 as a tax manager.

*Joseph S. Paresi*, Vice President—Product Development and President of the Security Systems Division. Mr. Paresi joined us in April 1997. From April 1996 until April 1997, Mr. Paresi was Corporate Director of Technology for Lockheed Martin's C<sup>3</sup>I and Systems Integration Sector. Prior to the April 1996 acquisition of Loral, Mr. Paresi was Corporate Director of Technology for Loral, a position he held since 1993. From 1978 to 1993, Mr. Paresi was a Systems Engineer, Director of Marketing and Director of International Programs at Loral Electronic Systems. Mr. Paresi is currently a director of AnnisTech, Inc.

*Robert W. RisCassi*, Vice President—Washington, D.C. Operations. General Robert W. RisCassi (U.S. Army-ret.) joined us in April 1997. From April 1996 until April 1997, he was Vice President of Land Systems for Lockheed Martin's C<sup>3</sup>I and Systems Integration Sector. Prior to the April 1996 acquisition of Loral, he had held the same position for Loral since 1993. He joined Loral in 1993 after retiring as U.S. Army Commander in Chief, United Nations Command/Korea. His 35-year military

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career included posts as Army Vice Chief of Staff; Director, Joint Staff, Joint Chiefs of Staff; Deputy Chief of Staff for Operations and Plans; and Commander of the Combined Arms Center. General RisCassi is currently a director of Alliant Techsystems Inc.

*Stephen M. Souza*, Vice President and Treasurer. Mr. Souza joined us in August 2001. Prior to joining us he was the Treasurer of ASARCO Inc. from 1999 to August 2001 and Assistant Treasurer from 1992 to 1999.

*Jill J. Wittels*, Vice President—Business Development. Dr. Wittels joined us in March 2001. From July 1998 to February 2001 she was President and General Manager of BAE Systems' Information and Electronic Warfare Systems/Infrared and Imaging Systems division and its predecessor company. From January 1997 to July 1998, Dr. Wittels was Vice President—Business Development and Operations for IR Focalplane Products at Lockheed Martin. Dr. Wittels is on the Board of Overseers for the Department of Energy's Fermi National Accelerator Lab. Dr. Wittels is also a director of Innovative Micro Technology, Inc. and Millivision, Inc.

*Claude R. Canizares*, Director since May 2003. Member of the audit committee. Since 1974, Professor Canizares has been a faculty member of the Massachusetts Institute of Technology (MIT). He currently serves as the Associate Provost and Bruno Rossi Professor of Experimental Physics, overseeing the MIT Lincoln Laboratory. In addition, he is a principal investigator and Associate Director of NASA's Chandra X-ray Observatory. Professor Canizares is a member of the National Academy of Sciences, the International Academy of Astronautics and a fellow of the American Physical Society and the American Association for the Advancement of Science. He is also a member of the Board of Trustees of the Associated Universities, Inc., the Board of Physics and Astronomy of the National Research Council and the Air Force Scientific Advisory Board.

*Thomas A. Corcoran*, Director since July 1997. Chairman of the audit committee. Since March 2001, Mr. Corcoran has been the President and Chief Executive Officer of Gemini Air Cargo. Mr. Corcoran is also president of Corcoran Enterprises, LLC, a private management consulting firm. Mr. Corcoran was the President and Chief Executive Officer of Allegheny Teledyne Incorporated from October 1999 to December 2000. From October 1998 to September 1999, he was President and Chief Operating Officer of the Space & Strategic Missiles Sector of Lockheed Martin Corporation. From March 1995 to September 1998 he was the President and Chief Operating Officer of the Electronic Systems Sector of Lockheed Martin Corporation. From 1993 to 1995, Mr. Corcoran was President of the Electronics Group of Martin Marietta Corporation. Prior to that he worked for General Electric for 26 years and from 1983 to 1993 he held various management positions with GE Aerospace and was a company officer from 1990 to 1993. Mr. Corcoran is a member of the Board of Trustees of Stevens Institute of

Technology, the Board of Directors of American Ireland Fund, the Board of Directors of REMEC Corporation and the Board of Directors of United Industrial Corporation.

*Robert B. Millard*, Director since April 1997. Chairman of the compensation committee. Mr. Millard is a Managing Director of Lehman Brothers Inc., head of Lehman Brothers' Principal Trading & Investments Group and principal of the Merchant Banking Group. Mr. Millard joined Lehman Brothers Inc. in 1978 when Kuhn Loeb & Co. was acquired by Lehman Brothers and became a Managing Director of Lehman Brothers Inc. in 1983. Mr. Millard joined Kuhn Loeb & Co. in 1976. Mr. Millard is a director of GulfMark Offshore, Inc. and Weatherford International, Inc.

*John M. Shalikashvili*, Director since August 1998. Member of the compensation and nominating/corporate governance committees. General Shalikashvili (U.S. Army-ret.) is an independent consultant and a Visiting Professor at Stanford University. General Shalikashvili was the senior officer of the United States military and principal military advisor to the President of the United States, the Secretary of Defense and National Security Council by serving as the thirteenth Chairman of the Joint Chiefs of Staff, Department of Defense, for two terms from 1993 to 1997. Prior to his tenure as Chairman of the Joint Chiefs of Staff, he served as the Commander in Chief of all United States forces in Europe and as NATO's tenth Supreme Allied Commander, Europe(SACEUR). He has also served in a variety of command and staff positions in the continental

United States, Alaska, Belgium, Germany, Italy, Korea, Turkey and Vietnam. General Shalikashvili is a director of The Boeing Company, United Defense Industries Inc., Frank Russell Trust Company and Plug Power, Inc.

*Arthur L. Simon*, Director since April 2000. Member of the audit and nominating/corporate governance committees. Mr. Simon is an independent consultant. Before his retirement, Mr. Simon was a partner at Coopers & Lybrand, L.L.P., Certified Public Accountants, from 1968 to 1994. He is a director of Loral Space & Communications Ltd.

*Alan H. Washkowitz*, Director since April 1997. Chairman of the nominating/corporate governance committee and member of the compensation committee. Mr. Washkowitz is a Managing Director of Lehman Merchant Banking Group, and is responsible for the oversight of Lehman Brothers Inc. Merchant Banking Portfolio Partnership L.P. Mr. Washkowitz joined Lehman Brothers Inc. in 1978 when Kuhn Loeb & Co. was acquired by Lehman Brothers. Mr. Washkowitz is a director of Peabody Energy Corporation.

L-3 Holdings' certificate of incorporation provides for a classified board of directors divided into three classes. Class I will expire at the annual meeting of the stockholders to be held in 2005; Class II will expire at the annual meeting of the stockholders to be held in 2004; and Class III will expire at the annual meeting of the stockholders to be held in 2006. At each annual meeting, L-3 Holdings' stockholders will elect the successors to directors whose terms will then expire to serve from the time of election and qualification until the third annual meeting following election and until their successors have been elected and qualified, or until their resignation or removal, if any. Increases or decreases in the number of directorships will be distributed among the three classes so that, as nearly as possible, each class will consist of an equal number of directors.

Our executive officers and key employees serve at the discretion of our board of directors.

**The Board of Directors and Certain Governance Matters**

Our board of directors directs the management of our business and affairs, as provided by Delaware law, and conducts its business through meetings of the board of directors and three standing committees: the audit, nominating/corporate governance and compensation committees. In addition, from time to time, special committees may be established under the direction of the board of directors when necessary to address specific issues. Each executive officer serves at the discretion of the board of directors.

**Compensation of Directors**

The directors who are also our employees or employees of our subsidiaries or affiliates do not receive compensation for their services as directors. The non-employee directors receive annual compensation of \$50,000 for service on the board of directors, of which \$40,000 is paid in cash on a quarterly basis, and \$10,000 is paid in shares of L-3 Holdings' common stock. The chairman of the audit committee receives additional cash annual compensation of \$7,500. The chairman of the compensation committee receives additional cash annual compensation of \$5,000. In addition, non-employee directors receive annual stock option grants of shares of L-3 Holdings' common stock, which vest in three equal annual installments. The non-employee directors are entitled to reimbursement for their reasonable out-of-pocket expenses in connection with their travel to and attendance at meetings of the board of directors or committees thereof. In addition, the non-employee directors will be compensated \$1,500 per board meeting attended, \$2,000 per audit committee meeting attended, \$1,500 per compensation committee meeting attended and \$1,000 per telephonic audit or compensation committee meeting in which they participate.

Non-employee directors may defer up to 100 percent of the cash portion of their annual cash compensation (including meeting fees) otherwise payable to the director. Subject to certain limitations, a participating director's deferred compensation will be distributed in a lump sum on, or distributed in annual installments commencing on, the 30th day following the date he or she ceases to be a director. Deferral elections are irrevocable during any calendar year and must be made before the beginning of the calendar year in which his/her compensation is earned. Interest is accrued on deferred amounts. Depending on a director's investment election, deferred amounts earn interest at a rate based on the 90-day U.S. Government Treasury Bill or the performance of L-3 Holdings' common stock.

**Executive Compensation and Other Matters**

**Summary Compensation Table**

The following table provides summary information concerning compensation paid or accrued by us to or on behalf of our Chief Executive Officer and each of our four other most highly compensated executive officers who served in such capacities at December 31, 2003, collectively referred to herein as the named executive officers, for services rendered to us during each of the last three years.

Name and Principal Position	Year	Annual Compensation		Long-Term Compensation Awards	All Other Compensation (\$) (1)
		Salary (\$)	Bonus (\$)	Securities Underlying Stock Options (#)	
Frank C. Lanza	2003	875,000	975,000	75,000	6,180
(Chairman and Chief Executive	2002	825,000	850,000	400,000	11,125

Officer)	2001	750,000	750,000	—	11,125
Robert V. LaPenta	2003	675,000	865,000	75,000	43,509
(President and Chief Financial Officer)	2002	625,000	750,000	400,000	39,287
	2001	545,577	650,000	—	34,306
Michael T. Strianese	2003	365,000	435,000	75,000	19,726
(Senior Vice President, Finance)	2002	331,250	375,000	—	19,690
	2001	255,000	300,000	54,000	13,790
Christopher C. Cambria	2003	235,000	435,000	75,000	12,383
(Senior Vice President, Secretary and General Counsel)	2002	235,000	375,000	—	12,038
	2001	235,000	300,000	54,000	10,838
Charles J. Schafer					
(Senior Vice President, Business Operations and President of the Products Group)	2003	308,750	400,000	50,000	24,018
	2002	268,750	350,000	—	24,449
	2001	248,230	250,000	36,000	118,438

(1) Amounts for the year ended December 31, 2003 include: (a) our matching contributions of \$9,600 under our savings plan for Mr. LaPenta, \$8,000 for Messrs. Strianese and Cambria and \$8,085 for Mr. Schafer; and (b) the value of supplemental life insurance programs in the amounts of \$6,180 for Mr. Lanza, \$33,909 for Mr. LaPenta, \$11,726 for Mr. Strianese, \$4,383 for Mr. Cambria and \$15,933 for Mr. Schafer.

#### Option Grants in Fiscal Year 2003

The following table shows the options to purchase L-3 Holdings' common stock granted in fiscal year 2003 to the named executive officers.

Name	Options Granted (#)	% Total Options Granted	Per Share Exercise Price (\$)	Expiration Date	Grant Date Value (\$)
Frank C. Lanza	75,000	3.26%	45.80	11/14/13	1,051,250
Robert V. LaPenta	75,000	3.26%	45.80	11/14/13	1,051,250
Michael T. Strianese	75,000	3.26%	35.60	3/4/13	892,250
Christopher C. Cambria	75,000	3.26%	35.60	3/4/13	892,250
Charles J. Schafer	50,000	2.17%	35.60	3/4/13	594,833
	<u>350,000</u>				<u>4,481,833</u>

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#### Option Exercises and Fiscal Year-End Values

The following table provides information on options to purchase L-3 Holdings' common stock that were exercised during fiscal year 2003 by our named executive officers; the total numbers of exercisable and non-exercisable options to purchase L-3 Holdings' common stock owned by our named executive officers at December 31, 2003; and the aggregate dollar value of such options that were in-the-money at December 31, 2003.

Name	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Securities Underlying Unexercised Options at Fiscal Year-End (#)		Value of Unexercised In-The-Money Options at Fiscal Year-end (\$) <sup>(1)</sup>	
			Exercisable	Unexercisable <sup>(2)</sup>	Exercisable	Unexercisable <sup>(2)</sup>
Frank C. Lanza	300,000	10,483,500	1,661,906	341,666	73,562,528	417,000
Robert V. LaPenta	—	—	1,661,906	341,666	73,562,528	417,000
Michael T. Strianese	—	—	93,000	93,000	2,241,210	1,391,970
Christopher C. Cambria	—	—	107,800	93,000	2,723,838	1,391,970
Charles J. Schafer	—	—	39,000	62,000	769,110	927,980

(1) In accordance with SEC rules, the values of the in-the-money options were calculated by subtracting the exercise prices of the options from the December 31, 2003 closing stock price of L-3 Holdings' common stock of \$51.36.

(2) These options are unexercisable because they have not yet vested under their terms.

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## Pension Plan

### PENSION PLAN TABLE

The following table shows the estimated annual pension benefits payable under the L-3 Communications Corporation Pension Plan and Supplemental Executive Retirement Plan to a covered participant upon retirement at normal retirement age (65), based on a career average compensation (salary and bonus) and years of credited service with us.

Average Compensation at Retirement	Years of Credited Service						
	5	10	15	20	25	30	35
\$ 500,000	\$ 39,100	\$ 70,485	\$ 95,638	\$115,833	\$132,074	\$145,214	\$155,811
600,000	47,127	84,955	115,277	139,621	159,190	175,000	187,740
700,000	55,156	99,426	134,917	163,410	186,308	204,790	219,674
800,000	63,184	113,897	154,557	187,197	213,424	234,577	251,603



900,000	71,212	128,365	174,194	210,982	240,537	264,362	283,532
1,000,000	79,240	142,836	193,835	234,773	267,658	294,155	315,469
1,100,000	87,270	157,309	213,478	258,563	294,776	323,943	347,399
1,200,000	95,296	171,777	233,115	282,348	321,890	353,728	379,329
1,300,000	103,326	186,250	252,759	306,141	349,012	383,520	411,264
1,400,000	111,352	200,717	272,395	329,926	376,126	413,308	443,197
1,500,000	119,382	215,190	292,038	353,716	403,244	443,097	475,129
1,600,000	127,409	229,658	311,675	377,501	430,359	472,882	507,057
1,700,000	135,438	244,130	331,317	401,293	457,478	502,672	538,989
1,800,000	143,465	258,600	350,956	425,080	484,596	532,462	570,924
1,900,000	151,495	273,072	370,599	448,872	511,715	562,253	602,858
2,000,000	159,521	287,539	390,234	472,655	538,828	592,036	634,786

As of December 31, 2003, the current annual compensation and current years of credited service (including for Messrs. LaPenta and Strianese, years of credited service as an employee of Loral and Lockheed Martin) for each of the following persons were: Mr. Lanza, \$1,725,000 and seven years; Mr. LaPenta, \$1,425,000 and 32 years; Mr. Strianese, \$740,000 and 14 years; Mr. Cambria, \$610,000 and seven years; and Mr. Schafer, \$658,750 and five years.

#### Compensation Committee Interlocks and Insider Participation

During the 2003 fiscal year, Messrs. Robert Millard, John Montague, and Alan Washkowitz served as members of the compensation committee of the board of directors. In May 2003, Mr. Montague resigned as a director and member of the compensation committee and in July 2003 General Shalikashvili was appointed a member of the committee. None of these individuals has served us or any of our subsidiaries as an officer or employee.

None of our executive officers serves as a member of the board of directors or compensation committee of any entity which has one or more executive officers serving as a member of our board of directors or compensation committee.

#### Employment Agreements

We entered into an employment agreement (the "Employment Agreements") effective on April 30, 1997 with each of Mr. Lanza, our Chairman and Chief Executive Officer, and Mr. LaPenta, our President and Chief Financial Officer. The Employment Agreements provided for an initial term of five years, which would automatically renew for one-year periods thereafter, unless a party thereto gave notice of its intent to terminate at least 90 days prior to the expiration of the term. Mr. Lanza's employment agreement was renewed in April 2003. Mr. LaPenta's employment agreement expired in April 2002.

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Upon a termination without cause or resignation for good reason, we will be obligated, through the end of the term, to (i) continue to pay the base salary and (ii) continue to provide life insurance and medical and hospitalization benefits comparable to those provided to other senior executives; provided, however, that any such coverage shall terminate to the extent that Mr. Lanza is offered or obtains comparable benefits coverage from any other employer. The Employment Agreements provided for confidentiality during employment and at all times thereafter. There was also a noncompetition and non-solicitation covenant which was effective during the employment term and for one year thereafter; provided, however, that if the employment terminated following the expiration of the initial term, the noncompetition covenant would only be effective during the period, if any, that we paid the severance described above.

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## OWNERSHIP OF CAPITAL STOCK

#### Security Ownership of Certain Beneficial Owners

All outstanding capital stock of L-3 Communications is owned by L-3 Holdings. As of February 27, 2004, there were 105,338,853 shares of L-3 Holdings' common stock outstanding. We know of no person who, as of February 27, 2004, beneficially owned more than five percent of the common stock, except as set forth below.

<u>Name of Beneficial Owner</u>	<u>Amount and Nature of Beneficial Ownership</u>	<u>Percent of Class <sup>(1)</sup></u>
Citigroup Inc. <sup>(2)</sup> 153 East 53rd Street New York, New York 10043.	12,646,127	12.0%
Robert V. LaPenta <sup>(3)</sup> c/o L-3 Communications Holdings, Inc. 600 Third Avenue, 34th Floor New York, New York 10016.	5,402,233	5.0%

(1) Under Rule 13d-3, certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights. As a result, the percentage of outstanding shares of any person as shown in this table does not necessarily reflect the person's actual ownership or voting power with respect to the number of shares of common stock actually outstanding at February 27, 2004.

(2) Based on a Schedule 13G/A filed with the S.E.C., dated February 13, 2004, in which Citigroup Inc. reported that it had shared voting and dispositive power over 12,646,127 shares of common stock.

(3) The shares of common stock beneficially owned includes 1,795,239 shares issuable under employee stock

options and exercisable within 60 days of February 27, 2004 and 1,052 shares allocated to the account of Mr. LaPenta under our savings plans.

## Security Ownership of Management

The following table shows the amount of L-3 Holdings' common stock beneficially owned (unless otherwise indicated) by L-3 Holdings' executive officers, L-3 Holdings' directors, and by all of L-3 Holdings' current executive officers and directors as a group. Except as otherwise indicated, all information listed below is as of February 27, 2004.

Name of Beneficial Owner	Shares of Common Stock Beneficially Owned <sup>(1)(2)</sup>	Percentage of Shares of Common Stock Outstanding <sup>(3)</sup>
Directors and Executive Officers		
Frank C. Lanza	5,046,581	4.7%
Robert V. LaPenta	5,402,233	5.0%
Michael T. Strianese	88,987	—
Christopher C. Cambria	133,784	—
Charles J. Schafer	56,643	—
Claude R. Canizares	—	—
Thomas A. Corcoran <sup>(4)</sup>	13,500	—
Robert B. Millard <sup>(4)(5)(6)</sup>	144,623	—
John M. Shalikashvili <sup>(4)</sup>	11,300	—
Arthur L. Simon <sup>(4)</sup>	16,866	—
Alan H. Washkowitz <sup>(4)(5)(7)</sup>	276,234	—
Directors and Executive Officers as a Group (11 persons) <sup>(8)</sup>	11,190,751	10.2%

(1) The shares of L-3 Holdings common stock beneficially owned include the number of shares (i) issuable under employee stock options and exercisable within 60 days of February 27, 2004 and (ii) allocated to the accounts of executive officers under our savings plans. Of the number of shares shown above, (i) the following represent shares that may be acquired upon exercise of employee stock options for the accounts of: Mr. Lanza, 1,795,239 shares; Mr. LaPenta, 1,795,239 shares; Mr. Strianese, 88,000 shares; Mr. Cambria, 132,800 shares and Mr. Schafer, 55,667 shares; and (ii) the following represent shares; allocated under our saving plans to the accounts of: Mr. LaPenta, 1,052 shares; Mr. Strianese, 987 shares; Mr. Cambria, 984 shares; and Mr. Schafer, 976 shares.

(2) The number of shares shown includes shares that are individually or jointly owned, as well as shares over which the individual has either sole or shared investment or voting authority.

(3) Share ownership does not exceed one percent of the class unless otherwise indicated. Under Rule 13d-3, certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights. As a result, the percentage of outstanding shares of any person as shown in this table does not necessarily reflect the person's actual ownership or voting power with respect to the number of shares of common stock actually outstanding at February 27, 2004.

(4) Includes 13,500 shares issuable and exercisable under director stock options within 60 days of February 27, 2004 in the case of Mr. Corcoran, 10,500 shares in the case of General Shalikashvili and Mr. Simon and 7,500 shares in the case of Messrs. Millard and Washkowitz.

(5) Robert B. Millard and Alan H. Washkowitz, each of whom is a member of our board of directors, are each a Managing Director of Lehman Brothers Inc. and limited partners of Lehman Brothers Capital Partners III, L.P. As limited partners of Lehman Brothers Capital Partners III, L.P., Messrs. Millard and Washkowitz may be deemed to share beneficial ownership of shares of L-3 Holdings' common stock held by Lehman Brothers Capital Partners III, L.P. Such individuals disclaim any such beneficial ownership and those shares of common stock are not reflected in the numbers shown in this table.

(6) Includes 105,278 shares owned by a charitable foundation of which Mr. Millard and his wife are the sole trustees, and as to which Mr. Millard disclaims beneficial ownership.

(7) Includes 111,324 shares in trust, for the benefit of Mr. Washkowitz's children, for which Mr. Washkowitz and his wife are co-trustees and as to which Mr. Washkowitz disclaims beneficial ownership.

(8) Includes 3,916,445 shares issuable under employee stock options and exercisable under employee stock options within 60 days of February 27, 2004, and 3,999 shares allocated to the accounts of executive officers under our savings plans.

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## DESCRIPTION OF OTHER INDEBTEDNESS

### Senior Credit Facilities of L-3 Communications Corporation

The senior credit facilities of L-3 Communications Corporation have been provided by a syndicate of banks led by Bank of America, N.A., as administrative agent. The senior credit facilities provide for:

(A) \$500 million in revolving credit loans which must be repaid by May 15, 2006 (the "Revolving Credit Facility"); and

(B) \$250 million in revolving credit loans which must be repaid by February 22, 2005 (the "Revolving 364 Day Facility" and together with (A) above, the "senior credit facilities").

However, all or a portion of the Revolving 364 Day Facility may be extended annually on the maturity date of the Revolving 364 Day Facility for a period of 364 days with the consent of lenders holding at least 50% of the commitments to make 364-day loans (February 23, 2005, as extended in accordance with the foregoing, the "364 Day Termination Date"). L-3 Communications Corporation may also convert the outstanding principal amount of any or all of the loans outstanding under the Revolving 364 Day Facility to term loans on the 364 Day Termination Date if it meets certain conditions. L-3 Communications Corporation may enter into agreements with any lender or, under some circumstances, with new lenders to increase the commitments under the senior credit facilities so long as doing so would not cause the Senior Debt Ratio (as defined below) to exceed 2.0 to 1.0 on a pro forma basis. The senior credit facilities include availability for letters of credit, and the Revolving Credit Facility allows borrowings up to a specified amount on same-day notice (the "Swingline Loans").

All borrowings under the senior credit facilities bear interest, at L-3 Communications Corporation's option, at either:

(A) "base rate" equal to, for any day, the higher of:

- 0.50% per annum above the latest federal funds effective rate; and
- the rate of interest in effect for such day as publicly announced from time to time by Bank of America, N.A. as its "reference rate,"

plus a spread ranging from 2.00% to 0.50% per annum, and adjusted periodically, depending on L-3 Communications Corporation's Debt Ratio (as defined below) at the time of determination or

(B) "LIBOR" equal to, for any interest period (as defined in the senior credit facilities), the London interbank offered rate for such interest period as determined in accordance with the senior credit facilities and as adjusted to reflect any reserve requirements, plus a spread ranging from 3.00% to 1.50% per annum, and adjusted periodically, depending on the Debt Ratio at the time of determination, provided that Swingline Loans can only bear interest at the "base rate" plus the applicable spread.

The Debt Ratio is defined in the senior credit facilities as the ratio of Consolidated Total Debt to Consolidated EBITDA. Consolidated Total Debt is equal to outstanding indebtedness for borrowed money or the deferred purchase price of property, including capitalized lease obligations, plus permitted convertible securities guaranteed by L-3 Communications Corporation or its subsidiaries minus the lesser of actual unrestricted cash or \$50 million. Consolidated EBITDA is equal to consolidated net income (excluding (i) impairment losses incurred on goodwill and identifiable intangible assets or debt and equity investments, (ii) gains or losses incurred on the retirement of debt, (iii) extraordinary gains or losses, (iv) gains or losses in connection with asset dispositions, and (v) gains or losses from discontinued operations) for the most recent four quarters, plus consolidated interest expense (including consolidated interest expense of L-3 Holdings for permitted convertible securities guaranteed by L-3 Communications Corporation or its subsidiaries), income taxes, depreciation and amortization minus depreciation and amortization related to minority interest.

The above interest rates are adjusted for changes in the Debt Ratio and reach their maximum if the Debt Ratio is greater than 4.25 to 1.0 and reach their minimum if that ratio is less than 2.75 to 1.0.

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L-3 Communications Corporation will pay commitment fees calculated at a rate ranging from 0.50% to 0.35% per annum for the Revolving Credit Facility and 0.45% to 0.30% per annum for the Revolving 364 Day Facility, depending on the Debt Ratio in effect at the time of determination, on the daily amount of the available unused commitment under the senior credit facilities. These commitment fees are payable quarterly in arrears and upon termination of the senior credit facilities.

L-3 Communications Corporation will pay a letter of credit fee calculated at a rate ranging from (A) 1.50% to 0.75% per annum in the case of performance letters of credit and (B) 3.00% to 1.50% per annum in the case of all other letters of credit, in each case depending on the Debt Ratio at the time of determination. L-3 Communications Corporation will also pay a fronting fee equal to 0.125% per annum on the aggregate face amount of all outstanding letters of credit. Such fees will be payable quarterly in arrears and upon the termination of the senior credit facilities. In addition, L-3 Communications Corporation will pay customary transaction charges in connection with any letters of credit. The senior credit facilities provide for the issuance of letters of credit in currencies other than United States dollars.

In the event that we convert any or all of the outstanding principal amount under the Revolving 364 Day Facility into term loans (the "Applicable Converted Commitment") on any 364 Termination Date, we would have to repay the principal amount of the resulting term loans by May 15, 2006 or, if earlier, the second anniversary of the effective date of such conversion into term loans.

Borrowings under the senior credit facilities are subject to mandatory prepayment (i) with the net proceeds of any incurrence of indebtedness that is not permitted under the senior credit facilities and (ii) with the net proceeds of asset sales, in both cases subject to certain exceptions.

L-3 Communications Corporation's obligations under the senior credit facilities are secured by:

- a pledge by L-3 Communications Holdings of the stock of L-3 Communications Corporation; and
- a pledge by L-3 Communications Corporation and all of its material direct and indirect subsidiaries of substantially all of the stock of their respective material domestic subsidiaries and 65% of the stock of their material first-tier foreign subsidiaries.

In addition, indebtedness under the senior credit facilities is guaranteed by L-3 Communications Holdings and by substantially all of L-3 Communications Corporation's direct and indirect material domestic subsidiaries.

The senior credit facilities contain customary covenants and restrictions on L-3 Communications Corporation's ability to, among other things, borrow additional funds, dispose of assets or pay cash dividends. In addition, the senior credit facilities provide that L-3 Communications Corporation must meet or exceed an interest coverage ratio and must not exceed the Debt Ratio and the Senior Debt Ratio.

The Senior Debt Ratio is defined as the ratio of Consolidated Senior Debt to Consolidated EBITDA. Consolidated Senior Debt is defined as Consolidated Total Debt other than subordinated debt. See note 8 to our consolidated financial statements for more information regarding these covenants.

The senior credit facilities also limit the payment of dividends by L-3 Communications Corporation to L-3 Communications Holdings except for payment of franchise taxes, fees to maintain L-3 Communication Holdings' legal existence, income taxes up to certain amounts, interest accrued on the CODES or to provide for operating costs of up to \$1.0 million annually. Under the covenant, L-3 Communications Corporation may also pay permitted dividends to L-3 Communications Holdings:

- in an amount not to exceed \$25.0 million in any fiscal quarter, so long as no default or event of default has occurred and is continuing;
- in an amount not to exceed \$200.0 million to permit L-3 Communications Holdings to repurchase its common stock, so long as those dividends are paid with the net proceeds of additional subordinated indebtedness issued by L-3 Communications Corporation after

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January 1, 2004. L-3 Holdings may repurchase its common stock in an amount not to exceed \$200.0 million, whether from the proceeds of dividends from L-3 Communications Corporation or of issuances of permitted convertible securities or capital stock of L-3 Communications Holdings; and

- in an amount not to exceed \$10.0 million in any fiscal year to fund certain repurchases of common stock of L-3 Communications Holdings from beneficiaries of equity compensation plans of L-3 Communications Corporation, L-3 Communications Holdings or their subsidiaries. L-3 Communications Holdings may make further payments of up to \$2.0 million from the proceeds of issuances of its common stock to repurchase common stock held by management.

The senior credit facilities also include customary events of default.

Under the senior credit facilities, each of the following items constitutes an event of default:

- L-3 Communications Corporation fails to pay principal or amounts drawn under letters of credit when due;
- L-3 Communications Corporation fails to pay interest within five days after that amount becomes due;
- any representation or warranty made is incorrect in any material respect;
- L-3 Communications Corporation does not comply with its financial and other covenants (and, for some of other covenants, the default continues for 30 days);
- L-3 Communications Corporation or any of its subsidiaries defaults under any indebtedness, guarantee obligation or interest rate hedging agreement in the aggregate amount of at least \$15.0 million for more than 10 days and that default would enable the holder of the obligation to accelerate the obligation;
- certain events of bankruptcy, insolvency or reorganization occur with respect to L-3 Communications Corporation or any of its subsidiaries;
- certain events occur with respect to any employee benefit plan of L-3 Communications Corporation or its affiliates covered by ERISA that would have a material adverse effect;
- L-3 Communications Holdings, L-3 Communications Corporation or any of the subsidiaries of L-3 Communications Corporation fails to pay judgments aggregating in excess of \$15.0 million, which judgments are not paid, covered by insurance, discharged or stayed for a period of 60 days;
- any of the pledge agreements ceases to be in full force and effect or L-3 Communications Corporation or any party to any pledge agreement so asserts, or the lien under any of the pledge agreements ceases to be an enforceable first priority lien (subject to a grace period in certain cases);
- the guarantees of the senior credit facilities are held to be enforceable or invalid or cease to be in full force and effect, or any guarantor denies its obligations under its guarantee; and
- a change of control.

If an event of default occurs involving certain events of bankruptcy, insolvency or reorganization of L-3 Communications Corporation, the commitments under the senior credit facilities will automatically terminate and the loans, including accrued interest, and all other amounts owed under the agreements will become immediately due and payable. If any other event of default occurs, then lenders holding the majority in aggregate principal amount of the loans under any senior credit facility may declare the commitments under that facility to be terminated and the loans, including accrued interest, and all other amounts owed under that facility to be immediately due and payable. Upon any acceleration, L-3 Communications Corporation must cash collateralize any undrawn letters of credit under the senior credit facilities.

8% Senior Subordinated Notes due 2008

L-3 Communications Corporation has outstanding \$200.0 million in aggregate principal amount of 8% Senior Subordinated Notes due 2008 (the "December 1998 Notes"). The December 1998 Notes are subject to the terms and conditions of an Indenture dated as of December 11, 1998, among L-3 Communications Corporation, the guarantors named therein and in supplements thereto and The Bank of New York as trustee (the "December 1998 Indenture"). The following summary of the material provisions of the December 1998 Indenture does not purport to be complete, and is subject to and qualified in its entirety by reference to, all of the provisions of the December 1998 Indenture and those terms made a part of the December 1998 Indenture by the Trust Indenture Act of 1939, as amended. All terms defined in the December 1998 Indenture and not otherwise defined herein are used below with the meanings set forth in the December 1998 Indenture.

General

The December 1998 Notes will mature on August 1, 2008 and bear interest at 8% per annum, payable semi-annually on February 1 and August 1 of each year. The December 1998 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinated in right of payment to all existing and future senior debt of L-3 Communications Corporation and rank *pari passu* with the 2002 Notes, the May 2003 Notes and the outstanding notes and the exchange notes. The December 1998 Notes are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally by all of L-3 Communications Corporation's restricted subsidiaries other than its foreign subsidiaries. These guarantees are *pari passu* with the guarantees of the outstanding notes and the exchange notes, the May 2003 Notes, the 2002 Notes and the CODES.

Optional Redemption

The December 1998 Notes are subject to redemption at any time, at the option of L-3 Communications Corporation, in whole or in part, on or after August 1, 2003 at redemption prices (plus accrued and unpaid interest) starting at 104% of principal (plus accrued and unpaid interest) during the 12-month period beginning August 1, 2003 and declining annually to 100% of principal (plus accrued and unpaid interest) on August 1, 2006 and thereafter.

Change of Control

Upon the occurrence of a change of control, each holder of the December 1998 Notes may require L-3 Communications Corporation to repurchase all or a portion of such holder's December 1998 Notes at a purchase price equal to 101% of the principal amount (plus accrued and unpaid interest and liquidated damages, if any). Generally, a change of control means the occurrence of any of the following:

- the disposition of all or substantially all of L-3 Communications Corporation's assets to any person;
- the adoption of a plan relating to the liquidation or dissolution of L-3 Communications Corporation;
- the consummation of any transaction in which a person other than the principals and their related parties becomes the beneficial owner of more than 50% of the voting stock of L-3 Communications Corporation; or
- the first day on which a majority of the members of the Board of Directors of L-3 Communications Corporation are not continuing directors.

Subordination

The December 1998 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinate to all existing and future senior debt of L-3 Communications Corporation. The December 1998 Notes rank senior in right of payment to all subordinated indebtedness of L-3 Communications Corporation. The guarantees of L-3 Communications Corporation's subsidiaries under the December 1998 Notes are general unsecured obligations of the guarantors and are

subordinated to the senior debt and to the guarantees of senior debt of those guarantors. These guarantees under the December 1998 Notes rank senior in right of payment to all subordinated Indebtedness of those guarantors.

Antilayering Provision

The December 1998 Indenture provides that (i) L-3 Communications Corporation will not incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt and senior in any respect in right of payment to the December 1998 Notes, and (ii) no guarantor of the December 1998 Notes will incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt of a guarantor and senior in any respect in right of payment to any of the subsidiary guarantees of the December 1998 Notes.

Certain Covenants

The December 1998 Indenture contains a number of covenants restricting the operations of L-3 Communications Corporation, limiting the ability of L-3 Communications Corporation to incur additional Indebtedness, pay dividends or make distributions, sell assets, issue subsidiary stock, restrict distributions from subsidiaries, create certain liens, enter into certain consolidations or mergers and enter into certain transactions with affiliates.

Events of Default

Events of Default under the December 1998 Indenture include the following:

- a default for 30 days in the payment when due of interest on, or liquidated damages with respect to the December 1998 Notes;
- default in payment when due of the principal of or premium, if any, on the December 1998 Notes;
- failure by L-3 Communications Corporation to comply with certain provision of the December 1998 Indenture (subject, in some but not all cases, to notice and cure periods);
- default under indebtedness for money borrowed by L-3 Communications Corporation or any of its restricted subsidiaries in excess of \$10.0 million, which default results in the acceleration of such indebtedness prior to its express maturity;
- failure by L-3 Communications Corporation or any restricted subsidiary that would be a

significant subsidiary to pay final judgments aggregating in excess of \$10.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;

- except as permitted by the December 1998 Indenture, any guarantee under the December 1998 Notes shall be held in any judicial proceeding to be unenforceable or invalid or shall cease for any reason to be in full force and effect or any guarantor, or any person acting on behalf of any guarantor under the December 1998 Notes, shall deny or disaffirm its obligations under its guarantee; or
- certain events of bankruptcy or insolvency with respect to L-3 Communications Corporation or any of its restricted subsidiaries.

Upon the occurrence of an Event of Default, with certain exceptions, the Trustee or the holders of at least 25% in principal amount of the then outstanding December 1998 Notes may accelerate the maturity of all the December 1998 Notes as provided in the December 1998 Indenture.

#### **4.00% Senior Subordinated Convertible Contingent Debt Securities (CODES) due 2011**

L-3 Communications Holdings has outstanding \$420.0 million in aggregate principal amount of 4.00% Senior Subordinated Convertible Contingent Debt Securities<sup>SM</sup> (CODES<sup>SM</sup>) due 2011 (the "CODES"). The CODES are subject to the terms and conditions of an Indenture dated as of October 24, 2001, among L-3 Communications Holdings, L-3 Communications Corporation, as a

guarantor, the other guarantors named therein and in supplements thereto and The Bank of New York as trustee (the "2001 Indenture"). The following summary of the material provisions of the 2001 Indenture does not purport to be complete, and is subject to and qualified in its entirety by reference to, all of the provisions of the 2001 Indenture and those terms made a part of the 2001 Indenture by the Trust Indenture Act of 1939, as amended. All terms defined in the 2001 Indenture and not otherwise defined herein are used below with the meanings set forth in the 2001 Indenture.

##### *General*

The CODES will mature on September 15, 2011 and bear interest at 4.00% per annum, subject to certain adjustments, payable semi-annually on March 15 and September 15 of each year. Holders of CODES are entitled to contingent interest not to exceed a per annum rate of 0.50% during any six months period from March 15 to September 14 and from September 15 to March 14 if the average trading price of the CODES for the five trading days ending on the second trading day immediately preceding the relevant six month period equals 120% or more of the principal amount of the CODES. The CODES are unsecured senior subordinated obligations of L-3 Communications Holdings and are subordinated in right of payment to all existing and future senior debt of L-3 Communications Holdings. The CODES are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally by all of L-3 Communications Holdings' restricted subsidiaries, including L-3 Communications Corporation, other than its foreign subsidiaries. These guarantees are *pari passu* with the guarantees of the May 2003 Notes, the 2002 Notes, the outstanding notes and the exchange notes and the December 1998 Notes. Holders of the CODES may convert the CODES into shares of L-3 Communications Holdings' common stock at a conversion rate of \$53.8125 per share (equal to a conversion rate of 18.583 shares per \$1,000 principal amount of CODES), subject to adjustment under any of the following circumstances:

- during any quarterly conversion period, if the closing sale price of our common stock for a period of at least 20 trading days in the period of 30 consecutive days ending on the first day of such conversion period is more than 120% of the conversion price on that thirtieth day;
- during the five business day period following any 10 consecutive trading-day period in which the average of the trading prices (as defined) for the CODES was less than 105% of the average sale prices (as defined) of our common stock multiplied by the number of shares into which such CODES are then convertible;
- during any period in which the credit rating assigned to the CODES by either Moody's Investors Service, Inc., or Moody's, or Standard & Poor's Rating Services, or Standard & Poor's, is below B3 and B\-, respectively, or in which the credit rating assigned to the CODES is suspended or withdrawn by either rating agency or in which neither rating agency continues to rate the CODES or provide ratings services or coverage to us;
- if the CODES have been called for redemption; or
- upon the occurrence of specified corporate transactions described.

##### *Optional Redemption*

The CODES are subject to redemption at any time, at the option of L-3 Communications Holdings, in whole or in part, on or after October 24, 2004 at redemption prices (plus accrued and unpaid interest, including contingent interest, if any) starting at 102.0% of principal (plus accrued and unpaid interest, including contingent interest, if any) and declining annually to 100% of principal (plus accrued and unpaid interest, including contingent interest, if any) on September 15, 2006 and thereafter. No interest, including contingent interest, will be paid on the CODES that are converted into common stock of L-3 Communications Holdings, except the CODES that are called for redemption on a date that is after a record date but prior to the corresponding interest payment date if the CODES are converted into common stock after the record date, provided, however, the holders of CODES are entitled to interest, including contingent interest, if any, accrued for a period beginning September 15, 2004 through October 23, 2004 if such holders convert subsequent to October 23, 2004.

##### *Change of Control*

Upon the occurrence of a change of control, each holder of the CODES may require L-3 Communications Holdings to repurchase all or a portion of such holder's CODES at a purchase price equal to 100% of the principal amount (plus accrued and unpaid interest, including contingent interest, if any and additional amounts, if any). Generally, a change of control means the occurrence of any of the following:

- the disposition of all or substantially all of the assets of L-3 Communications Holdings and

certain of its subsidiaries to any person;

- the consummation of any transaction in which a person other than the principals and their related parties becomes the beneficial owner of more than 50% of the voting stock of L-3 Communications Holdings;
- the first day on which a majority of the members of the Board of Directors of L-3 Communications Holdings are not continuing directors; or
- the consolidation or merger of L-3 Communications Holdings with or into any other person, the merger of another person into L-3 Communications Holdings or any conveyance, transfer, sale, lease, or other disposition of all or substantially all of the properties and assets of L-3 Communications Holdings to another person, subject to certain exceptions.

#### *Subordination*

The CODES are unsecured senior subordinated obligations of L-3 Communications Holdings and are subordinate to all existing and future senior debt of L-3 Communications Holdings. The guarantees of L-3 Communications Holdings' subsidiaries under the CODES, including the guarantee by L-3 Communications Corporation, are general unsecured obligations of the guarantors and are subordinated to the senior debt and to the guarantees of senior debt of those guarantors. These guarantees under the CODES rank *pari passu* with all senior subordinated indebtedness of those guarantors.

#### *Antilayering Provision*

The 2001 Indenture provides that (i) L-3 Communications Holdings will not incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt and senior in any respect in right of payment to the CODES, and (ii) no guarantor of the CODES will incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt of a guarantor and senior in any respect in right of payment to any of the subsidiary guarantees of the CODES.

#### *Events of Default*

Events of Default under the 2001 Indenture include the following:

- a default for 30 days in the payment when due of interest (including contingent interest, if any) on, or additional amounts with respect to, the CODES;
- default in payment when due of the principal of or premium, if any, on the CODES;
- failure by L-3 Communications Holdings for 60 days after notice to comply with certain provisions of the 2001 Indenture (subject, in some but not all cases, to notice and cure periods);
- default under indebtedness for money borrowed by L-3 Communications Holdings or any of its restricted subsidiaries that would be a significant subsidiary in excess of \$10.0 million, which default results in the acceleration of such indebtedness prior to express maturity;
- failure by L-3 Communications Holdings or any restricted subsidiary that would be a significant subsidiary to pay final judgments aggregating in excess of \$10.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;

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- except as permitted by the 2001 Indenture, any guarantee under the CODES shall be held in any judicial proceeding to be unenforceable or invalid; and
  - certain events of bankruptcy, insolvency or reorganization with respect to L-3 Communications Holdings or any of its significant subsidiaries or any group of subsidiaries that, taken as a whole, would constitute a significant subsidiary.

Upon the occurrence of an Event of Default, with certain exceptions, the Trustee or the holders of at least 25% in principal amount of the then outstanding CODES may accelerate the maturity of all the CODES as provided in the 2001 Indenture.

#### **7 5/8% Senior Subordinated Notes due 2012**

L-3 Communications Corporation has outstanding \$750.0 million in aggregate principal amount of 7 5/8% Senior Subordinated Notes due 2012 (the "2002 Notes"). The 2002 Notes are subject to the terms and conditions of an Indenture dated as of June 28, 2002, among L-3 Communications Corporation, the guarantors named therein and in supplements thereto and The Bank of New York as trustee (the "2002 Indenture"). The following summary of the material provisions of the 2002 Indenture does not purport to be complete, and is subject to and qualified in its entirety by reference to, all of the provisions of the 2002 Indenture and those terms made a part of the 2002 Indenture by the Trust Indenture Act of 1939, as amended. All terms defined in the 2002 Indenture and not otherwise defined herein are used below with the meanings set forth in the 2002 Indenture.

#### *General*

The 2002 Notes will mature on June 15, 2012 and bear interest at 7 5/8% per annum, payable semi-annually on December 15 and June 15 of each year. The 2002 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinated in right of payment to all existing and future senior debt of L-3 Communications Corporation and rank *pari passu* with the May 2003 Notes, the December 1998 Notes and the outstanding notes and the exchange notes. The 2002 Notes are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally by all of L-3 Communications Corporation's restricted subsidiaries other than its foreign subsidiaries. These guarantees are *pari passu* with the guarantees of the outstanding notes and the exchange notes, the May 2003 Notes, the December 1998 Notes and the CODES.

#### *Optional Redemption*

The 2002 Notes are subject to redemption at any time, at the option of L-3 Communications Corporation, in whole or in part, on or after June 15, 2007 at redemption prices (plus accrued and unpaid interest) starting at 103.813% of principal (plus accrued and unpaid interest) during the 12-month period beginning June 15, 2007 and declining annually to 100% of principal (plus accrued and unpaid interest) on June 15, 2010 and thereafter.

Before June 15, 2005, L-3 Communications Corporation may on any one or more occasions redeem up to an aggregate of 35% of the 2002 Notes originally issued at a redemption price of 107.625% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with the net cash proceeds of certain equity offerings by L-3 Communications Corporation or the net cash proceeds of certain equity offerings by L-3

Communications Holdings that are contributed to L-3 Communications Corporation as common equity capital; provided that at least 65% of the 2002 Notes originally issued remain outstanding immediately after the occurrence of each such redemption; and provided, further, that any such redemption must occur within 120 days of the date of the closing of such equity offering.

#### *Change of Control*

Upon the occurrence of a change of control, each holder of the 2002 Notes may require L-3 Communications Corporation to repurchase all or a portion of such holder's 2002 Notes at a purchase price equal to 101% of the principal amount (plus accrued and unpaid interest and liquidated damages, if any). Generally, a change of control means the occurrence of any of the following:

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- the disposition of all or substantially all of L-3 Communications Corporation's assets to any person;
  - the adoption of a plan relating to the liquidation or dissolution of L-3 Communications Corporation;
  - the consummation of any transaction in which a person other than the principals and their related parties becomes the beneficial owner of more than 50% of the voting stock of L-3 Communications Corporation; or
  - the first day on which a majority of the members of the Board of Directors of L-3 Communications Corporation are not continuing directors.

#### *Subordination*

The 2002 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinate to all existing and future senior debt of L-3 Communications Corporation. The 2002 Notes rank senior in right of payment to all subordinated indebtedness of L-3 Communications Corporation. The guarantees of L-3 Communications Corporation's subsidiaries under the 2002 Notes are general unsecured obligations of the guarantors and are subordinated to the senior debt and to the guarantees of senior debt of those guarantors. These guarantees under the 2002 Notes rank senior in right of payment to all subordinated Indebtedness of those guarantors.

#### *Antilayering Provision*

The 2002 Indenture provides that (i) L-3 Communications Corporation will not incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt and senior in any respect in right of payment to the 2002 Notes, and (ii) no guarantor of the 2002 Notes will incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt of a guarantor and senior in any respect in right of payment to any of the subsidiary guarantees of the 2002 Notes.

#### *Certain Covenants*

The 2002 Indenture contains a number of covenants restricting the operations of L-3 Communications Corporation, limiting the ability of L-3 Communications Corporation to incur additional Indebtedness, pay dividends or make distributions, sell assets, issue subsidiary stock, restrict distributions from subsidiaries, create certain liens, enter into certain consolidations or mergers and enter into certain transactions with affiliates.

In the event that the 2002 Notes are assigned a rating of Baa3 or better by Moody's and BBB- or better by S&P and no event of default has occurred and is continuing, certain covenants in the 2002 Indenture will be suspended. If the ratings should subsequently decline to below Baa3 or BBB-, the suspended covenants will be reinstituted.

#### *Events of Default*

Events of Default under the 2002 Indenture include the following:

- a default for 30 days in the payment when due of interest on, or liquidated damages with respect to the 2002 Notes;
- default in payment when due of the principal of or premium, if any, on the 2002 Notes;
- failure by L-3 Communications Corporation to comply with certain provision of the 2002 Indenture (subject, in some but not all cases, to notice and cure periods);
- default under indebtedness for money borrowed by L-3 Communications Corporation or any of its restricted subsidiaries in excess of \$25.0 million, which default results in the acceleration of such indebtedness prior to its express maturity;

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- failure by L-3 Communications Corporation or any restricted subsidiary that would be a significant subsidiary to pay final judgments aggregating in excess of \$25.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;
  - except as permitted by the 2002 Indenture, any guarantee under the 2002 Notes shall be held in any judicial proceeding to be unenforceable or invalid or shall cease for any reason to be in full force and effect or any guarantor, or any person acting on behalf of any guarantor under the May 2003 Notes, shall deny or disaffirm its obligations under its guarantee; or
  - certain events of bankruptcy or insolvency with respect to L-3 Communications Corporation or any of its significant subsidiaries or any group of subsidiaries that, taken as a whole, would constitute a significant subsidiary.

Upon the occurrence of an Event of Default, with certain exceptions, the Trustee or the holders of at least 25% in principal amount of the then outstanding 2002 Notes may accelerate the maturity of all the 2002 Notes as provided in the 2002 Indenture.



L-3 Communications Corporation has outstanding \$400.0 million in aggregate principal amount of 6 1/8% Senior Subordinated Notes due 2013 (the "May 2003 Notes"). The May 2003 Notes are subject to the terms and conditions of an Indenture dated as of May 21, 2003, among L-3 Communications Corporation, the guarantors named therein and in supplements thereto and The Bank of New York as trustee (the "May 2003 Indenture"). The following summary of the material provisions of the May 2003 Indenture does not purport to be complete, and is subject to and qualified in its entirety by reference to, all of the provisions of the May 2003 Indenture and those terms made a part of the May 2003 Indenture by the Trust Indenture Act of 1939, as amended. All terms defined in the May 2003 Indenture and not otherwise defined herein are used below with the meanings set forth in the May 2003 Indenture.

#### *General*

The May 2003 Notes will mature on July 15, 2013 and bear interest at 6 1/8% per annum, payable semi-annually on July 15 and January 15 of each year. The May 2003 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinated in right of payment to all existing and future senior debt of L-3 Communications Corporation and rank *pari passu* with the December 1998 Notes, the 2002 Notes and the outstanding notes and the exchange notes. The May 2003 Notes are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally by all of L-3 Communications Corporation's restricted subsidiaries other than its foreign subsidiaries. These guarantees are *pari passu* with the guarantees of the outstanding notes and the exchange notes, the 2002 Notes, the December 1998 Notes and the CODES.

#### *Optional Redemption*

The May 2003 Notes are subject to redemption at any time, at the option of L-3 Communications Corporation, in whole or in part, on or after July 15, 2008 at redemption prices (plus accrued and unpaid interest) starting at 103.063% of principal (plus accrued and unpaid interest) during the 12-month period beginning July 15, 2008 and declining annually to 100% of principal (plus accrued and unpaid interest) on July 15, 2011 and thereafter.

Before July 15, 2006, L-3 Communications Corporation may on any one or more occasions redeem up to an aggregate of 35% of the May 2003 Notes originally issued at a redemption price of 106.125% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with the net cash proceeds of certain equity offerings by L-3 Communications Corporation or the net cash proceeds of certain equity offerings by L-3 Communications Holdings that are contributed to L-3 Communications Corporation as common equity capital; provided that at least 65% of the May 2003 Notes originally issued remain outstanding immediately after the occurrence of each such redemption; and provided, further, that any such redemption must occur within 120 days of the date of the closing of such equity offering.

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#### *Change of Control*

Upon the occurrence of a change of control, each holder of the May 2003 Notes may require L-3 Communications Corporation to repurchase all or a portion of such holder's May 2003 Notes at a purchase price equal to 101% of the principal amount (plus accrued and unpaid interest and liquidated damages, if any). Generally, a change of control means the occurrence of any of the following:

- the disposition of all or substantially all of L-3 Communications Corporation's assets to any person;
- the adoption of a plan relating to the liquidation or dissolution of L-3 Communications Corporation;
- the consummation of any transaction in which a person other than the principals and their related parties becomes the beneficial owner of more than 50% of the voting stock of L-3 Communications Corporation; or
- the first day on which a majority of the members of the Board of Directors of L-3 Communications Corporation are not continuing directors.

#### *Subordination*

The May 2003 Notes are general unsecured obligations of L-3 Communications Corporation and are subordinate to all existing and future senior debt of L-3 Communications Corporation. The May 2003 Notes rank senior in right of payment to all subordinated indebtedness of L-3 Communications Corporation. The guarantees of L-3 Communications Corporation's subsidiaries under the May 2003 Notes are general unsecured obligations of the guarantors and are subordinated to the senior debt and to the guarantees of senior debt of those guarantors. These guarantees under the May 2003 Notes rank senior in right of payment to all subordinated Indebtedness of those guarantors.

#### *Antilayering Provision*

The May 2003 Indenture provides that (i) L-3 Communications Corporation will not incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt and senior in any respect in right of payment to the May 2003 Notes, and (ii) no guarantor of the May 2003 Notes will incur, create, issue, assume, guarantee or otherwise become liable for any indebtedness that is subordinate or junior in right of payment to any senior debt of a guarantor and senior in any respect in right of payment to any of the subsidiary guarantees of the May 2003 Notes.

#### *Certain Covenants*

The May 2003 Indenture contains a number of covenants restricting the operations of L-3 Communications Corporation, limiting the ability of L-3 Communications Corporation to incur additional Indebtedness, pay dividends or make distributions, sell assets, issue subsidiary stock, restrict distributions from subsidiaries, create certain liens, enter into certain consolidations or mergers and enter into certain transactions with affiliates.

In the event that the May 2003 Notes are assigned a rating of Baa3 or better by Moody's and BBB- or better by S&P and no event of default has occurred and is continuing, certain covenants in the 2002 Indenture will be suspended. If the ratings should subsequently decline to below Baa3 or BBB-, the suspended covenants will be reinstituted.

#### *Events of Default*

Events of Default under the May 2003 Indenture include the following:

- a default for 30 days in the payment when due of interest on, or liquidated damages with respect to the May 2003 Notes;
- default in payment when due of the principal of or premium, if any, on the May 2003 Notes;

- failure by L-3 Communications Corporation to comply with certain provision of the 2002 Indenture (subject, in some but not all cases, to notice and cure periods);
- default under indebtedness for money borrowed by L-3 Communications Corporation or any of its restricted subsidiaries in excess of \$25.0 million, which default results in the acceleration of such indebtedness prior to its express maturity;
- failure by L-3 Communications Corporation or any restricted subsidiary that would be a significant subsidiary to pay final judgments aggregating in excess of \$25.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;
- except as permitted by the May 2003 Indenture, any guarantee under the May 2003 Notes shall be held in any judicial proceeding to be unenforceable or invalid or shall cease for any reason to be in full force and effect or any guarantor, or any person acting on behalf of any guarantor under the May 2003 Notes, shall deny or disaffirm its obligations under its guarantee; or
- certain events of bankruptcy or insolvency with respect to L-3 Communications Corporation or any of its significant subsidiaries or any group of subsidiaries that, taken as a whole, would constitute a significant subsidiary.

Upon the occurrence of an Event of Default, with certain exceptions, the Trustee or the holders of at least 25% in principal amount of the then outstanding May 2003 Notes may accelerate the maturity of all the May 2003 Notes as provided in the May 2003 Indenture.

## THE EXCHANGE OFFER

### General

L-3 hereby offers, upon the terms and subject to the conditions set forth in this prospectus and in the accompanying letter of transmittal (which together constitute the exchange offer), to exchange up to \$400.0 million aggregate principal amount of our 6 1/8% Senior Subordinated Notes due 2014, which we refer to in this prospectus as the outstanding notes, for a like aggregate principal amount of our 6 1/8% Series B Senior Subordinated Notes due 2014, which we refer to in this prospectus as the exchange notes, properly tendered on or prior to the expiration date and not withdrawn as permitted pursuant to the procedures described below. The exchange offer is being made with respect to all of the outstanding notes.

As of the date of this prospectus, \$400.0 million aggregate principal amount of the outstanding notes is outstanding. This prospectus, together with the letter of transmittal, is first being sent on or about , 2004, to all holders of outstanding notes known to L-3. L-3's obligation to accept outstanding notes for exchange pursuant to the exchange offer is subject to certain conditions set forth under "Certain Conditions to the Exchange Offer" below. L-3 currently expects that each of the conditions will be satisfied and that no waivers will be necessary.

### Purpose and Effect of the Exchange Offer

We have entered into a registration rights agreement with the initial purchasers of the outstanding notes in which we agreed, under some circumstances, to file a registration statement relating to an offer to exchange the outstanding notes for exchange notes. We also agreed to use all commercially reasonable efforts to cause the exchange offer registration statement to become effective under the Securities Act as promptly as practicable, but in no event later than 180 days after the closing date and to keep the exchange offer open for a period of not less than 20 business days. The exchange notes will have terms substantially identical to the outstanding notes, except that the exchange notes will not contain terms with respect to transfer restrictions, registration rights and additional interest for failure to observe certain obligations in the registration rights agreement. The outstanding notes were issued on December 22, 2003.

Under certain circumstances set forth in the registration rights agreement, we will use all commercially reasonable efforts to cause the SEC to declare effective a shelf registration statement with respect to the resale of the outstanding notes and keep the statement, effective for up to two years after the closing date.

If we fail to comply with certain obligations under the registration rights agreement, we will be required to pay additional interest to holders of the outstanding notes.

Each holder of outstanding notes that wishes to exchange outstanding notes for transferable exchange notes in the exchange offer will be required to make the following representations:

- any exchange notes will be acquired in the ordinary course of its business;
- the holder will have no arrangements or understanding with any person to participate in the distribution of the outstanding notes or the exchange notes within the meaning of the Securities Act;
- the holder is not an "affiliate," as defined in Rule 405 of the Securities Act, of L-3 or if it is an affiliate, that it will comply with applicable registration and prospectus delivery requirements of the Securities Act to the extent applicable;
- if the holder is not a broker-dealer, that it is not engaged in, and does not intend to engage in, the distribution of the exchange notes; and
- if the holder is a broker-dealer, that it will receive exchange notes for its own account in exchange for outstanding notes that were acquired as a result of market-making activities or

other trading activities and that it will be required to acknowledge that it will deliver a prospectus in connection with any resale of the exchange notes. See "Plan of Distribution."

### Resale of Exchange Notes

Based on interpretations of the SEC staff set forth in no action letters issued to unrelated third parties, we believe that exchange notes issued under the exchange offer in exchange for outstanding notes may be offered for resale, resold and otherwise transferred by any exchange note holder without compliance with the registration and prospectus delivery provisions of the Securities Act, if:

- the holder is not an "affiliate" of ours within the meaning of Rule 405 under the Securities Act;
- the exchange notes are acquired in the ordinary course of the holder's business; and
- the holder does not intend to participate in the distribution of the exchange notes.

Any holder who tenders in the exchange offer with the intention of participating in any manner in a distribution of the exchange notes:

- cannot rely on the position of the staff of the SEC enunciated in *Exxon Capital Holdings Corporation* or similar interpretive letters; and
- must comply with the registration and prospectus delivery requirements of the Securities Act in connection with a secondary resale transaction.

This prospectus may be used for an offer to resell, for the resale or for other retransfer of exchange notes only as specifically set forth in this prospectus. With regard to broker-dealers, only broker-dealers that acquired the outstanding notes as a result of market-making activities or other trading activities may participate in the exchange offer. Each broker-dealer that receives exchange notes for its own account in exchange for outstanding notes, where the outstanding notes were acquired by the broker-dealer as a result of market-making activities or other trading activities, must acknowledge that it will deliver a prospectus in connection with any resale of the exchange notes. Please read the section captioned "Plan of Distribution" for more details regarding the transfer of exchange notes.

### Terms of the Exchange Offer

Upon the terms and subject to the conditions set forth in this prospectus and in the accompanying letter of transmittal, we will accept for exchange any outstanding notes properly tendered and not withdrawn prior to the expiration date. We will issue \$1,000 principal amount of exchange notes in exchange for each \$1,000 principal amount of outstanding notes surrendered under the exchange offer. Outstanding notes may be tendered only in integral multiples of \$1,000.

The form and terms of the exchange notes will be substantially identical to the form and terms of the outstanding notes except the exchange notes will be registered under the Securities Act, will not bear legends restricting their transfer and will not provide for any additional amounts upon our failure to fulfill our obligations under the registration rights agreement to file, and cause to be effective, a registration statement. The exchange notes will evidence the same debt as the outstanding notes. The exchange notes will be issued under and entitled to the benefits of the same indenture that authorized the issuance of the outstanding notes.

The exchange offer is not conditioned upon any minimum aggregate principal amount of outstanding notes being tendered for exchange.

As of the date of this prospectus, \$400.0 million aggregate principal amount of the outstanding notes are outstanding. This prospectus and a letter of transmittal are being sent to all registered holders of outstanding notes. There will be no fixed record date for determining registered holders of outstanding notes entitled to participate in the exchange offer.

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We intend to conduct the exchange offer in accordance with the provisions of the exchange offer and registration rights agreement, the applicable requirements of the Securities Act and the Securities Exchange Act of 1934 and the rules and regulations of the SEC. Outstanding notes that are not tendered for exchange in the exchange offer will remain outstanding and continue to accrue interest and will be entitled to the rights and benefits the holders have under the indenture relating to the outstanding notes, except for any rights under the exchange offer and registration rights agreement that by their terms terminate upon the consummation of the exchange offer.

We will be deemed to have accepted for exchange properly tendered outstanding notes when we have given oral or written notice of the acceptance to the exchange agent. The exchange agent will act as agent for the tendering holders for the purposes of receiving the exchange notes from us and delivering exchange notes to the holders. Under the terms of the exchange offer and registration rights agreement, we reserve the right to amend or terminate the exchange offer, and not to accept for exchange any outstanding notes not previously accepted for exchange, upon the occurrence of any of the conditions specified below under the caption "—Certain Conditions to the Exchange Offer."

Holders who tender outstanding notes in the exchange offer will not be required to pay brokerage commissions or fees or, subject to the instructions in the letter of transmittal, transfer taxes with respect to the exchange of outstanding notes. We will pay all charges and expenses, other than certain applicable taxes described below, in connection with the exchange offer. It is important that you read the section labeled "—Fees and Expenses" below for more details regarding fees and expenses incurred in the exchange offer.

### Expiration Date; Extensions; Amendments

The exchange offer will expire at 5:00 p.m., New York City time on \_\_\_\_\_, 2004, unless in our sole discretion we extend it.

In order to extend the exchange offer, we will notify the exchange agent orally or in writing of any extension. We will notify the registered holders of outstanding notes of the extension no later than 9:00 a.m., New York City time, on the business day after the previously scheduled expiration date.

We reserve the right, in our sole discretion:

- to delay accepting for exchange any outstanding notes;

- to extend the exchange offer or to terminate the exchange offer and to refuse to accept outstanding notes not previously accepted if any of the conditions set forth below under "— Certain Conditions to the Exchange Offer" have not been satisfied, by giving oral or written notice of the delay, extension or termination to the exchange agent; or
- under the terms of the exchange offer and registration rights agreement, to amend the terms of the exchange offer in any manner.

Any delay in acceptance, extension, termination, or amendment will be followed as promptly as practicable by oral or written notice to the registered holders of outstanding notes. If we amend the exchange offer in a manner that we determine constitutes a material change, we will promptly disclose the amendment in a manner reasonably calculated to inform the holder of outstanding notes of the amendment.

Without limiting the manner in which we may choose to make public announcements of any delay in acceptance, extension, termination or amendment of the exchange offer, we will have no obligation to publish, advertise, or otherwise communicate any public announcement, other than by making a timely release to a financial news service.

#### **Certain Conditions to the Exchange Offer**

Despite any other term of the exchange offer, we will not be required to accept for exchange, or exchange any exchange notes for, any outstanding notes, and we may terminate the exchange offer as provided in this prospectus before accepting any outstanding notes for exchange if in our reasonable judgment:

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- the exchange notes to be received will not be tradable by the holder. without restriction under the Securities Act, the Securities Exchange Act and without material restrictions under the blue sky or securities laws of substantially all of the states of the United States;
- the exchange offer, or the making of any exchange by a holder of outstanding notes, would violate applicable law or any applicable interpretation of the staff of the SEC; or
- any action or proceeding has been instituted or threatened in any court or by or before any governmental agency with respect to the exchange offer that, in our judgment, would reasonably be expected to impair our ability to proceed with the exchange offer.

In addition, we will not be obligated to accept for exchange the outstanding notes of any holder that has not made to us:

- the representations described under "—Purpose and Effect of the Exchange Offer," "— Procedures for Tendering" and "Plan of Distribution"; and
- such other representations as may be reasonably necessary under applicable SEC rules, regulations or interpretations to make available to it an appropriate form for registration of the exchange notes under the Securities Act.

We expressly reserve the right, at any time or at various times, to extend the period of time during which the exchange offer is open. Consequently, we may delay acceptance of any outstanding notes by giving oral or written notice of the extension to their holders. During any such extensions, all notes previously tendered will remain subject to the exchange offer, and we may accept them for exchange. We will return any outstanding notes that we do not accept for exchange for any reason without expense to their tendering holder as promptly as practicable after the expiration or termination of the exchange offer.

We expressly reserve the right to amend or terminate the exchange offer, and to reject for exchange any outstanding notes not previously accepted for exchange, upon the occurrence of any of the conditions of the exchange offer specified above. We will give oral or written notice of any extension, amendment, nonacceptance, or termination to the holders of the outstanding notes as promptly as practicable.

These conditions are for our sole benefit and we may assert them regardless of the circumstances that may give rise to them or waive them in whole or in part at any or at various times in our sole discretion. If we fail at any time to exercise any of the foregoing rights, this failure will not constitute a waiver of this right. Each right will be deemed an ongoing right that we may assert at any time or at various times.

In addition, we will not accept for exchange any outstanding notes tendered, and will not issue exchange notes in exchange for any outstanding notes, if at the time any stop order will be threatened or in effect with respect to the registration statement of which this prospectus constitutes a part or the qualification of the indenture under the Trust Indenture Act.

#### **Procedures for Tendering**

Only a holder of outstanding notes may tender the outstanding notes in the exchange offer. To tender in the exchange offer, a holder must:

- complete, sign and date the accompanying letter of transmittal, or a facsimile of the letter of transmittal; have the signature on the letter of transmittal guaranteed if the letter of transmittal so requires; and mail or deliver the letter of transmittal or facsimile to the exchange agent prior to the expiration date; or
- comply with DTC's Automated Tender Offer Program procedures described below.

In addition, either:

- the exchange agent must receive the outstanding notes along with the accompanying letter of transmittal; or

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- the exchange agent must receive, prior to the expiration date, a timely confirmation of book-entry transfer of the outstanding notes into the exchange agent's account at DTC according to

the procedures for book-entry transfer described below or a properly transmitted agent's message; or

- the holder must comply with the guaranteed delivery procedures described below.

To be tendered effectively, the exchange agent must receive any physical delivery of a letter of transmittal and other required documents at the address set forth below under "— Exchange Agent" prior to the expiration date.

The tender by a holder that is not withdrawn prior to the expiration date will constitute an agreement between the holder and us in accordance with the terms and subject to the conditions set forth in this prospectus and in the accompanying letter of transmittal.

The method of delivery of outstanding notes, the letter of transmittal and all other required documents to the exchange agent is at the holder's election and risk. Rather than mail these items, we recommend that holders use an overnight or hand delivery service. In all cases, holders should allow sufficient time to assure delivery to the exchange agent before the expiration date. Holders should not send the letter of transmittal or outstanding notes to us. Holders may request their respective brokers, dealers, commercial banks, trust companies or other nominees to effect the above transactions for them.

Any beneficial owner whose outstanding notes are registered in the name of a broker, dealer, commercial bank, trust company or other nominee and who wishes to tender should contact the registered holder promptly and instruct it to tender on the owners behalf. If the beneficial owner wishes to tender on its own behalf, it must, prior to completing and executing the accompanying letter of transmittal and delivering its outstanding notes either:

- make appropriate arrangements to register ownership of the outstanding notes in such owner's name; or
- obtain a properly completed bond power from the registered holder of outstanding notes.

The transfer of registered ownership may take considerable time and may not be completed prior to the expiration date.

Signatures on a letter of transmittal or a notice of withdrawal described below must be guaranteed by a member firm of a registered national securities exchange or of the National Association of Securities Dealers, Inc., a commercial bank or trust company having an office or correspondent in the United States or another "eligible institution" within the meaning of Rule 17Ad-15 under the Exchange Act, unless the outstanding notes are tendered:

- by a registered holder who has not completed the box entitled "Special Issuance Instructions" or "Special Delivery Instructions" on the accompanying letter of transmittal; or
- for the account of an eligible institution.

If the accompanying letter of transmittal is signed by a person other than the registered holder of any outstanding notes listed on the outstanding notes, the outstanding notes must be endorsed or accompanied by a properly completed bond power. The bond power must be signed by the registered holder as the registered holder's name appears on the outstanding notes and an eligible institution must guarantee the signature on the bond power.

If the accompanying letter of transmittal or any outstanding notes or bond powers are signed by trustees, executors, administrators, guardians, attorneys-in-fact, officers of corporations or others acting in a fiduciary or representative capacity, these persons should so indicate when signing. Unless waived by us, they should also submit evidence satisfactory to us of their authority to deliver the accompanying letter of transmittal.

The exchange agent and DTC have confirmed that any financial institution that is a participant in DTC's system may use DTC's Automated Tender Offer Program to tender. Participants in the

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program may, instead of physically completing and signing the accompanying letter of transmittal and delivering it to the exchange agent, transmit their acceptance of the exchange offer electronically. They may do so by causing DTC to transfer the outstanding notes to the exchange agent in accordance with its procedures for transfer. DTC will then send an agent's message to the exchange agent. The term "agent's message" means a message transmitted by DTC, received by the exchange agent and forming part of the book-entry confirmation, to the effect that:

- DTC has received an express acknowledgment from a participant in its Automated Tender Offer Program that is tendering outstanding notes that are the subject of the book-entry confirmation;
- the participant has received and agrees to be bound by the terms of the accompanying letter of transmittal, or, in the case of an agent's message relating to guaranteed delivery, that the participant has received and agrees to be bound by the applicable notice of guaranteed delivery; and
- the agreement may be enforced against that participant.

We will determine in our sole discretion all outstanding questions as to the validity, form, eligibility, including time or receipt, acceptance of tendered outstanding notes and withdrawal of tendered outstanding notes. Our determination will be final and binding. We reserve the absolute right to reject any outstanding notes not properly tendered or any outstanding notes the acceptance of which would, in the opinion of our counsel, be unlawful. We also reserve the right to waive any defects, irregularities or conditions of tender as to particular outstanding notes. Our interpretation of the terms and conditions of the exchange offer, including the instructions in the accompanying letter of transmittal, will be final and binding on all parties. Unless waived, any defects or irregularities in connection with tenders of outstanding notes must be cured within such time as we will determine. Although we intend to notify holders of defects or irregularities with respect to tenders of outstanding notes, neither we, the exchange agent, nor any other person will incur any liability for failure to give the notification. Tendere of outstanding notes will not be deemed made until any defects or irregularities have been cured or waived. Any outstanding notes received by the exchange agent that are not properly tendered and as to which the defects or irregularities have not been cured or waived will be returned to the exchange agent without cost to the tendering holder, unless otherwise provided in the letter of transmittal, as soon as practicable following the expiration date.

In all cases, we will issue exchange notes for outstanding notes that we have accepted for exchange under the exchange offer only after the exchange agent timely receives:

- outstanding notes or a timely book-entry confirmation of the outstanding notes into the exchange agent's account at DTC; and
- a properly completed and duly executed letter of transmittal and all other required documents or a properly transmitted agent's message.

By signing the accompanying letter of transmittal or authorizing the transmission of the agent's message, each tendering holder of outstanding notes will represent or be deemed to have represented to us that, among other things:

- any exchange notes that the holder receives will be acquired in the ordinary course of its business;
- the holder has no arrangement or understanding with any person or entity to participate in the distribution of the exchange notes;
- if the holder is not a broker-dealer, that it is not engaged in and does not intend to engage in the distribution of the exchange notes;
- if the holder is a broker-dealer that will receive exchange notes for its own account in exchange for outstanding notes that were acquired as a result of market-making activities or other trading activities, that it will deliver a prospectus, as required by law, in connection with any resale of any exchange notes. See "Plan of Distribution"; and

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- the holder is not an "affiliate," as defined in Rule 405 of the Securities Act, of ours or, if the holder is an affiliate, it will comply with any applicable registration and prospectus delivery requirements of the Securities Act.

### **Book-Entry Transfer**

The exchange agent will make a request to establish an account with respect to the outstanding notes at DTC for purposes of the exchange offer promptly after the date of this prospectus. Any financial institution participating in DTC's system may make book-entry delivery of outstanding notes by causing DTC to transfer the outstanding notes into the exchange agent's account at DTC in accordance with DTC's procedures for transfer. Holders of outstanding notes who are unable to deliver confirmation of the book-entry tender of their outstanding notes into the exchange agent's account at DTC or all other documents required by the letter of transmittal to the exchange agent on or prior to the expiration date must tender their outstanding notes according to the guaranteed delivery procedures described below.

### **Guaranteed Delivery Procedures**

Holders wishing to tender their outstanding notes but whose outstanding notes are not immediately available or who cannot deliver their outstanding notes, the accompanying letter of transmittal or any other available required documents to the exchange agent or comply with the applicable procedures under DTC's Automated Tender Offer Program prior to the expiration date may tender if:

- the tender is made through an eligible institution;
- prior to the expiration date, the exchange agent receives from the eligible institution either a properly completed and duly executed notice of guaranteed delivery, by facsimile transmission, mail or hand delivery, or a properly transmitted agent's message and notice of guaranteed delivery:
  - setting forth the name and address of the holder, the registered number(s) of the outstanding notes and the principal amount of outstanding notes tendered;
  - stating that the tender is being made thereby; and
  - guaranteeing that, within three New York Stock Exchange trading days after the expiration date, the accompanying letter of transmittal, or facsimile thereof, together with the outstanding notes or a book-entry confirmation, and any other documents required by the accompanying letter of transmittal will be deposited by the eligible institution with the exchange agent; and
- the exchange agent receives the properly completed and executed letter of transmittal, or facsimile thereof, as well as all tendered outstanding notes in proper form for transfer or a book-entry confirmation, and all other documents required by the accompanying letter of transmittal, within three New York Stock Exchange trading days after the expiration date.

Upon request to the exchange agent, a notice of guaranteed delivery will be sent to holders who wish to tender their outstanding notes according to the guaranteed delivery procedures set forth above.

### **Withdrawal of Tenders**

Except as otherwise provided in this prospectus, holders of outstanding notes may withdraw their tenders at any time prior to the expiration date.

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For a withdrawal to be effective:

- the exchange agent must receive a written notice of withdrawal, which notice may be by telegram, telex, facsimile transmission or letter of withdrawal at one of the addresses set forth below under "— Exchange Agent", or

- holders must comply with the appropriate procedures of DTC's Automated Tender Offer Program system.

Any notice of withdrawal must:

- specify the name of the person who tendered the outstanding notes to be withdrawn;
- identify the outstanding notes to be withdrawn, including the principal amount of the outstanding notes; and
- where certificates for outstanding notes have been transmitted, specify the name in which the outstanding notes were registered, if different from that of the withdrawing holder.

If certificates for outstanding notes have been delivered or otherwise identified to the exchange agent, then, prior to the release of the certificates, the withdrawing holder must also submit:

- the serial numbers of the particular certificates to be withdrawn; and
- a signed notice of withdrawal with signatures guaranteed by an eligible institution unless the holder is an eligible institution.

If outstanding notes have been tendered pursuant to the procedure for book-entry transfer described above, any notice of withdrawal must specify the name and number of the account at DTC to be credited with the withdrawn outstanding notes and otherwise comply with the procedures of that facility. We will determine all questions as to the validity, form and eligibility, including time of receipt, of the notices, and our determination will be final and binding on all parties. We will deem any outstanding notes so withdrawn not to have been validly tendered for exchange for purposes of the exchange offer. Any outstanding notes that have been tendered for exchange but that are not exchanged for any reason will be returned to their holder without cost to the holder, or, in the case of outstanding notes tendered by book-entry transfer into the exchange agent's account at DTC according to the procedures described above, the outstanding notes will be credited to an account maintained with DTC for outstanding notes, as soon as practicable after withdrawal, rejection of tender or termination of the exchange offer. Properly withdrawn, outstanding notes may be retendered by following one of the procedures described under "— Procedures for Tendering" above at any time on or prior to the expiration date.

**Exchange Agent**

The Bank of New York has been appointed as exchange agent for the exchange offer. You should direct questions and requests for assistance, requests for additional copies of this prospectus or for the letter of transmittal and requests for the notice of guaranteed delivery to the exchange agent as follows:

<i>By Mail:</i>	<i>By Facsimile:</i>	<i>By Hand or Overnight Delivery:</i>
The Bank of New York Reorganization Unit 101 Barclay Street – 7 East New York, NY 10286 Attention: Carolle Montreuil	The Bank of New York Reorganization Unit 101 Barclay Street – 7 East New York, NY 10286 Attention: Carolle Montreuil (212) 298-1915 <b>Confirm Receipt of Facsimile by telephone</b> (212) 815-5920	The Bank of New York Reorganization Unit 101 Barclay Street Lobby Level – Corp. Trust Window New York 10286 Attention: Carolle Montreuil

**Delivery of the letter of transmittal to an address other than as set forth above or transmission via facsimile other than as set forth above does not constitute a valid delivery of the letter of transmittal.**

**Fees and Expenses**

We will bear the expenses of soliciting tenders. The principal solicitation is being made by mail; however, we may make additional solicitations by telephone or in person by our officers and regular employees and those of our affiliates.

We have not retained any dealer-manager in connection with the exchange offer and will not make any payments to broker-dealers or others soliciting acceptance of the exchange offer. We will, however, pay the exchange agent reasonable and customary fees for its services and reimburse it for its related reasonable out-of-pocket expenses.

We will pay the cash expenses to be incurred in connection with the exchange offer. The expenses are estimated in the aggregate to be approximately \$300,000. They include:

- SEC registration fees;
- fees and expenses of the exchange agent and trustee;
- accounting and legal fees and printing costs; and
- related fees and expenses.

**Transfer Taxes**

We will pay all transfer taxes, if any, applicable to the exchange of outstanding notes under the exchange offer. The tendering holder, however, will be required to pay any transfer taxes, whether imposed on the registered holder or any other person, if:

- certificates representing outstanding notes for principal amounts not tendered or accepted for exchange are to be delivered to, or are to be issued in the name of, any person other than the registered holder of outstanding notes tendered;
- tendered outstanding notes are registered in the name of any person other than the person signing the letter of transmittal; or

- a transfer tax is imposed for any reason other than the exchange of outstanding notes under the exchange offer.

If satisfactory evidence of payment of the taxes is not submitted with the letter of transmittal, the amount of the transfer taxes will be billed to that tendering holder.

Holders who tender their outstanding notes for exchange will not be required to pay any transfer taxes. However, holders who instruct us to register exchange notes in the name of, or request that outstanding notes not tendered or not accepted in the exchange offer be returned to, a person other than the registered tendering holder will be required to pay any applicable transfer tax.

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## Consequences of Failure to Exchange

Holders of outstanding notes who do not exchange their outstanding notes for exchange notes under the exchange offer will remain subject to the restrictions on transfer of the outstanding notes:

- as set forth in the legend printed on the notes as a consequence of the issuance of the outstanding notes under the exemption from, or in transactions not subject to, the registration requirements of the Securities Act and applicable state securities laws; and
- otherwise as set forth in the offering memorandum distributed in connection with the private offering of the outstanding notes.

In general, you may not offer or sell the outstanding notes unless they are registered under the Securities Act, or if the offer or sale is exempt from registration under the Securities Act and applicable state securities laws. Except as required by the registration rights agreement, we do not intend to register resales of the outstanding notes under the Securities Act. Based on interpretations of the SEC staff, exchange notes issued under the exchange offer may be offered for resale, resold or otherwise transferred by their holders (other than any holder that is our "affiliate" within the meaning of Rule 405 under the Securities Act) without compliance with the registration and prospectus delivery provisions of the Securities Act, provided that the holders acquired the exchange notes in the ordinary course of the holders' business and the holders have no arrangement or understanding with respect to the distribution of the exchange notes to be acquired in the exchange offer. Any holder who tenders in the exchange offer for the purpose of participating in a distribution of the exchange notes:

- cannot rely on the applicable interpretations of the SEC; and
- must comply with the registration and prospectus delivery requirements of the Securities Act in connection with a secondary resale transaction.

## Accounting Treatment

We will record the exchange notes in our accounting records at the same carrying value as the outstanding notes, which is the aggregate principal amount, as reflected in our accounting records on the date of exchange. Accordingly, we will not recognize any gain or loss for accounting purposes in connection with the exchange offer. We will record the expenses of the exchange offer as incurred.

## Other

Participation in the exchange offer is voluntary, and you should carefully consider whether to accept. You are urged to consult your financial and tax advisors in making your own decision on what action to take.

We may in the future seek to acquire untendered outstanding notes in open market or privately negotiated transactions, through subsequent exchange offers or otherwise. We have no present plans to acquire any outstanding notes that are not tendered in the exchange offer or to file a registration statement to permit resales of any untendered outstanding notes.

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## DESCRIPTION OF THE NOTES

The outstanding notes were issued and the exchange notes offered hereby will be issued under an indenture (the "Indenture") among the Company, as issuer, the Guarantors and The Bank of New York, as trustee (the "Trustee"). The terms of the Notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"). The Notes are subject to all such terms, and holders of the Notes are referred to the Indenture and the Trust Indenture Act for a statement thereof.

The following summary of the material provisions of the Indenture describes the material terms of the Indenture but does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the Indenture, including the definitions of certain terms contained therein and those terms made part of the Indenture by reference to the Trust Indenture Act. For definitions of certain capitalized terms used in the following summary, see "— Certain Definitions."

For purposes of this summary, the term "Company" refers only to L-3 Communications Corporation and not to any of its Subsidiaries.

## Brief Description of the Notes and the Subsidiary Guarantees

The Notes:

- are general unsecured obligations of the Company;
- rank *pari passu* in right of payment with the May 2003 Notes, the December 1998 Notes and the 2002 Notes;
- rank *pari passu* in right of payment with the obligations of the Company under Holdings' outstanding 2001 CODES;



- are subordinated in right of payment to all current and future Senior Debt; and
- are senior in right of payment to any future Indebtedness of the Company that expressly provides that it is not senior to the Notes.

The Subsidiary Guarantees:

- are general unsecured obligations of the Guarantors;
- rank *pari passu* in right of payment with the guarantees of the May 2003 Notes, the December 1998 Notes and the 2002 Notes;
- rank *pari passu* in right of payment with the obligations of the Guarantors under Holdings' outstanding 2001 CODES;
- are subordinated in right of payment to all current and future Senior Debt of the Guarantors; and
- are senior in right of payment to any future Indebtedness of the Guarantors that expressly provides that it is not senior to the Subsidiary Guarantees.

At December 31, 2003, the Company did not have any Senior Debt outstanding (excluding letters of credit, which aggregated \$84.1 million). The Indenture permits the incurrence of additional Senior Debt in the future. See "— Certain Covenants — Incurrence of Indebtedness and Issuance of Preferred Stock."

### The Subsidiary Guarantees

The Indenture provides that the Company's payment obligations under the Notes are jointly and severally guaranteed (the "Subsidiary Guarantees") by all of the Company's present and future Restricted Subsidiaries, other than Foreign Subsidiaries. The obligations of each Guarantor under its Subsidiary Guarantee will be limited as necessary to prevent that Subsidiary Guarantee from

constituting a fraudulent conveyance under applicable law. See "Risk Factors — The guarantees may be unenforceable due to fraudulent conveyance statutes, and accordingly, you could have no claim against the guarantors." The Subsidiary Guarantee of each Guarantor will be subordinated to the prior payment in full of all Senior Debt of such Guarantor, which would include the guarantees of amounts borrowed under the Senior Credit Facilities.

Upon the release of a Guarantee by a Restricted Subsidiary under all then outstanding Credit Facilities, at any time after the suspension of certain covenants as provided below under the caption "— Certain Covenants — Changes in Covenants when Notes Rated Investment Grade," the Subsidiary Guarantee of such Restricted Subsidiary under the Indenture will be released and discharged at such time. In the event that any such Restricted Subsidiary thereafter Guarantees any Indebtedness of the Company under any Credit Facility (or if any released Guarantee under any Credit Facility is reinstated or renewed), or if at any time certain covenants are reinstituted as provided below under the caption "— Certain Covenants — Changes in Covenants when Notes Rated Investment Grade," then such Restricted Subsidiary will Guarantee the Notes on the terms and conditions set forth in the Indenture.

As of the date of this prospectus, not all of the Company's subsidiaries are "Restricted Subsidiaries." Army Fleet Support, LLC, Aviation Communications & Surveillance Systems, LLC, Honeywell TCAS Inc., Digital Technics, L.P., ITel Solutions, LLC, L-3 Communications Secure Information Technology, Inc., Logimetrics, Inc., LogiMetrics FSC, Inc. and mmTech, INC. are currently Unrestricted Subsidiaries. In addition, under the circumstances described below under the subheading "— Certain Covenants — Restricted Payments", the Company is permitted to designate certain of the Company's subsidiaries as "Unrestricted Subsidiaries." Unrestricted Subsidiaries are not subject to many of the restrictive covenants in the Indenture. Unrestricted Subsidiaries do not guarantee these Notes.

### Principal, Maturity and Interest

The exchange notes will be limited in aggregate principal amount to \$400.0 million. The Company may issue additional Notes from time to time after the offering of exchange notes. Any offering of additional Notes is subject to the covenant described below under the caption "— Certain Covenants — Incurrence of Indebtedness and Issuance of Preferred Stock." The Notes and any additional Notes subsequently issued under the Indenture will be treated as a single class for all purposes under the Indenture, including, without limitation, waivers, amendments, redemptions and offers to purchase.

The Notes will mature on January 15, 2014. Interest on the Notes will accrue at the rate of 6 1/8% per annum and will be payable semi-annually in arrears on July 15 and January 15, commencing on July 15, 2004, to Holders of record on the immediately preceding July 1 and January 1.

Interest on the Notes will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the date of original issuance. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months.

### Methods of Receiving Payments on the Notes

Principal, premium and Additional Interest, if any, and interest on the Notes will be payable at the office or agency of the Company maintained for such purpose within the City and State of New York or, at the option of the Company, payment of interest and Additional Interest, if any, may be made by check mailed to the Holders of the Notes at their respective addresses set forth in the register of Holders of Notes; provided that all payments of principal, premium, interest and Additional Interest with respect to Notes the Holders of which have given wire transfer instructions to the Company will be required to be made by wire transfer of immediately available funds to the accounts specified by the Holders thereof if such Holders shall be registered Holders of at least \$250,000 in principal amount of Notes. Until otherwise designated by the Company, the Company's office or agency in New York will be the office of the Trustee maintained for such purpose. The exchange notes will be issued in denominations of \$1,000 and integral multiples thereof.

Optional Redemption

The Notes will not be redeemable at the Company's option prior to January 15, 2009. Thereafter, the Notes will be subject to redemption at any time at the option of the Company, in whole or in part, upon not less than 30 nor more than 60 days' notice, at the redemption prices (expressed as percentages of principal amount) set forth below plus accrued and unpaid interest and Additional Interest, if any, to the applicable redemption date, if redeemed during the twelve-month period beginning on January 15 of the years indicated below:

Year	Percentage
2009	103.063%
2010	102.042%
2011	101.021%
2012 and thereafter	100.000%

Notwithstanding the foregoing, before January 15, 2007, the Company may on any one or more occasions redeem up to an aggregate of 35% of the Notes originally issued at a redemption price of 106.125% of the principal amount thereof, plus accrued and unpaid interest and Additional Interest, if any, to the redemption date, with the net cash proceeds of one or more Equity Offerings by the Company or the net cash proceeds of one or more Equity Offerings by Holdings that are contributed to the Company as common equity capital; provided that at least 65% of the Notes originally issued remain outstanding immediately after the occurrence of each such redemption; and provided, further, that any such redemption must occur within 120 days of the date of the closing of such Equity Offering.

Subordination

The payment of principal of, premium and Additional Interest, if any, and interest on the Notes will be subordinated in right of payment, as set forth in the Indenture, to the prior payment in full in cash of all Senior Debt, whether outstanding on the Issue Date or thereafter incurred.

Upon any distribution to creditors of the Company:

- (1) in a liquidation or dissolution of the Company;
- (2) in a bankruptcy, reorganization, insolvency, receivership or similar proceeding relating to the Company or its property;
- (3) in an assignment for the benefit of creditors; or
- (4) in any marshalling of the Company's assets and liabilities,

the holders of Senior Debt will be entitled to receive payment in full in cash of all Obligations due in respect of such Senior Debt (including interest after the commencement of any such proceeding at the rate specified in the applicable Senior Debt, whether or not an allowable claim in any such proceeding) before the Holders of Notes will be entitled to receive any payment with respect to the Notes, and until all Obligations with respect to Senior Debt are paid in full in cash, any distribution to which the Holders of Notes would be entitled shall be made to the holders of Senior Debt (except, in each case, that Holders of Notes may receive Permitted Junior Securities and payments made from the trust described under "— Legal Defeasance and Covenant Defeasance").

The Company also may not make any payment upon or in respect of the Notes (except in Permitted Junior Securities or from the trust described under "— Legal Defeasance and Covenant Defeasance") if:

- (1) a default in the payment of the principal of, premium, if any, or interest on Designated Senior Debt occurs and is continuing; or

- (2) any other default occurs and is continuing with respect to Designated Senior Debt that permits holders of the Designated Senior Debt as to which such default relates to accelerate its maturity (or that would permit such holders to accelerate with the giving of notice or the passage of time or both) and the Trustee receives a notice of such default (a "Payment Blockage Notice") from the Company or the holders of any Designated Senior Debt.

Payments on the Notes may and shall be resumed:

- (1) in the case of a payment default, upon the date on which such default is cured or waived; and
- (2) in case of a nonpayment default, the earlier of the date on which such nonpayment default is cured or waived or 179 days after the date on which the applicable Payment Blockage Notice is received, unless the maturity of any Designated Senior Debt has been accelerated.

No new period of payment blockage may be commenced unless and until:

- (1) 360 days have elapsed since the effectiveness of the immediately prior Payment Blockage Notice; and
- (2) all scheduled payments of principal, premium and Additional Interest, if any, and interest on the Notes that have come due have been paid in full in cash.

No nonpayment default that existed or was continuing on the date of delivery of any Payment Blockage Notice to the Trustee shall be, or be made, the basis for a subsequent Payment Blockage Notice unless such default shall have been cured or waived for a period of not less than 90 days.

The Indenture further requires that the Company promptly notify holders of Senior Debt if payment of the Notes is accelerated because of an Event of Default.

As a result of the subordination provisions described above, in the event of a liquidation or insolvency, Holders of Notes may recover less ratably than creditors of the Company who are holders of Senior Debt. At December 31, 2003, the Company did not have any Senior Debt outstanding (excluding letters of credit, which aggregated \$84.1 million).

Mandatory Redemption

Except as set forth below under "— Repurchase at the Option of Holders", the Company is not required to make mandatory redemption or sinking fund payments with respect to the Notes.

## Repurchase at the Option of Holders

### *Change of Control*

Upon the occurrence of a Change of Control, each Holder of Notes will have the right to require the Company to repurchase all or any part (equal to \$1,000 or an integral multiple thereof) of such Holder's Notes pursuant to the offer described below (the "Change of Control Offer") at an offer price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest and Additional Interest, if any, to the date of purchase (the "Change of Control Payment"). Within ten days following any Change of Control, the Company will mail a notice to each Holder describing the transaction or transactions that constitute the Change of Control and offering to repurchase Notes on the date specified in such notice, which date shall be no earlier than 30 days and no later than 60 days from the date such notice is mailed (the "Change of Control Payment Date"), pursuant to the procedures required by the Indenture and described in such notice. The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable in connection with the repurchase of the Notes as a result of a Change of Control.

On the Change of Control Payment Date, the Company will, to the extent lawful:

- (1) accept for payment all Notes or portions thereof properly tendered pursuant to the Change of Control Offer;

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- (2) deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all Notes or portions thereof so tendered; and
- (3) deliver or cause to be delivered to the Trustee the Notes so accepted together with an Officers' Certificate stating the aggregate principal amount of Notes or portions thereof being purchased by the Company.

The Paying Agent will promptly mail to each Holder of Notes so tendered the Change of Control Payment for such Notes, and the Trustee will promptly authenticate and mail (or cause to be transferred by book entry) to each Holder a new Note equal in principal amount to any unpurchased portion of the Notes surrendered, if any; provided that each such new Note will be in a principal amount of \$1,000 or an integral multiple thereof.

The Indenture provides that, prior to mailing a Change of Control Offer, but in any event within 90 days following a Change of Control, the Company will either repay all outstanding Senior Debt or offer to repay all Senior Debt and terminate all commitments thereunder of each lender who has accepted such offer or obtain the requisite consents, if any, under all agreements governing outstanding Senior Debt to permit the repurchase of Notes required by this covenant. The Company will publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date.

The Change of Control provisions described above will be applicable whether or not any other provisions of the Indenture are applicable. Except as described above with respect to a Change of Control, the Indenture does not contain provisions that permit the Holders of the Notes to require that the Company repurchase or redeem the Notes in the event of a takeover, recapitalization or similar transaction.

The Senior Credit Facilities prohibits the Company, in certain circumstances, from purchasing any Notes, and also provides that certain change of control events with respect to the Company constitutes a default thereunder. Any future credit agreements or other agreements relating to Senior Debt to which the Company becomes a party may contain similar restrictions and provisions. In the event a Change of Control occurs at a time when the Company is prohibited from purchasing Notes, the Company could seek the consent of its lenders to the purchase of Notes or could attempt to refinance the borrowings that contain such prohibition. If the Company does not obtain such a consent or repay such borrowings, the Company will remain prohibited from purchasing Notes. In such case, the Company's failure to purchase tendered Notes would constitute an Event of Default under the Indenture and under the documentation governing certain of our other Indebtedness which would, in turn, constitute a default under the Senior Credit Facilities. In such circumstances, the subordination provisions in the Indenture would likely restrict payments to the Holders of Notes. See "Risk Factors — Our ability to repurchase notes with cash upon a change of control may be limited."

Finally, the Company's ability to pay cash to the holders of Notes upon a purchase may be limited by the Company's then-existing financial resources. There can be no assurance that sufficient funds will be available when necessary to make any required purchases. Even if sufficient funds were otherwise available, the terms of the Senior Credit Facilities will prohibit, subject to certain exceptions, the Company's prepayment of Notes prior to their scheduled maturity. Consequently, if the Company is not able to prepay indebtedness outstanding under the Senior Credit Facilities and any other Senior Debt containing similar restrictions or obtain requisite consents, the Company will be unable to fulfill its repurchase obligations if holders of Notes exercise their purchase rights following a Change of Control, thereby resulting in a default under the Indenture and under the documentation governing certain of our other Indebtedness, which would, in turn, constitute a default under our Senior Credit Facilities. Furthermore, the Change of Control provisions of the Indenture and under the documentation governing certain of our other Indebtedness may in certain circumstances make more difficult or discourage a takeover of the Company.

The Company will not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in

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compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Company and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

The definition of Change of Control contains, with respect to the disposition of assets, the phrase "all or substantially all," which varies according to the facts and circumstances of the subject transaction and is subject to judicial interpretation. Accordingly, in certain circumstances there may be a degree of uncertainty in ascertaining whether a particular transaction would involve a disposition of "all or substantially all" of the assets of the Company and its Restricted Subsidiaries, and therefore it may be unclear as to whether a Change of Control has occurred and whether the holders have the right to require the Company to purchase the Notes. In the event that the Company were to determine that a Change of Control did not occur because not "all or

substantially all" of the assets of the Company and its Restricted Subsidiaries had been sold and the holders of the Notes disagreed with such determination, the holders and/or the Trustee would need to seek a judicial determination of the issue.

#### ***Asset Sales***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, consummate an Asset Sale unless:

- (1) the Company or the Restricted Subsidiary, as the case may be, receives consideration at the time of such Asset Sale at least equal to the fair market value (evidenced by an Officers' Certificate delivered to the Trustee which will include a resolution of the Board of Directors with respect to such fair market value in the event such Asset Sale involves aggregate consideration in excess of \$10.0 million) of the assets or Equity Interests issued or sold or otherwise disposed of; and
- (2) at least 80% of the consideration therefor received by the Company or such Restricted Subsidiary, as the case may be, consists of cash, Cash Equivalents and/or Marketable Securities;

provided, however, that:

- (a) the amount of any Senior Debt of the Company or such Restricted Subsidiary that is assumed by the transferee in any such transaction; and
- (b) any consideration received by the Company or such Restricted Subsidiary, as the case may be, that consists of (1) all or substantially all of the assets of one or more Similar Businesses, (2) other long-term assets that are used or useful in one or more Similar Businesses and (3) Permitted Securities shall be deemed to be cash for purposes of this provision.

Within 365 days after the receipt of any Net Proceeds from an Asset Sale, the Company may apply such Net Proceeds, at its option:

- (1) to repay Indebtedness under a Credit Facility;
- (2) to the acquisition of Permitted Securities;
- (3) to the acquisition of all or substantially all of the assets of one or more Similar Businesses;
- (4) to the making of a capital expenditure; or
- (5) to the acquisition of other long-term assets in a Similar Business.

Pending the final application of any such Net Proceeds, the Company may temporarily reduce Indebtedness under a Credit Facility or otherwise invest such Net Proceeds in any manner that is not prohibited by the Indenture.

Any Net Proceeds from Asset Sales that are not applied or invested as provided in the first sentence of this paragraph will be deemed to constitute "Excess Proceeds." When the aggregate amount of Excess Proceeds exceeds \$10.0 million, the Company will be required to make an offer to

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all Holders of the Notes (an "Asset Sale Offer") and any other Indebtedness that ranks *pari passu* with the Notes (including, without limitation, the December 1998 Notes, the May 1998 Notes and the 2002 Notes) that, by its terms, requires the Company to offer to repurchase such Indebtedness with such Excess Proceeds to purchase the maximum principal amount of Notes and *pari passu* Indebtedness that may be purchased out of such Excess Proceeds at an offer price in cash in an amount equal to 100% of the principal amount thereof plus accrued and unpaid interest thereon, if any, to the date of purchase, in accordance with the procedures set forth in the Indenture. To the extent that the aggregate amount of Notes or *pari passu* Indebtedness tendered pursuant to an Asset Sale Offer is less than the Excess Proceeds, the Company may use any Excess Proceeds for general corporate purposes. If the aggregate principal amount of Notes or *pari passu* Indebtedness surrendered by Holders thereof exceeds the amount of Excess Proceeds in an Asset Sale Offer, the Company shall repurchase such Indebtedness on a pro rata basis and the Trustee shall select the Notes to be purchased on a pro rata basis. Upon completion of such offer to purchase, the amount of Excess Proceeds shall be reset at zero.

The Senior Credit Facilities will substantially limit the Company's ability to purchase subordinated Indebtedness, including the Notes. Any future credit agreements relating to Senior Debt may contain similar restrictions. See "Description of Other Indebtedness — Senior Credit Facilities of L-3 Communications Corporation."

#### **Selection and Notice**

If less than all of the Notes are to be redeemed at any time, selection of Notes for redemption will be made by the Trustee as follows:

- (1) in compliance with the requirements of the principal national securities exchange, if any, on which the Notes are listed; or
- (2) if the Notes are not so listed, on a pro rata basis, by lot or by such method as the Trustee shall deem fair and appropriate.

No Notes of \$1,000 or less shall be redeemed in part. Notices of redemption shall be mailed by first class mail at least 30 but not more than 60 days before the redemption date to each Holder of Notes to be redeemed at its registered address. Notices of redemption may not be conditional.

If any Note is to be redeemed in part only, the notice of redemption that relates to such Note shall state the portion of the principal amount thereof to be redeemed. A new Note in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original Note. Notes called for redemption become due on the date fixed for redemption. On and after the redemption date, interest ceases to accrue on Notes or portions of them called for redemption.

#### **Certain Covenants**

##### ***Changes in Covenants when Notes Rated Investment Grade***

If on any date following the date of the Indenture:

- (1) the Notes are rated Baa3 or better by Moody's and BBB\ or better by S&P (or, if either such entity

ceases to rate the notes for reasons outside of the control of the Company, the equivalent investment grade credit rating from any other "nationally recognized statistical rating organization" within the meaning of Rule 15c3-1(c)(2)(vi)(F) under the Exchange Act selected by Company as a replacement agency); and

- (2) no Default or Event of Default shall have occurred and be continuing,

then, beginning on that day and subject to the provisions of the following paragraph, the provisions and covenants specifically listed under the following captions in this prospectus will be suspended:

- (a) "— Repurchase at the Option of Holders-Asset Sales;"

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- (b) "— Restricted Payments;"

- (c) "— Incurrence of Indebtedness and Issuance of Preferred Stock;"

- (d) "— Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries;"

- (e) "— Transactions with Affiliates;"

- (f) clauses (4)(a) and (b) of the covenant listed under "— Merger, Consolidation or Sale of Assets;"

- (g) "— Payments for Consent;" and

- (h) clauses (3)(a) and (b) of the covenant listed under "— Future Subsidiary Guarantees."

In addition, following the achievement of such investment grade ratings, (1) the Subsidiary Guarantees of the Company's Restricted Subsidiaries will be released at the time of the release of Guarantees under all outstanding Credit Facilities as described above under the caption "— The Subsidiary Guarantees" and, (2) as described below under the caption "— Future Subsidiary Guarantees," no Restricted Subsidiary thereafter acquired or created will be required to execute a Subsidiary Guarantee unless such Subsidiary Guarantees Indebtedness of the Company under a Credit Facility.

Notwithstanding the foregoing, if the rating assigned by any such rating agency should subsequently decline to below Baa3 or BBB-, respectively, the foregoing covenants shall be reinstituted as of and from the date of such rating decline. For purposes of determining whether a Restricted Payment exceeds the allowable amount under the calculation described in paragraphs 3(a) through (d) of "—Restricted Payments" below, the covenant described under the caption "—Restricted Payments" will be interpreted as if it had been in effect since the date of the Indenture. However, no default will be deemed to have occurred as a result of the provisions and covenants listed in 2(a) through (h) above while those provisions and covenants were suspended. There can be no assurance that the Notes will ever achieve an investment grade rating or that any such rating will be maintained.

#### ***Restricted Payments***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly:

- (1) declare or pay any dividend or make any other payment or distribution on account of the Company's or any of its Restricted Subsidiaries' Equity Interests (including, without limitation, any payment in connection with any merger or consolidation involving the Company) or to the direct or indirect holders of the Company's or any of its Restricted Subsidiaries' Equity Interests in their capacity as such (other than (A) dividends or distributions payable in Equity Interests (other than Disqualified Stock) of the Company or (B) dividends or distributions by a Restricted Subsidiary so long as, in the case of any dividend or distribution payable on or in respect of any class or series of securities issued by a Restricted Subsidiary other than a Wholly Owned Restricted Subsidiary, the Company or a Restricted Subsidiary receives at least its pro rata share of such dividend or distribution in accordance with its Equity Interests in such class or series of securities);
- (2) purchase, redeem or otherwise acquire or retire for value (including without limitation, in connection with any merger or consolidation involving the Company) any Equity Interests of the Company or any direct or indirect parent of the Company;
- (3) make any payment on or with respect to, or purchase, redeem, defease or otherwise acquire or retire for value any Indebtedness that is subordinated to the Notes except a payment of interest or principal at Stated Maturity; or
- (4) make any Restricted Investment (all such payments and other actions set forth in clauses (1) through (4) above being collectively referred to as "Restricted Payments"),

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unless, at the time of and after giving effect to such Restricted Payment:

- (1) no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof; and
- (2) the Company would, at the time of such Restricted Payment and after giving pro forma effect thereto as if such Restricted Payment had been made at the beginning of the applicable four-quarter period, have been permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of the covenant described below under the caption "— Incurrence of Indebtedness and Issuance of Preferred Stock"; and
- (3) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Company and its Restricted Subsidiaries since April 30, 1997 (excluding Restricted Payments permitted by clauses (2) through (8) of the next succeeding paragraph or of the kind contemplated by such clauses that were made prior to the date of the Indenture), is less than the sum of:

- (a) 50% of the Consolidated Net Income of the Company for the period (taken as one accounting period) from July 1, 1997 to the end of the Company's most recently ended fiscal quarter for which internal financial statements are available at the time of such Restricted Payment (or, if such Consolidated Net Income for such period is a deficit, less 100% of such deficit); *plus*
- (b) 100% of the aggregate net cash proceeds received by the Company since April 30, 1997 as a contribution to its common equity capital or from the issue or sale of Equity Interests of the Company (other than Disqualified Stock) or from the issue or sale of Disqualified Stock or debt securities of the Company that have been converted into such Equity Interests (other than Equity Interests (or Disqualified Stock or convertible debt securities) sold to a Subsidiary of the Company and other than Disqualified Stock or convertible debt securities that have been converted into Disqualified Stock); *plus*
- (c) to the extent that any Restricted Investment that was made after April 30, 1997 is sold for cash or otherwise liquidated or repaid for cash, the amount of cash received in connection therewith (or from the sale of Marketable Securities received in connection therewith); *plus*
- (d) to the extent not already included in such Consolidated Net Income of the Company for such period and without duplication;
  - (A) 100% of the aggregate amount of cash received as a dividend from an Unrestricted Subsidiary;
  - (B) 100% of the cash received upon the sale of Marketable Securities received as a dividend from an Unrestricted Subsidiary; and
  - (C) 100% of the net assets of any Unrestricted Subsidiary on the date that it becomes a Restricted Subsidiary.

As of December 31, 2003, the amount that would have been available to the Company for Restricted Payments pursuant to this paragraph (3) would have been approximately \$1,673.1 million, giving pro forma effect to the principal amount of the 2000 Convertible Notes that converted into common stock of Holdings in January 2004.

The foregoing provisions will not prohibit:

- (1) the payment of any dividend within 60 days after the date of declaration thereof, if at said date of declaration such payment would have complied with the provisions of the Indenture;
- (2) the redemption, repurchase, retirement, defeasance or other acquisition of any subordinated Indebtedness or Equity Interests of the Company in exchange for, or out of the net cash proceeds of the substantially concurrent sale (other than to a Subsidiary of the Company)

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of, other Equity Interests of the Company (other than any Disqualified Stock); provided that the amount of any such net cash proceeds that are utilized for any such redemption, repurchase, retirement, defeasance or other acquisition shall be excluded from clause (3) (b) of the preceding paragraph;

- (3) the defeasance, redemption, repurchase or other acquisition of subordinated Indebtedness (other than intercompany Indebtedness) in exchange for, or with the net cash proceeds from an incurrence of, Permitted Refinancing Indebtedness;
- (4) the repurchase, retirement or other acquisition or retirement for value of common Equity Interests of the Company or Holdings held by any future, present or former employee, director or consultant of the Company or any Subsidiary or Holdings issued pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or agreement; provided, however, that the aggregate amount of Restricted Payments made under this clause (4) does not exceed \$1.5 million in any calendar year and provided further that cancellation of Indebtedness owing to the Company from members of management of the Company or any of its Restricted Subsidiaries in connection with a repurchase of Equity Interests of the Company will not be deemed to constitute a Restricted Payment for purposes of this covenant or any other provision of the Indenture;
- (5) repurchases of Equity Interests deemed to occur upon exercise of stock options upon surrender of Equity Interests to pay the exercise price of such options;
- (6) payments to Holdings (A) in amounts equal to the amounts required for Holdings to pay franchise taxes and other fees required to maintain its legal existence and provide for other operating costs of up to \$500,000 per fiscal year and (B) in amounts equal to amounts required for Holdings to pay federal, state and local income taxes to the extent such income taxes are actually due and owing; provided that the aggregate amount paid under this clause (B) does not exceed the amount that the Company would be required to pay in respect of the income of the Company and its Subsidiaries if the Company were a stand alone entity that was not owned by Holdings;
- (7) dividends paid to Holdings in amounts equal to amounts required for Holdings to pay interest and/or principal on Indebtedness that has been guaranteed by, or is otherwise considered Indebtedness of, the Company; and
- (8) other Restricted Payments in an aggregate amount since May 22, 1998 not to exceed \$20.0 million.

The Board of Directors of the Company may designate any Restricted Subsidiary to be an Unrestricted Subsidiary if such designation would not cause a Default. For purposes of making such determination, all outstanding Investments by the Company and its Restricted Subsidiaries (except to the extent repaid in cash) in the Subsidiary so designated will be deemed to be Restricted Payments at the time of such designation and will reduce the amount available for Restricted Payments under the first paragraph of this covenant. All such outstanding Investments will be deemed to constitute Investments in an amount equal to the fair market value of such Investments at the time of such designation. Such designation will only be permitted if such Restricted Payment would be permitted at such time and if such Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary.

The amount of all Restricted Payments (other than cash) shall be the fair market value on the date of the Restricted Payment of the asset(s) or securities proposed to be transferred or issued by the Company or such Restricted Subsidiary, as the case may be, pursuant to the Restricted Payment. The fair market value of any non-

cash Restricted Payment shall be determined by the Board of Directors whose resolution with respect thereto shall be delivered to the Trustee. Not later than the date of making any Restricted Payment, the Company shall deliver to the Trustee an Officers' Certificate stating that such Restricted Payment is permitted and setting forth the basis upon which the calculations required by the covenant "Restricted Payments" were computed.

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***Incurrence of Indebtedness and Issuance of Preferred Stock***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable, contingently or otherwise, with respect to (collectively, "incur") any Indebtedness (including Acquired Debt) and that the Company will not issue any Disqualified Stock and will not permit any of its Restricted Subsidiaries to issue any shares of preferred stock; provided, however, that the Company and any Restricted Subsidiary may incur Indebtedness (including Acquired Debt) or issue shares of preferred stock if the Fixed Charge Coverage Ratio for the Company's most recently ended four full fiscal quarters for which internal financial statements are available immediately preceding the date on which such additional Indebtedness is incurred or such preferred stock is issued would have been at least 2.0 to 1.0, determined on a pro forma basis (including a pro forma application of the net proceeds therefrom), as if the additional Indebtedness had been incurred, or the preferred stock had been issued, as the case may be, at the beginning of such four-quarter period.

The foregoing limitation will not apply to the incurrence of any of the following items of Indebtedness (collectively, "Permitted Debt"):

- (1) the incurrence by the Company of additional Indebtedness under Credit Facilities (and the guarantee thereof by the Guarantors) in an aggregate principal amount outstanding pursuant to this clause (1) at any one time (with letters of credit being deemed to have a principal amount equal to the maximum potential liability of the Company and its Restricted Subsidiaries thereunder), including all Permitted Refinancing Indebtedness then outstanding incurred to refund, refinance or replace any other Indebtedness incurred pursuant to this clause (1), not to exceed \$750.0 million less the aggregate amount of all Net Proceeds of Asset Sales applied to repay any such Indebtedness pursuant to the covenant described above under the caption "— Asset Sales";
- (2) the incurrence by the Company and its Restricted Subsidiaries of the Existing Indebtedness;
- (3) the incurrence by the Company and the Guarantors of \$400.0 million in aggregate principal amount of each of the outstanding notes and the Exchange Notes and the Subsidiary Guarantees thereof;
- (4) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness represented by Capital Lease Obligations, mortgage financings or purchase money obligations, in each case incurred for the purpose of financing all or any part of the purchase price or cost of construction or improvement of property, plant or equipment used in the business of the Company or such Restricted Subsidiary, in an aggregate principal amount, including all Permitted Refinancing Indebtedness then outstanding incurred to refund, refinance or replace any other Indebtedness incurred pursuant to this clause (4), not to exceed \$100.0 million at any time outstanding;
- (5) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness in connection with the acquisition of assets or a new Restricted Subsidiary; provided that such Indebtedness was incurred by the prior owner of such assets or such Restricted Subsidiary prior to such acquisition by the Company or one of its Restricted Subsidiaries and was not incurred in connection with, or in contemplation of, such acquisition by the Company or one of its Restricted Subsidiaries; and provided further that the principal amount (or accreted value, as applicable) of such Indebtedness, together with any other outstanding Indebtedness incurred pursuant to this clause (5) does not exceed \$50.0 million;
- (6) the incurrence by the Company or any of its Restricted Subsidiaries of Permitted Refinancing Indebtedness in exchange for, or the net proceeds of which are used to refund, refinance or replace, Indebtedness that was permitted by the Indenture to be incurred (other than intercompany Indebtedness or Indebtedness incurred pursuant to clause (1) above);
- (7) Indebtedness incurred by the Company or any of its Restricted Subsidiaries constituting reimbursement obligations with respect to letters of credit issued in the ordinary course of

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business in respect of workers' compensation claims or self-insurance, or other Indebtedness with respect to reimbursement type obligations regarding workers' compensation claims; provided, however, that upon the drawing of such letters of credit or the incurrence of such Indebtedness, such obligations are reimbursed within 30 days following such drawing or incurrence;

- (8) Indebtedness arising from agreements of the Company or a Restricted Subsidiary providing for indemnification, adjustment of purchase price or similar obligations, in each case, incurred or assumed in connection with the disposition of any business, assets or a Subsidiary, other than guarantees of Indebtedness incurred by any Person acquiring all or any portion of such business, assets or a Subsidiary for the purpose of financing such acquisition; provided, however, that:
  - (a) such Indebtedness is not reflected on the balance sheet of the Company or any Restricted Subsidiary (contingent obligations referred to in a footnote to financial statements and not otherwise reflected on the balance sheet will not be deemed to be reflected on such balance sheet for purposes of this clause (a)); and
  - (b) the maximum assumable liability in respect of all such Indebtedness shall at no time exceed the gross proceeds including noncash proceeds (the fair market value of such noncash proceeds being measured at the time received and without giving effect to any subsequent changes in value) actually received by the Company and its Restricted Subsidiaries in connection with such disposition;
- (9) the incurrence by the Company or any of its Restricted Subsidiaries of intercompany Indebtedness

between or among the Company and any of its Restricted Subsidiaries; provided, however, that:

- (a) if the Company is the obligor on such Indebtedness, such Indebtedness is expressly subordinated to the prior payment in full in cash of all Obligations with respect to the Notes; and
  - (b) (1) any subsequent issuance or transfer of Equity Interests that results in any such Indebtedness being held by a Person other than the Company or one of its Restricted Subsidiaries and (2) any sale or other transfer of any such Indebtedness to a Person that is not either the Company or one of its Restricted Subsidiaries shall be deemed, in each case, to constitute an incurrence of such Indebtedness by the Company or such Restricted Subsidiary, as the case may be;
- (10) the incurrence by the Company or any of the Guarantors of Hedging Obligations that are incurred for the purpose of:
- (a) fixing, hedging or capping interest rate risk with respect to any floating rate Indebtedness that is permitted by the terms of the Indenture to be outstanding; or
  - (b) protecting the Company and its Restricted Subsidiaries against changes in currency exchange rates;
- (11) the guarantee by the Company or any of the Guarantors of Indebtedness of the Company or a Restricted Subsidiary of the Company that was permitted to be incurred by another provision of this covenant;
- (12) the incurrence by the Company's Unrestricted Subsidiaries of Non-Recourse Debt, provided, however, that if any such Indebtedness ceases to be Non-Recourse Debt of an Unrestricted Subsidiary, such event shall be deemed to constitute an incurrence of Indebtedness by a Restricted Subsidiary of the Company that was not permitted by this clause (12), and the issuance of preferred stock by Unrestricted Subsidiaries;
- (13) obligations in respect of performance and surety bonds and completion guarantees provided by the Company or any Restricted Subsidiaries in the ordinary course of business; and

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- (14) the incurrence by the Company or any of its Restricted Subsidiaries of additional Indebtedness in an aggregate principal amount (or accreted value, as applicable) at any time outstanding, including all Permitted Refinancing Indebtedness then outstanding incurred to refund, refinance or replace any other Indebtedness incurred pursuant to this clause (14), not to exceed \$100.0 million.

For purposes of determining compliance with this covenant, in the event that an item of Indebtedness meets the criteria of more than one of the categories of Permitted Debt described in clauses (1) through (14) above or is entitled to be incurred pursuant to the first paragraph of this covenant, the Company shall, in its sole discretion, classify, or later reclassify, such item of Indebtedness in any manner that complies with this covenant. Accrual of interest, the accretion of accreted value and the payment of interest in the form of additional Indebtedness will not be deemed to be an incurrence of Indebtedness for purposes of this covenant.

#### ***Liens***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, assume or suffer to exist any Lien (other than Permitted Liens) securing Indebtedness on any asset now owned or hereafter acquired, or any income or profits therefrom or assign or convey any right to receive income therefrom, unless all payments due under the Indenture and the Notes are secured on an equal and ratable basis with the Obligations so secured until such time as such Obligations are no longer secured by a Lien.

#### ***Antilayering Provision***

The Indenture provides that (A) the Company will not incur, create, issue, assume, guarantee or otherwise become liable for any Indebtedness that is subordinate or junior in right of payment to any Senior Debt and senior in any respect in right of payment to the Notes, and (B) no Guarantor will incur, create, issue, assume, guarantee or otherwise become liable for any Indebtedness that is subordinate or junior in right of payment to any Senior Debt of a Guarantor and senior in any respect in right of payment to any of the Subsidiary Guarantees.

#### ***Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create or otherwise cause or suffer to exist or become effective any encumbrance or restriction on the ability of any Restricted Subsidiary to:

- (1) (A) pay dividends or make any other distributions to the Company or any of its Restricted Subsidiaries (1) on its Capital Stock or (2) with respect to any other interest or participation in, or measured by, its profits, or (B) pay any indebtedness owed to the Company or any of its Restricted Subsidiaries;
- (2) make loans or advances to the Company or any of its Restricted Subsidiaries; or
- (3) transfer any of its properties or assets to the Company or any of its Restricted Subsidiaries.

However, the preceding restrictions will not apply to encumbrances or restrictions existing under or by reason of:

- (1) the provisions of security agreements that restrict the transfer of assets that are subject to a Lien created by such security agreements;
- (2) the provisions of agreements governing Indebtedness incurred pursuant to clause (5) of the second paragraph of the covenant described above under the caption "— Incurrence of Indebtedness and Issuance of Preferred Stock";
- (3) the Senior Credit Facilities, the Indenture, the Notes, the Exchange Notes, the December 1998 Indenture, the December 1998 Notes, the May 2003 Indenture, the May 2003 Notes, the 2002 Indenture and the 2002 Notes;
- (4) applicable law;



- (5) any instrument governing Indebtedness or Capital Stock of a Person acquired by the Company or any of its Restricted Subsidiaries as in effect at the time of such acquisition (except to the extent such Indebtedness was incurred in connection with or in contemplation of such acquisition), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired, provided that, in the case of Indebtedness, such Indebtedness was permitted by the terms of the Indenture to be incurred;
- (6) by reason of customary non-assignment provisions in leases entered into in the ordinary course of business and consistent with past practices;
- (7) purchase money obligations for property acquired in the ordinary course of business that impose restrictions of the nature described in clause (3) of the preceding paragraph;
- (8) Permitted Refinancing Indebtedness, provided that the restrictions contained in the agreements governing such Permitted Refinancing Indebtedness are not materially more restrictive, taken as a whole, than those contained in the agreements governing the Indebtedness being refinanced;
- (9) contracts for the sale of assets, including, without limitation, customary restrictions with respect to a Subsidiary pursuant to an agreement that has been entered into for the sale or disposition of all or substantially all of the Capital Stock or assets of such Subsidiary;
- (10) agreements relating to secured Indebtedness otherwise permitted to be incurred pursuant to the covenants described under "Limitations on Incurrence of Indebtedness and Issuance of Preferred Stock" and "Liens" that limit the right of the debtor to dispose of the assets securing such Indebtedness;
- (11) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business; or
- (12) customary provisions in joint venture agreements and other similar agreements entered into in the ordinary course of business.

#### ***Merger, Consolidation or Sale of Assets***

The Indenture provides that the Company may not consolidate or merge with or into (whether or not the Company is the surviving corporation), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets in one or more related transactions, to another Person unless:

- (1) the Company is the surviving corporation or the Person formed by or surviving any such consolidation or merger (if other than the Company) or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made is a corporation organized or existing under the laws of the United States, any state thereof or the District of Columbia;
- (2) the Person formed by or surviving any such consolidation or merger (if other than the Company) or the Person to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made assumes all the obligations of the Company under the Registration Rights Agreement, the Notes and the Indenture pursuant to a supplemental indenture in a form reasonably satisfactory to the Trustee;
- (3) immediately after such transaction no Default or Event of Default exists; and
- (4) except in the case of a merger of the Company with or into a Wholly Owned Restricted Subsidiary of the Company, the Company or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made, after giving pro forma effect to such transaction as if such transaction had occurred at the beginning of the most recently ended four full fiscal quarters for which internal financial statements are available immediately preceding such transaction either:

- (a) would be permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of the covenant described above under the caption "— Incurrence of Indebtedness and Issuance of Preferred Stock"; or
- (b) would have a pro forma Fixed Charge Coverage Ratio that is greater than the actual Fixed Charge Coverage Ratio for the same four-quarter period without giving pro forma effect to such transaction.

Notwithstanding the foregoing clause (4):

- (1) any Restricted Subsidiary may consolidate with, merge into or transfer all or part of its properties and assets to the Company; and
- (2) the Company may merge with an Affiliate that has no significant assets or liabilities and was incorporated solely for the purpose of reincorporating the Company in another State of the United States so long as the amount of Indebtedness of the Company and its Restricted Subsidiaries is not increased thereby.

#### ***Transactions with Affiliates***

The Indenture provides that the Company will not, and will not permit any of its Restricted Subsidiaries to, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any transaction, contract, agreement, understanding, loan, advance or guarantee with, or for the benefit of, any Affiliate (each of the foregoing, an "Affiliate Transaction"), unless:

- (1) such Affiliate Transaction is on terms that are no less favorable to the Company or the relevant Restricted Subsidiary than those that would have been obtained in a comparable transaction by the

Company or such Restricted Subsidiary with an unrelated Person; and

- (2) the Company delivers to the Trustee:
- (a) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of \$5.0 million, a resolution of the Board of Directors set forth in an Officers' Certificate certifying that such Affiliate Transaction complies with clause (1) above and that such Affiliate Transaction has been approved by a majority of the disinterested members of the Board of Directors; and
  - (b) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of \$15.0 million, an opinion as to the fairness to the Holders of such Affiliate Transaction from a financial point of view issued by an accounting, appraisal or investment banking firm of national standing.

The foregoing provisions will not prohibit:

- (1) any employment agreement entered into by the Company or any of its Restricted Subsidiaries in the ordinary course of business;
- (2) any transaction with a Lehman Investor;
- (3) any transaction between or among the Company and/or its Restricted Subsidiaries;
- (4) transactions between the Company or any of its Restricted Subsidiaries, on the one hand, and a Permitted Joint Venture, on the other hand, on terms that are not materially less favorable to the Company or the applicable Restricted Subsidiary of the Company than those that could have been obtained from an unaffiliated third party; provided that:
  - (a) in the case of any such transaction or series of related transactions pursuant to this clause (4) involving aggregate consideration in excess of \$5.0 million but less than \$25.0 million, such transaction or series of transactions (or the agreement pursuant to which the transactions were executed) was approved by the Company's Chief Executive Officer or Chief Financial Officer; and

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- (b) in the case of any such transaction or series of related transactions pursuant to this clause (4) involving aggregate consideration equal to or in excess of \$25.0 million, such transaction or series of related transactions (or the agreement pursuant to which the transactions were executed) was approved by a majority of the disinterested members of the Board of Directors;
  - (5) any transaction pursuant to and in accordance with the provisions of the Transaction Documents as the same are in effect on the Issue Date; and
  - (6) any Restricted Payment that is permitted by the provisions of the Indenture described above under the caption "— Restricted Payments."

#### ***Payments for Consent***

The Indenture provides that neither the Company nor any of its Subsidiaries will, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any Holder of any Notes for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes unless such consideration is offered to be paid or is paid to all Holders of the Notes that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

#### ***Reports***

Notwithstanding that the Company may not be subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act or otherwise report on an annual and quarterly basis on forms provided for such annual and quarterly reporting pursuant to rules and regulations promulgated by the SEC, the Indenture requires the Company to file with the Commission (and provide the Trustee and Holders with copies thereof, without cost to each Holder, within 15 days after it files them with the Commission):

- (1) within 90 days after the end of each fiscal year, annual reports on Form 10-K (or any successor or comparable form) containing the information required to be contained therein (or required in such successor or comparable form);
- (2) within 45 days after the end of each of the first three fiscal quarters of each fiscal year, reports on Form 10-Q (or any successor or comparable form);
- (3) promptly from time to time after the occurrence of an event required to be therein reported, such other reports on Form 8-K (or any successor or comparable form); and
- (4) any other information, documents and other reports which the Company would be required to file with the Commission if it were subject to Section 13 or 15(d) of the Exchange Act;

provided, however, the Company shall not be so obligated to file such reports with the Commission if the Commission does not permit such filing, in which event the Company will make available such information to prospective purchasers of Notes, in addition to providing such information to the Trustee and the Holders, in each case within 15 days after the time the Company would be required to file such information with the Commission, if it were subject to Sections 13 or 15(d) of the Exchange Act.

#### ***Future Subsidiary Guarantees***

The Company's payment obligations under the Notes are jointly and severally guaranteed by all of the Company's existing and future Restricted Subsidiaries, other than Foreign Subsidiaries. The Indenture provides that if the Company or any of its Subsidiaries shall acquire or create a Subsidiary (other than a Foreign Subsidiary or an Unrestricted Subsidiary) after the Issue Date, then such Subsidiary shall execute a Subsidiary Guarantee and deliver an opinion of counsel, in accordance with the terms of the Indenture. The Subsidiary Guarantee of each Guarantor ranks *pari passu* with the guarantees of the 2001 CODES, the December 1998 Notes, the May 2003 Notes and the 2002 Notes and is subordinated to the prior payment in full of all Senior Debt of such Guarantor, which would include the guarantees of amounts borrowed under the Senior Credit Facilities.

The Indenture also provides that, notwithstanding the foregoing, for so long as certain covenants are suspended as provided above under the caption "— Certain Covenants — Changes in Covenants when Notes Rated Investment Grade," no newly acquired or created Subsidiary will be required to execute a Subsidiary Guarantee unless such Subsidiary Guarantees Indebtedness of the Company under a Credit Facility. However, any Subsidiary (other than a Foreign Subsidiary or an Unrestricted Subsidiary) that Guarantees any Indebtedness of the Company under a Credit Facility will become a Subsidiary Guarantor and, if at any time certain covenants are reinstituted as provided above under the caption "— Certain Covenants — Changes in Covenants when Notes Rated Investment Grade," any newly acquired or created Subsidiary (other than a Foreign Subsidiary or an Unrestricted Subsidiary) will Guarantee the Notes on the terms and conditions set forth in the Indenture.

The Indenture provides that no Guarantor may consolidate with or merge with or into (whether or not such Guarantor is the surviving Person) another Person (except the Company or another Guarantor) unless:

- (1) subject to the provisions of the following paragraph, the Person formed by or surviving any such consolidation or merger (if other than such Guarantor) or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made assumes all the obligations of such Guarantor pursuant to a supplemental indenture in form and substance reasonably satisfactory to the Trustee, under the Notes and the Indenture;
- (2) immediately after giving effect to such transaction, no Default or Event of Default exists; and
- (3) the Company:
  - (a) would be permitted by virtue of the Company's pro forma Fixed Charge Coverage Ratio, immediately after giving effect to such transaction, to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the covenant described above under the caption "— Incurrence of Indebtedness and Issuance of Preferred Stock"; or
  - (b) would have a pro forma Fixed Charge Coverage Ratio that is greater than the actual Fixed Charge Coverage Ratio for the same four-quarter period without giving pro forma effect to such transaction.

Notwithstanding the foregoing clause (3):

- (1) any Guarantor may consolidate with, merge into or transfer all or part of its properties and assets to the Company or to another Guarantor; and
- (2) any Guarantor may merge with an Affiliate that has no significant assets or liabilities and was incorporated solely for the purpose of reincorporating such Guarantor in another State of the United States so long as the amount of Indebtedness of the Company and its Restricted Subsidiaries is not increased thereby.

The Indenture provides that in the event of a sale or other disposition of all of the assets of any Guarantor, by way of merger, consolidation or otherwise, or a sale or other disposition of all of the capital stock of any Guarantor, then such Guarantor (in the event of a sale or other disposition, by way of such a merger, consolidation or otherwise, of all of the capital stock of such Guarantor) or the corporation acquiring the property (in the event of a sale or other disposition of all of the assets of such Guarantor) will be released and relieved of any obligations under its Subsidiary Guarantee; provided that the Net Proceeds of such sale or other disposition are applied in accordance with the applicable provisions of the Indenture. See "— Repurchase at the Option of Holders — Asset Sales."

#### Events of Default and Remedies

The Indenture provides that each of the following constitutes an Event of Default:

- (1) default for 30 days in the payment when due of interest or Additional Interest, if any, on the Notes (whether or not prohibited by the subordination provisions of the Indenture);

- (2) default in payment when due of the principal of or premium, if any, on the Notes (whether or not prohibited by the subordination provisions of the Indenture);
- (3) failure by the Company to comply with the provisions described under the captions "— Repurchase at the Option of Holders — Change of Control", "— Repurchase at the Option of Holders — Asset Sales" or "— Merger, Consolidation or Sale of Assets";
- (4) failure by the Company for 60 days after notice to comply with any of its other agreements in the Indenture or the Notes;
- (5) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Company or any of its Restricted Subsidiaries (or the payment of which is guaranteed by the Company or any of its Restricted Subsidiaries) whether such Indebtedness or guarantee now exists, or is created after the Issue Date, which default results in the acceleration of such Indebtedness prior to its express maturity and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness the maturity of which has been so accelerated, aggregates \$25.0 million or more;
- (6) failure by the Company or any of its Restricted Subsidiaries to pay final judgments aggregating in excess of \$25.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;
- (7) certain events of bankruptcy or insolvency with respect to the Company or any of its Significant

Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary; and

- (8) except as permitted by the Indenture, any Subsidiary Guarantee shall be held in any judicial proceeding to be unenforceable or invalid.

If any Event of Default occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of the then outstanding Notes may declare all the Notes to be due and payable immediately; provided, however, that so long as any Designated Senior Debt is outstanding, such declaration shall not become effective until the earlier of:

- (1) the day which is five Business Days after receipt by the Representatives of Designated Senior Debt of such notice of acceleration; or
- (2) the date of acceleration of any Designated Senior Debt.

Notwithstanding the foregoing, in the case of an Event of Default arising from certain events of bankruptcy or insolvency, with respect to the Company or any Significant Subsidiary or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary, all outstanding Notes will become due and payable without further action or notice. Holders of the Notes may not enforce the Indenture or the Notes except as provided in the Indenture. Subject to certain limitations, Holders of a majority in principal amount of the then outstanding Notes may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Holders of the Notes notice of any continuing Default or Event of Default (except a Default or Event of Default relating to the payment of principal or interest) if it determines that withholding notice is in their interest.

In the case of any Event of Default occurring by reason of any willful action (or inaction) taken (or not taken) by or on behalf of the Company with the intention of avoiding payment of the premium that the Company would have had to pay if the Company then had elected to redeem the Notes pursuant to the optional redemption provisions of the Indenture, an equivalent premium shall also become and be immediately due and payable to the extent permitted by law upon the acceleration of the Notes. If an Event of Default occurs prior to January 15, 2009 by reason of any willful action (or inaction) taken (or not taken) by or on behalf of the Company with the intention of avoiding the prohibition on redemption of the Notes prior to January 15, 2009, then the premium specified in the Indenture shall also become immediately due and payable to the extent permitted by law upon the acceleration of the Notes.

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The Holders of a majority in aggregate principal amount of the Notes then outstanding by notice to the Trustee may on behalf of the Holders of all of the Notes waive any existing Default or Event of Default and its consequences under the Indenture except a continuing Default or Event of Default in the payment of interest on, or the principal of, the Notes.

The Company is required to deliver to the Trustee annually a statement regarding compliance with the Indenture, and the Company is required upon becoming aware of any Default or Event of Default, to deliver to the Trustee a statement specifying such Default or Event of Default.

#### **No Personal Liability of Directors, Officers, Employees and Stockholders**

No director, officer, employee, incorporator or stockholder of the Company or any Subsidiary of the Company, as such, shall have any liability for any obligations of the Company or any Subsidiary of the Company under the Notes, the Subsidiary Guarantees or the Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes. Such waiver may not be effective to waive liabilities under the federal securities laws and it is the view of the Commission that such a waiver is against public policy.

#### **Legal Defeasance and Covenant Defeasance**

The Company may, at its option and at any time, elect to have all of its obligations discharged with respect to the outstanding Notes ("Legal Defeasance") except for:

- (1) the rights of Holders of outstanding Notes to receive payments in respect of the principal of, premium and Additional Interest, if any, and interest on such Notes when such payments are due from the trust referred to below;
- (2) the Company's obligations with respect to the Notes concerning issuing temporary Notes, registration of Notes, mutilated, destroyed, lost or stolen Notes and the maintenance of an office or agency for payment and money for security payments held in trust;
- (3) the rights, powers, trusts, duties and immunities of the Trustee, and the Company's obligations in connection therewith; and
- (4) the Legal Defeasance provisions of the Indenture.

In addition, the Company may, at its option and at any time, elect to have the obligations of the Company released with respect to certain covenants that are described in the Indenture ("Covenant Defeasance") and thereafter any omission to comply with such obligations shall not constitute a Default or Event of Default with respect to the Notes. In the event Covenant Defeasance occurs, certain events (not including non-payment, bankruptcy, receivership, rehabilitation and insolvency events) described under "Events of Default" will no longer constitute an Event of Default with respect to the Notes.

In order to exercise either Legal Defeasance or Covenant Defeasance:

- (1) the Company must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders of the Notes, cash in U.S. dollars, non-callable Government Securities, or a combination thereof, in such amounts as will be sufficient, in the opinion of a nationally recognized firm of independent public accountants, to pay the principal of, premium and Additional Interest, if any, and interest on the outstanding Notes on the stated maturity or on the applicable redemption date, as the case may be, and the Company must specify whether the Notes are being defeased to maturity or to a particular redemption date;
- (2) in the case of Legal Defeasance, the Company shall have delivered to the Trustee an opinion of counsel in the United States reasonably acceptable to the Trustee confirming that:

- (a) the Company has received from, or there has been published by, the Internal Revenue Service a ruling; or

- (b) since the Issue Date, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such opinion of counsel shall confirm that, the Holders of the outstanding Notes will not recognize income, gain or loss for federal income tax purposes as a result of such Legal Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;
- (3) in the case of Covenant Defeasance, the Company shall have delivered to the Trustee an opinion of counsel in the United States reasonably acceptable to the Trustee confirming that the Holders of the outstanding Notes will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;
- (4) no Default or Event of Default shall have occurred and be continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit) or insofar as Events of Default from bankruptcy or insolvency events are concerned, at any time in the period ending on the 91st day after the date of deposit;
- (5) such Legal Defeasance or Covenant Defeasance will not result in a breach or violation of, or constitute a default under any material agreement or instrument (other than the Indenture) to which the Company or any of its Restricted Subsidiaries is a party or by which the Company or any of its Restricted Subsidiaries is bound;
- (6) the Company must have delivered to the Trustee an opinion of counsel to the effect that after the 91st day following the deposit, the trust funds will not be subject to the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally;
- (7) the Company must deliver to the Trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the Holders of Notes over the other creditors of the Company with the intent of defeating, hindering, delaying or defrauding creditors of the Company or others; and
- (8) the Company must deliver to the Trustee an Officers' Certificate and an opinion of counsel, each stating that all conditions precedent provided for relating to the Legal Defeasance or the Covenant Defeasance have been complied with.

#### Transfer and Exchange

A Holder may transfer or exchange Notes in accordance with the Indenture. The registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and the Company may require a Holder to pay any taxes and fees required by law or permitted by the Indenture. The Company is not required to transfer or exchange any Note selected for redemption. Also, the Company is not required to transfer or exchange any Note for a period of 15 days before a selection of Notes to be redeemed.

The registered Holder of a Note will be treated as the owner of it for all purposes.

#### Amendment, Supplement and Waiver

Except as provided in the next two succeeding paragraphs, the Indenture or the Notes may be amended or supplemented with the consent of the Holders of at least a majority in principal amount of the Notes then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes), and any existing default or compliance with any provision of the Indenture or the Notes may be waived with the consent of the Holders of a majority in principal amount of the then outstanding Notes (including consents obtained in connection with a tender offer or exchange offer for Notes).

Without the consent of each Holder affected, an amendment or waiver may not (with respect to any Notes held by a non-consenting Holder):

- (1) reduce the principal amount of Notes whose Holders must consent to an amendment, supplement or waiver;
- (2) reduce the principal of or change the fixed maturity of any Note or alter the provisions with respect to the redemption of the Notes (other than provisions relating to the covenants described above under the caption "— Repurchase at the Option of Holders");
- (3) reduce the rate of or change the time for payment of interest on any Note;
- (4) waive a Default or Event of Default in the payment of principal of or premium and Additional Interest, if any, or interest on the Notes (except a rescission of acceleration of the Notes by the Holders of at least a majority in aggregate principal amount of the Notes and a waiver of the payment default that resulted from such acceleration);
- (5) make any Note payable in money other than that stated in the Notes;
- (6) make any change in the provisions of the Indenture relating to waivers of past Defaults or the rights of Holders of Notes to receive payments of principal of or premium and Additional Interest, if any, or interest on the Notes;
- (7) waive a redemption payment with respect to any Note (other than a payment required by one of the covenants described above under the caption "— Repurchase at the Option of Holders"); or

- (8) make any change in the foregoing amendment and waiver provisions.

In addition, any amendment to the provisions of Article 10 of the Indenture (which relates to subordination) will require the consent of the Holders of at least 75% in aggregate principal amount of the Notes then outstanding if such amendment would adversely affect the rights of Holders of Notes.

Notwithstanding the foregoing, without the consent of any Holder of Notes, the Company and the Trustee may amend or supplement the Indenture or the Notes:

- (1) to cure any ambiguity, defect or inconsistency;
- (2) to provide for uncertificated Notes in addition to or in place of certificated Notes;
- (3) to provide for the assumption of the Company's obligations to Holders of Notes in the case of a merger or consolidation;
- (4) to make any change that would provide any additional rights or benefits to the Holders of Notes or that does not adversely affect the legal rights under the Indenture of any such Holder;
- (5) to comply with requirements of the Commission in order to effect or maintain the qualification of the Indenture under the Trust Indenture Act; or
- (6) to conform the text of the Indenture or the Notes to any provision of this "Description of the Notes" to the extent that such provision in this "Description of the Notes" was intended to be a verbatim recitation of the Indenture, the Subsidiary Guarantees or the Notes.

### Concerning the Trustee

The Indenture contains certain limitations on the rights of the Trustee, should it become a creditor of the Company, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise. The Trustee is permitted to engage in other transactions; however, if it acquires any conflicting interest it must eliminate such conflict within 90 days, apply to the Commission for permission to continue or resign.

The Holders of a majority in principal amount of the then outstanding Notes have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to

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the Trustee, subject to certain exceptions. The Indenture provides that in case an Event of Default shall occur (which shall not be cured), the Trustee will be required, in the exercise of its power, to use the degree of care of a prudent person in the conduct of such person's affairs. Subject to such provisions, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request of any Holder of Notes, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

### Additional Information

Anyone who receives this prospectus may obtain a copy of the Indenture and Registration Rights Agreement without charge by writing to L-3 Communications Corporation, 600 Third Avenue, New York, New York 10016, Attention: Senior Vice President — Finance.

### Book-Entry, Delivery and Form

The Exchange Notes will be represented by one or more global notes in registered, global form without interest coupons (collectively, the "Global Exchange Note"). The Global Exchange Note initially will be deposited upon issuance with the Trustee as custodian for The Depository Trust Company ("DTC"), in New York, New York, and registered in the name of DTC or its nominee, in each case for credit to an account of a direct or indirect participant as described below.

Except as set forth below, the Global Exchange Notes may be transferred, in whole and not in part, only to another nominee of DTC or to a successor of DTC or its nominee. Beneficial interests in the Global Exchange Notes may not be exchanged for Exchange Notes in certificated form except in the limited circumstances described below. See "— Exchange of Book-Entry Notes for Certificated Notes." In addition, transfer of beneficial interests in the Global Notes will be subject to the applicable rules and procedures of DTC and its direct or indirect participants (including, if applicable, those of Euroclear and Clearstream), which may change from time to time.

The Notes may be presented for registration of transfer and exchange at the offices of the registrar.

### Depository Procedures

DTC has advised the Company that DTC is a limited-purpose trust company created to hold securities for its participating organizations (collectively, the "Participants") and to facilitate the clearance and settlement of transactions in those securities between Participants through electronic book-entry changes in accounts of Participants. The Participants include securities brokers and dealers (including the initial purchasers), banks, trust companies, clearing corporations and certain other organizations. Access to DTC's system is also available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Participant, either directly or indirectly (collectively, "Indirect Participants"). Persons who are not Participants may beneficially own securities held by or on behalf of DTC only through the Participants or Indirect Participants. The ownership interest and transfer of ownership interest of each actual purchaser of each security held by or on behalf of DTC are recorded on the records of the Participants and Indirect Participants.

DTC has also advised the Company that pursuant to procedures established by it:

- (1) upon deposit of the Global Exchange Note, DTC will credit the accounts of Participants with portions of the principal amount of Global Exchange Note; and
- (2) ownership of such interests in the Global Exchange Note will be shown on, and the transfer of ownership thereof will be effected only through, records maintained by DTC (with respect to Participants) or by Participants and the Indirect Participants (with respect to other owners of beneficial interests in the Global Exchange Note).

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Clearstream) that are Participants in such system. All interests in a Global Exchange Note, including those held through Euroclear or Clearstream, may be subject to the procedures and requirements of DTC. Those interests held by Euroclear or Clearstream may also be subject to the procedures and requirements of such system.

The laws of some states require that certain persons take physical delivery in definitive form of securities that they own. Consequently, the ability to transfer beneficial interest in a Global Exchange Note to such persons may be limited to that extent. Because DTC can act only on behalf of Participants, which in turn act on behalf of Indirect Participants and certain banks, the ability of a person having a beneficial interest in a Global Exchange Note to pledge such interest to persons or entities that do not participate in DTC system, or otherwise take actions in respect of such interests, may be affected by the lack of physical certificate evidencing such interests. For certain other restrictions on the transferability of the Notes see, "— Exchange of Book-Entry Notes for Certificated Notes."

**Except as described below, owners of interests in the Global Exchange Notes will not have Notes registered in their names, will not receive physical delivery of Exchange Notes in certificated form and will not be considered the registered owners or Holders thereof under the Indenture for any purpose.**

Payments in respect of the principal and premium and Additional Interest, if any, and interest on a Global Exchange Note registered in the name of DTC or its nominee will be payable by the Trustee to DTC or its nominee in its capacity as the registered Holder under the Indenture. Under the terms of the Indenture, the Company and the Trustee will treat the persons in whose names the Exchange Notes, including the Global Exchange Notes, are registered as the owners thereof for the purpose of receiving such payments and for any and all other purposes whatsoever. Consequently, neither the Company, the Trustee nor any agent of the Company or the Trustee has or will have any responsibility or liability for:

- (1) any aspect of DTC's records or any Participant's or Indirect Participant's records relating to or payments made on account of beneficial ownership interests in the Global Exchange Notes, or for maintaining, supervising or reviewing any of DTC's records or any Participant's or Indirect Participant's records relating to the beneficial ownership interests in the Global Exchange Notes; or
- (2) any other matter relating to the actions and practices of DTC or any of its Participants or Indirect Participants.

DTC has advised the Company that its current practices, upon receipt of any payment in respect of securities such as the Exchange Notes (including principal and interest), is to credit the accounts of the relevant Participants with the payment on the payment date, in amounts proportionate to their respective holdings in principal amount of beneficial interests in the relevant security such as the Global Exchange Notes as shown on the records of DTC. Payments by Participants and the Indirect Participants to the beneficial owners of Notes will be governed by standing instructions and customary practices and will be the responsibility of the Participants or the Indirect Participants and will not be the responsibility of DTC, the Trustee or the Company. Neither the Company nor the Trustee will be liable for any delay by DTC or its Participants in identifying the beneficial owners of the Exchange Notes, and the Company and the Trustee may conclusively rely on and will be protected in relying on instructions from DTC or its nominee as the registered owner of the Exchange Notes for all purposes.

Except for trades involving only Euroclear and Clearstream participants, interests in the Global Exchange Notes will trade in DTC's Same-Day Funds Settlement System and secondary market trading activity in such interests will, therefore, settle in immediately available funds, subject in all cases to the rules and procedures of DTC and its participants.

Transfers between Participants in DTC will be effected in accordance with DTC's procedures, and will be settled in same-day funds. Transfers between participants in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Subject to compliance with the transfer restrictions applicable to the Exchange Notes described herein, crossmarket transfers between Participants in DTC, on the one hand, and Euroclear or

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Clearstream participants, on the other hand, will be effected through DTC in accordance with DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by its respective depository; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (Brussels time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its respective depository to take action to effect final settlement on its behalf by delivering or receiving interests in the relevant Global Exchange Note in DTC, and making or receiving payment in accordance with normal procedures for same-day fund settlement applicable to DTC. Euroclear participants and Clearstream participants may not deliver instructions directly to the Depositories for Euroclear or Clearstream.

Because of time zone differences, the securities accounts of a Euroclear or Clearstream participant purchasing an interest in a Global Exchange Note from a Participant in DTC will be credited, and any such crediting will be reported to the relevant Euroclear or Clearstream participant, during the securities settlement processing day (which must be a business day for Euroclear or Clearstream) immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a Global Exchange Note by or through a Euroclear or Clearstream participant to a Participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

DTC has advised the Company that it will take any action permitted to be taken by a Holder of Exchange Notes only at the direction of one or more Participants to whose account DTC interests in the Global Exchange Notes are credited and only in respect of such portion of the aggregate principal amount of the Notes as to which such Participant or Participants has or have given direction. However, if there is an Event of Default under the Notes, DTC reserves the right to exchange Global Exchange Notes for legended Exchange Notes in certificated form, and to distribute such Exchange Notes to its Participants.

The information in this section concerning DTC, Euroclear and Clearstream and their book-entry systems has been obtained from sources that the Company believes to be reliable, but the Company takes no responsibility

for the accuracy thereof.

Although DTC, Euroclear and Clearstream have agreed to the foregoing procedures to facilitate transfers of interests in the Global Exchange Note among participants in DTC, Euroclear and Clearstream, they are under no obligation to perform or to continue to perform such procedures, and such procedures may be discontinued at any time. None of the Company, the initial purchasers or the Trustee will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

#### **Exchange of Book-Entry Notes for Certificated Notes**

A Global Exchange Note is exchangeable for definitive Exchange Notes in registered certificated form if:

- (1) DTC (A) notifies the Company that it is unwilling or unable to continue as depository for the Global Exchange Note and the Company thereupon fails to appoint a successor depository or (B) has ceased to be a clearing agency registered under the Exchange Act; or
- (2) the Company, at its option, notifies the Trustee in writing that it elects to cause issuance of the Exchange Notes in certificated form.

In addition, beneficial interests in a Global Exchange Note may be exchanged for certificated Exchange Notes upon request but only upon at least 20 days prior written notice given to the Trustee by or on behalf of DTC in accordance with customary procedures. In all cases, certificated Exchange Notes delivered in exchange for any Global Exchange Note or beneficial interest therein will be registered in names, and issued in any approved denominations, requested by or on behalf of DTC (in accordance with its customary procedures).

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#### **Certificated Notes**

Subject to certain conditions, any person having a beneficial interest in the Global Exchange Note may, upon request to the Trustee, exchange such beneficial interest for Exchange Notes in the form of certificated Exchange Notes. Upon any such issuance, the Trustee is required to register such certificated Exchange Notes in the name of, and cause the same to be delivered to, such person or persons (or the nominee of any thereof). In addition, if (i) the Company notifies the Trustee in writing that DTC is no longer willing or able to act as a depository and the Company is unable to locate a qualified successor within 90 days or (ii) the Company, at its option, notifies the Trustee in writing that it elects to cause the issuance of Exchange Notes in the form of certificated Exchange Notes under the Indenture, then, upon surrender by the Global Exchange Note Holder of its Global Note, Notes in such form will be issued to each person that the Global Exchange Note Holder and DTC identify as being the beneficial owner of the related Exchange Notes.

Neither the Company nor the Trustee will be liable for any delay by the Global Exchange Note Holder or DTC in identifying the beneficial owners of Exchange Notes and the Company and the Trustee may conclusively rely on, and will be protected in relying on, instructions from the Global Exchange Note Holder or DTC for all purposes.

#### **Same Day Settlement and Payment**

The Indenture requires that payments in respect of the Exchange Notes represented by the Global Exchange Note (including principal, premium, if any, interest and Additional Interest, if any) be made by wire transfer of immediately available funds to the accounts specified by the Global Exchange Note Holder. With respect to certificated Exchange Notes, the Company will make all payments of principal, premium, if any, interest and Additional Interest, if any, by wire transfer of immediately available funds to the accounts specified by the Holders thereof or, if no such account is specified, by mailing a check to each such Holder's registered address. The Company expects that secondary trading in the certificated Exchange Notes will also be settled in immediately available funds.

#### **Registration Rights; Additional Interest**

The Company, the Guarantors and the initial purchasers entered into the Registration Rights Agreement on December 22, 2003. Pursuant to the Registration Rights Agreement, the Company and the Guarantors agreed to file with the Commission the Exchange Offer Registration Statement on the appropriate form under the Securities Act with respect to the Exchange Notes. Upon the effectiveness of the Exchange Offer Registration Statement, the Company will offer to the Holders of Transfer Restricted Securities pursuant to the Exchange Offer who are able to make certain representations the opportunity to exchange their Transfer Restricted Securities for Exchange Notes. If:

- (1) the Company and the Guarantors are not required to file the Exchange Offer Registration Statement or permitted to consummate the Exchange Offer because the Exchange Offer is not permitted by applicable law or Commission policy; or
- (2) any Holder of Transfer Restricted Securities notifies the Company prior to the 20th day following consummation of the Exchange Offer that:
  - (a) it is prohibited by law or Commission policy from participating in the Exchange Offer; or
  - (b) it may not resell the Exchange Notes acquired by it in the Exchange Offer to the public without delivering a prospectus and the prospectus contained in the Exchange Offer Registration Statement is not appropriate or available for such resales; or
  - (c) it is a broker-dealer and owns Notes acquired directly from the Company or an affiliate of the Company,

the Company and the Guarantors will file with the Commission a Shelf Registration Statement to cover resales of the Notes by the Holders thereof who satisfy certain conditions relating to the



promptly as possible by the Commission.

For purposes of the foregoing, "Transfer Restricted Securities" means each outstanding note until:

- (1) the date on which such outstanding note has been exchanged by a person other than a broker-dealer for an Exchange Note in the Exchange Offer;
- (2) following the exchange by a broker-dealer in the Exchange Offer of an outstanding note for an Exchange Note, the date on which such Exchange Note is sold to a purchaser who receives from such broker-dealer on or prior to the date of such sale a copy of the prospectus contained in the Exchange Offer Registration Statement;
- (3) the date on which such outstanding note has been effectively registered under the Securities Act and disposed of in accordance with the Shelf Registration Statement; or
- (4) the date on which such outstanding note is distributed to the public pursuant to Rule 144 under the Act.

The Registration Rights Agreement provides that:

- (1) the Company and the Guarantors will file an Exchange Offer Registration Statement with the Commission on or prior to 90 days after the Issue Date;
- (2) the Company and the Guarantors will use all commercially reasonable efforts to have the Exchange Offer Registration Statement declared effective by the Commission on or prior to 180 days after the Issue Date;
- (3) unless the Exchange Offer would not be permitted by applicable law or Commission policy, the Company and the Guarantors will commence the Exchange Offer and use all commercially reasonable efforts to issue on or prior to 30 business days after the date on which the Exchange Offer Registration Statement was declared effective by the Commission, Exchange Notes in exchange for all Notes tendered prior thereto in the Exchange Offer; and
- (4) if obligated to file the Shelf Registration Statement, the Company and the Guarantors will use their best efforts to file the Shelf Registration Statement with the Commission on or prior to 30 days after such filing obligation arises and to use all commercially reasonable efforts to cause the Shelf Registration Statement to be declared effective by the Commission on or prior to 90 days after such obligation arises.

If:

- (a) the Company and the Guarantors fail to file any of the Registration Statements required by the Registration Rights Agreement on or before the date specified above for such filing;
- (b) any of such Registration Statements is not declared effective by the Commission on or prior to the date specified for such effectiveness (the "Effectiveness Target Date");
- (c) the Company and the Guarantors fail to consummate the Exchange Offer within 30 business days of the Effectiveness Target Date with respect to the Exchange Offer Registration Statement; or
- (d) the Shelf Registration Statement or the Exchange Offer Registration Statement is declared effective but thereafter ceases, subject to certain exceptions, to be effective or usable in connection with resales of Transfer Restricted Securities during the periods specified in the Registration Rights Agreement (each such event referred to in clauses (a) through (d) above as "Registration Default"),

then the Company and the Guarantors will pay Additional Interest to each Holder of outstanding notes, with respect to the first 90-day period immediately following the occurrence of the first Registration Default in an amount equal to \$.05 per week per \$1,000 principal amount of outstanding notes held by such Holder.

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The amount of the Additional Interest will increase by an additional \$.05 per week per \$1,000 principal amount of outstanding notes with respect to each subsequent 90-day period until all Registration Defaults have been cured, up to a maximum amount of Additional Interest of \$.50 per week per \$1,000 principal amount of outstanding notes.

All accrued Additional Interest will be paid by the Company and the Guarantors on each Damages Payment Date to the Global Note Holder by wire transfer of immediately available funds or by federal funds check and to Holders of certificated outstanding notes by wire transfer to the accounts specified by them or by mailing checks to their registered addresses if no such accounts have been specified.

Following the cure of all Registration Defaults, the accrual of Additional Interest will cease.

Holders of outstanding notes will be required to make certain representations to the Company and the Guarantors (as described in the Registration Rights Agreement) in order to participate in the Exchange Offer and will be required to deliver information to be used in connection with the Shelf Registration Statement and to provide comments on the Shelf Registration Statement within the time periods set forth in the Registration Rights Agreement in order to have their outstanding notes included in the Shelf Registration Statement and benefit from the provisions regarding Additional Interest set forth above.

#### Certain Definitions

Set forth below are certain defined terms used in the Indenture. Reference is made to the Indenture for a full disclosure of all such terms, as well as any other capitalized terms used herein for which no definition is provided.

"2000 Convertible Notes" means the \$300,000,000 in aggregate principal amount of Holdings' 5.25% Convertible Senior Subordinated Notes due 2009, issued pursuant to the 2000 Convertible Note Indenture in November and December of 2000 and guaranteed by the Company and the other guarantors thereof.

"2000 Convertible Note Indenture" means the indenture, dated as of November 21, 2000, among The Bank of New York, as trustee, Holdings, the Company, as a guarantor, and the other guarantors named therein, with respect to the 2000 Convertible Notes.

"2001 CODES" means the \$420,000,000 in aggregate principal amount of Holdings' 4.00% Senior Subordinated Convertible Contingent Debt Securities (CODES) due 2011, issued pursuant to the 2001 CODES Indenture in October and November 2001 and guaranteed by the Company and the other guarantors thereof.

"2001 CODES Indenture" means the indenture, dated as of October 24, 2001, among The Bank of New York, as trustee, Holdings, the Company, as a guarantor, and the other guarantors named therein, with respect to the 2001 CODES.

"2002 Indenture" means the indenture, dated as of June 28, 2002, among The Bank of New York, as trustee, the Company and the guarantors thereto, with respect to the 2002 Notes.

"2002 Notes" means the \$750,000,000 in aggregate principal amount of the Company's 7 5/8% Senior Subordinated Notes due 2012, issued pursuant to the 2002 Indenture on June 28, 2002.

"Acquired Debt" means, with respect to any specified Person:

- (1) Indebtedness of any other Person existing at the time such other Person is merged with or into or became a Restricted Subsidiary of such specified Person, including, without limitation, Indebtedness incurred in connection with, or in contemplation of, such other Person merging with or into or becoming a Restricted Subsidiary of such specified Person; and
- (2) Indebtedness secured by a Lien encumbering any asset acquired by such specified Person.

"Additional Interest" means all additional interest then owing pursuant to Section 5 of the Registration Rights Agreement.

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"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling", "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise; provided that beneficial ownership of 10% or more of the voting securities of a Person shall be deemed to be control.

"Asset Sale" means:

- (1) the sale, lease, conveyance or other disposition of any assets or rights (including, without limitation, by way of a sale and leaseback) other than sales of inventory in the ordinary course of business (provided that the sale, lease, conveyance or other disposition of all or substantially all of the assets of the Company and its Restricted Subsidiaries taken as a whole will be governed by the provisions of the Indenture described above under the caption "— Change of Control" and/or the provisions described above under the caption "— Merger, Consolidation or Sale of Assets" and not by the provisions of the Asset Sale covenant); and
- (2) the issue or sale by the Company or any of its Subsidiaries of Equity Interests of any of the Company's Restricted Subsidiaries,

in the case of either clause (1) or (2), whether in a single transaction or a series of related transactions (A) that have a fair market value in excess of \$5.0 million or (B) for net proceeds in excess of \$5.0 million.

Notwithstanding the foregoing:

- (1) a transfer of assets by the Company to a Restricted Subsidiary or by a Restricted Subsidiary to the Company or to another Restricted Subsidiary;
- (2) an issuance of Equity Interests by a Restricted Subsidiary to the Company or to another Restricted Subsidiary;
- (3) a Restricted Payment that is permitted by the covenant described above under the caption "— Certain Covenants — Restricted Payments"; and
- (4) a disposition of Cash Equivalents in the ordinary course of business will not be deemed to be an Asset Sale.

"Attributable Debt" in respect of a sale and leaseback transaction means, at the time of determination, the present value (discounted at the rate of interest implicit in such transaction, determined in accordance with GAAP) of the obligation of the lessee for net rental payments during the remaining term of the lease included in such sale and leaseback transaction (including any period for which such lease has been extended or may, at the option of the lessor, be extended).

"Capital Lease Obligation" means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at such time be required to be capitalized on a balance sheet in accordance with GAAP.

"Capital Stock" means:

- (1) in the case of a corporation, corporate stock;
- (2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;
- (3) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited); and
- (4) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person.

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"Cash Equivalents" means:

- (1) United States dollars;
- (2) securities issued or directly and fully guaranteed or insured by the United States government or any agency or instrumentality thereof having maturities of not more than one year from the date of acquisition;
- (3) certificates of deposit and eurodollar time deposits with maturities of six months or less from the date of acquisition, bankers' acceptances with maturities not exceeding six months and overnight bank deposits, in each case with any domestic financial institution to the Senior Credit Facilities or with any domestic commercial bank having capital and surplus in excess of \$500.0 million and a Thompson Bank Watch Rating of "B" or better;
- (4) repurchase obligations with a term of not more than seven days for underlying securities of the types described in clauses (2) and (3) above entered into with any financial institution meeting the qualifications specified in clause (3) above;
- (5) commercial paper having the highest rating obtainable from Moody's or S&P and in each case maturing within six months after the date of acquisition;
- (6) investment funds investing 95% of their assets in securities of the types described in clauses (1)-(5) above; and
- (7) readily marketable direct obligations issued by any State of the United States of America or any political subdivision thereof having maturities of not more than one year from the date of acquisition and having one of the two highest rating categories obtainable from either Moody's or S&P.

"Change of Control" means the occurrence of any of the following:

- (1) the sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the assets of the Company and its Restricted Subsidiaries taken as a whole to any "person" (as such term is used in Section 13(d)(3) of the Exchange Act) other than the Principals or their Related Parties (as defined below);
- (2) the adoption of a plan relating to the liquidation or dissolution of the Company;
- (3) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any "person" (as defined above), other than the Principals and their Related Parties, becomes the "beneficial owner" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the Voting Stock of the Company (measured by voting power rather than number of shares); or
- (4) the first day on which a majority of the members of the Board of Directors of the Company are not Continuing Directors.

"Consolidated Cash Flow" means, with respect to any Person for any period, the Consolidated Net Income of such Person for such period plus:

- (1) an amount equal to any extraordinary loss plus any net loss realized in connection with an Asset Sale (to the extent such losses were deducted in computing such Consolidated Net Income); *plus*
- (2) provision for taxes based on income or profits of such Person and its Restricted Subsidiaries for such period, to the extent that such provision for taxes was included in computing such Consolidated Net Income; *plus*
- (3) consolidated interest expense of such Person and its Restricted Subsidiaries for such period, whether paid or accrued and whether or not capitalized (including, without limitation, original issue discount, non-cash interest payments, the interest component of any deferred

payment obligations, the interest component of all payments associated with Capital Lease Obligations, imputed interest with respect to Attributable Debt, commissions, discounts and other fees and charges incurred in respect of letter of credit or bankers' acceptance financings, and net payments (if any) pursuant to Hedging Obligations), to the extent that any such expense was deducted in computing such Consolidated Net Income; *plus*

- (4) depreciation, amortization (including amortization of goodwill, debt issuance costs and other intangibles but excluding amortization of other prepaid cash expenses that were paid in a prior period) and other non-cash expenses (excluding any such non-cash expense to the extent that it represents an accrual of or reserve for cash expenses in any future period or amortization of a prepaid cash expense that was paid in a prior period) of such Person and its Restricted Subsidiaries for such period to the extent that such depreciation, amortization and other non-cash expenses were deducted in computing such Consolidated Net Income; *minus*
- (5) non-cash items (excluding any items that were accrued in the ordinary course of business) increasing such Consolidated Net Income for such period, in each case, on a consolidated basis and determined in accordance with GAAP.

"Consolidated Net Income" means, with respect to any Person for any period, the aggregate of the Net Income of such Person and its Restricted Subsidiaries for such period, on a consolidated basis, determined in accordance with GAAP; provided that:

- (1) the Net Income of any Person that is not a Restricted Subsidiary or that is accounted for by the equity method of accounting shall be included only to the extent of the amount of dividends or distributions paid in cash to the referent Person or a Restricted Subsidiary thereof;
- (2) the Net Income of any Restricted Subsidiary shall be excluded to the extent that the declaration or payment of dividends or similar distributions by that Restricted Subsidiary of that Net Income is not at the date of determination permitted without any prior governmental approval (that has not been obtained) or, directly or indirectly, by operation of the terms of its charter or any agreement,

instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Restricted Subsidiary or its stockholders;

- (3) the Net Income of any Person acquired in a pooling of interests transaction for any period prior to the date of such acquisition shall be excluded;
- (4) the cumulative effect of a change in accounting principles shall be excluded;
- (5) the Net Income of any Unrestricted Subsidiary shall be excluded, whether or not distributed to the Company or one of its Restricted Subsidiaries; and
- (6) the Net Income of any Restricted Subsidiary shall be calculated after deducting preferred stock dividends payable by such Restricted Subsidiary to Persons other than the Company and its other Restricted Subsidiaries.

"Consolidated Tangible Assets" means, with respect to the Company, the total consolidated assets of the Company and its Restricted Subsidiaries, less the total intangible assets of the Company and its Restricted Subsidiaries, as shown on the most recent internal consolidated balance sheet of the Company and such Restricted Subsidiaries calculated on a consolidated basis in accordance with GAAP.

"Continuing Directors" means, as of any date of determination, any member of the Board of Directors of the Company who:

- (1) was a member of such Board of Directors on the date of the Indenture; or
- (2) was nominated for election or elected to such Board of Directors with the approval of a majority of the Continuing Directors who were members of such Board at the time of such nomination or election.

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"Credit Facilities" means, with respect to the Company, one or more debt facilities (including, without limitation, the Senior Credit Facilities) or commercial paper facilities with banks or other institutional lenders providing for revolving credit loans, term loans, receivables financing (including through the sale of receivables to such lenders or to special purpose entities formed to borrow from such lenders against such receivables) or letters of credit, in each case, as amended, restated, modified, renewed, refunded, replaced or refinanced in whole or in part from time to time (and whether or not with the original lender or lenders and whether provided under the original Credit Facilities or other credit, agreement, indenture or otherwise).

"December 1998 Indenture" means the indenture, dated as of December 11, 1998, between The Bank of New York, as trustee, the Company and the guarantors party thereto, with respect to the December 1998 Notes.

"December 1998 Notes" means the \$200,000,000 in aggregate principal amount of the Company's 8% Senior Subordinated Notes due 2008, issued pursuant to the December 1998 Indenture on December 11, 1998.

"Default" means any event that is, or with the passage of time or the giving of notice or both would be, an Event of Default.

"Designated Senior Debt" means:

- (1) any Indebtedness outstanding under the Senior Credit Facilities; and
- (2) any other Senior Debt permitted under the Indenture the principal amount of which is \$25.0 million or more and that has been designated by the Company as "Designated Senior Debt."

"Disqualified Stock" means any Capital Stock that, by its terms (or by the terms of any security into which it is convertible, or for which it is exchangeable, at the option of the holder thereof), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the Holder thereof, in whole or in part, on or prior to the date that is 91 days after the date on which the Notes mature; provided, however, that any Capital Stock that would constitute Disqualified Stock solely because the holders thereof have the right to require the Company to repurchase such Capital Stock upon the occurrence of a Change of Control or an Asset Sale shall not constitute Disqualified Stock if the terms of such Capital Stock provide that the Company may not repurchase or redeem any such Capital Stock pursuant to such provisions unless such repurchase or redemption complies with the covenant described above under the caption "— Certain Covenants — Restricted Payments"; and provided further, that if such Capital Stock is issued to any plan for the benefit of employees of the Company or its Subsidiaries or by any such plan to such employees, such Capital Stock shall not constitute Disqualified Stock solely because it may be required to be repurchased by the Company in order to satisfy applicable statutory or regulatory obligations.

"Equity Interests" means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

"Equity Offering" means any public or private sale of equity securities (excluding Disqualified Stock) of the Company or Holdings, other than any private sales to an Affiliate of the Company or Holdings.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Existing Indebtedness" means any Indebtedness of the Company and its Restricted Subsidiaries (other than Indebtedness under the Senior Credit Facilities and the Notes) in existence on the date of the Indenture, until such amounts are repaid.

"Fixed Charges" means, with respect to any Person for any period, the sum, without duplication, of:

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- (1) the consolidated interest expense of such Person and its Restricted Subsidiaries for such period, whether paid or accrued (including, without limitation, original issue discount, non-cash interest payments, the interest component of any deferred payment obligations, the interest component of all payments associated with Capital Lease Obligations, imputed interest with respect to Attributable Debt, commissions, discounts and other fees and charges incurred in respect of letter of credit or bankers' acceptance financings, and net payments (if any) pursuant to Hedging Obligations, but excluding amortization of debt issuance costs);

- (2) the consolidated interest of such Person and its Restricted Subsidiaries that was capitalized during such period;
- (3) any interest expense on Indebtedness of another Person that is guaranteed by such Person or one of its Restricted Subsidiaries or secured by a Lien on assets of such Person or one of its Restricted Subsidiaries (whether or not such Guarantee or Lien is called upon); and
- (4) the product of:
  - (a) all dividend payments, whether or not in cash, on any series of preferred stock of such Person or any of its Restricted Subsidiaries, other than dividend payments on Equity Interests payable solely in Equity Interests of the Company, times
  - (b) a fraction, the numerator of which is one and the denominator of which is one minus the then current combined federal, state and local statutory tax rate of such Person, expressed as a decimal,

in each case, on a consolidated basis and in accordance with GAAP.

"Fixed Charge Coverage Ratio" means, with respect to any Person for any period, the ratio of the Consolidated Cash Flow of such Person for such period to the Fixed Charges of such Person and its Restricted Subsidiaries for such period. In the event that the Company or any of its Restricted Subsidiaries incurs, assumes, Guarantees or redeems any Indebtedness (other than revolving credit borrowings) or issues preferred stock subsequent to the commencement of the period for which the Fixed Charge Coverage Ratio is being calculated but on or prior to the date on which the event for which the calculation of the Fixed Charge Coverage Ratio is made (the "Calculation Date"), then the Fixed Charge Coverage Ratio shall be calculated giving pro forma effect to such incurrence, assumption, Guarantee or redemption of Indebtedness, or such issuance or redemption of preferred stock, as if the same had occurred at the beginning of the applicable four-quarter reference period. In addition, for purposes of making the computation referred to above:

- (1) acquisitions that have been made by the Company or any of its Restricted Subsidiaries, including through mergers or consolidations and including any related financing transactions, during the four-quarter reference period or subsequent to such reference period and on or prior to the Calculation Date shall be deemed to have occurred on the first day of the four-quarter reference period and Consolidated Cash Flow for such reference period shall be calculated without giving effect to clause (3) of the proviso set forth in the definition of Consolidated Net Income;
- (2) the Consolidated Cash Flow attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses disposed of prior to the Calculation Date, shall be excluded; and
- (3) the Fixed Charges attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses disposed of prior to the Calculation Date, shall be excluded, but only to the extent that the obligations giving rise to such Fixed Charges will not be obligations of the referent Person or any of its Restricted Subsidiaries following the Calculation Date.

"Foreign Subsidiary" means a Restricted Subsidiary of the Company that was not organized or existing under the laws of the United States, any state thereof, the District of Columbia or any territory thereof or has not guaranteed or otherwise provided credit support for any Indebtedness of the Company.

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"GAAP" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which were in effect on April 30, 1997.

"Guarantee" means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including, without limitation, letters of credit and reimbursement agreements in respect thereof), of all or any part of any Indebtedness.

"Guarantors" means each Subsidiary of the Company that executes a Subsidiary Guarantee in accordance with the provisions of the Indenture, and their respective successors and assigns.

"Hedging Obligations" means, with respect to any Person, the obligations of such Person under:

- (1) currency exchange or interest rate swap agreements, interest rate cap agreements and currency exchange or interest rate collar agreements; and
- (2) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange rates or interest rates.

"Holdings" means L-3 Communications Holdings, Inc., a Delaware corporation.

"Indebtedness" means, with respect to any Person, any indebtedness of such Person, whether or not contingent, in respect of borrowed money or evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof) or banker's acceptances or representing Capital Lease Obligations or the balance deferred and unpaid of the purchase price of any property or representing any Hedging Obligations, except any such balance that constitutes an accrued expense or trade payable, if and to the extent any of the foregoing indebtedness (other than letters of credit and Hedging Obligations) would appear as a liability upon a balance sheet of such Person prepared in accordance with GAAP, as well as all indebtedness of others secured by a Lien on any asset of such Person (whether or not such indebtedness is assumed by such Person) and, to the extent not otherwise included, the Guarantee by such Person of any indebtedness of any other Person. The amount of any Indebtedness outstanding as of any date shall be:

- (1) the accreted value thereof, in the case of any Indebtedness that does not require current payments of interest; and
- (2) the principal amount thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Indebtedness.

"Investments" means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the forms of direct or indirect loans (including guarantees of Indebtedness or other obligations), advances or capital contributions (excluding commission, travel, moving and similar loans or advances to officers

and employees made in the ordinary course of business), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities, together with all items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP. If the Company or any Restricted Subsidiary of the Company sells or otherwise disposes of any Equity Interests of any direct or indirect Restricted Subsidiary of the Company such that, after giving effect to any such sale or disposition, such Person is no longer a Subsidiary of the Company, the Company shall be deemed to have made an Investment on the date of any such sale or disposition equal to the fair market value of the Equity Interests of such Subsidiary not sold or disposed of in an amount determined as provided in the last paragraph of the covenant described above under the caption "—Restricted Payments."

"Issue Date" means December 22, 2003.

"Lehman Investor" means Lehman Brothers Holdings Inc. and any of its Affiliates.

"Lien" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise

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perfected under applicable law (including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction).

"Marketable Securities" means, with respect to any Asset Sale, any readily marketable equity securities that are:

- (1) traded on The New York Stock Exchange, the American Stock Exchange or the Nasdaq National Market; and
- (2) issued by a corporation having a total equity market capitalization of not less than \$250.0 million;

provided that the excess of:

- (a) the aggregate amount of securities of any one such corporation held by the Company and any Restricted Subsidiary; over
- (b) ten times the average daily trading volume of such securities during the 20 immediately preceding trading days

shall be deemed not to be Marketable Securities; as determined on the date of the contract relating to such Asset Sale.

"May 2003 Indenture" means the indenture, dated as of May 21, 2003, between the Bank of New York, as trustee, and the Company, with respect to the May 2003 Notes.

"May 2003 Notes" means the \$400,000,000 in aggregate principal amount of the Company's 6 1/8% Senior Subordinated notes due 2013, issued pursuant to the May 2003 Indenture on May 21, 2003.

"Moody's" means Moody's Investors Services, Inc.

"Net Income" means, with respect to any Person, the net income (loss) of such Person, determined in accordance with GAAP and before any reduction in respect of preferred stock dividends, excluding, however:

- (1) any gain or loss, together with any related provision for taxes thereon, realized in connection with:
  - (a) any Asset Sale (including, without limitation, dispositions pursuant to sale and leaseback transactions); or
  - (b) the disposition of any securities by such Person or any of its Restricted Subsidiaries or the extinguishment of any Indebtedness of such Person or any of its Restricted Subsidiaries; and
- (2) any extraordinary gain or loss, together with any related provision for taxes on such extraordinary gain or loss; and
- (3) the cumulative effect of a change in accounting principles.

"Net Proceeds" means the aggregate cash proceeds received by the Company or any of its Subsidiaries in respect of any Asset Sale (including, without limitation, any cash received upon the sale or other disposition of any non-cash consideration received in any Asset Sale), net of the direct costs relating to such Asset Sale (including, without limitation, legal, accounting and investment banking fees, and sales commissions) and any relocation expenses incurred as a result thereof, taxes paid or payable as a result thereof (after taking into account any available tax credits or deductions and any tax sharing arrangements), amounts required to be applied to the repayment of Indebtedness secured by a Lien on the asset or assets that were the subject of such Asset Sale and any reserve for adjustment in respect of the sale price of such asset or assets established in accordance with GAAP.

"Non-Recourse Debt" means Indebtedness:

- (1) as to which neither the Company nor any of its Restricted Subsidiaries:

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- (a) provides credit support of any kind (including any undertaking, agreement or instrument that would constitute Indebtedness);
    - (b) is directly or indirectly liable (as a guarantor or otherwise); or
    - (c) constitutes the lender;
  - (2) no default with respect to which (including any rights that the holders thereof may have to take enforcement action against an Unrestricted Subsidiary) would permit (upon notice, lapse of time or both) any holder of any other Indebtedness (other than Indebtedness incurred under Credit Facilities) of the Company or any of its Restricted Subsidiaries to declare a default on such other Indebtedness or cause the payment thereof to be accelerated or payable prior to its stated maturity; and

- (3) as to which the lenders have been notified in writing that they will not have any recourse to the stock or assets of the Company or any of its Restricted Subsidiaries.

"Obligations" means any principal, premium (if any), Additional Interest (if any), interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization, whether or not a claim for post-filing interest is allowed in such proceeding), penalties, fees, charges, expenses, indemnifications, reimbursement obligations, damages, guarantees and other liabilities or amounts payable under the documentation governing any Indebtedness or in respect thereto.

"Permitted Investment" means:

- (1) any Investment in the Company or in a Restricted Subsidiary of the Company that is a Guarantor;
- (2) any Investment in cash or Cash Equivalents;
- (3) any Investment by the Company or any Restricted Subsidiary of the Company in a Person, if as a result of such Investment:
  - (a) such Person becomes a Restricted Subsidiary of the Company and a Guarantor; or
  - (b) such Person is merged, consolidated or amalgamated with or into, or transfers or conveys substantially all of its assets to, or is liquidated into, the Company or a Restricted Subsidiary of the Company that is a Guarantor;
- (4) any Restricted Investment made as a result of the receipt of non-cash consideration from an Asset Sale that was made pursuant to and in compliance with the covenant described above under the caption "— Repurchase at the Option of Holders — Asset Sales" or any disposition of assets not constituting an Asset sale;
- (5) any acquisition of assets solely in exchange for the issuance of Equity Interests (other than Disqualified Stock) of the Company;
- (6) advances to employees not to exceed \$2.5 million at any one time outstanding;
- (7) any Investment acquired in connection with or as a result of a workout or bankruptcy of a customer or supplier;
- (8) Hedging Obligations permitted to be incurred under the covenant described above under the caption "— Incurrence of Indebtedness and Issuance of Preferred Stock";
- (9) any Investment in a Similar Business that is not a Restricted Subsidiary; provided that the aggregate fair market value of all Investments outstanding pursuant to this clause (9) (valued on the date each such Investment was made and without giving effect to subsequent changes in value) may not at any one time exceed 10% of the Consolidated Tangible Assets of the Company; and
- (10) other Investments in any Person having an aggregate fair market value (measured on the date each such Investment was made and without giving effect to subsequent changes in value), when taken together with all other Investments made pursuant to this clause (10) that are at the time outstanding, not to exceed \$30.0 million.

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"Permitted Joint Venture" means any joint venture, partnership or other Person designated by the Board of Directors (until designation by the Board of Directors to the contrary); provided that:

- (1) at least 25% of the Capital Stock thereof with voting power under ordinary circumstances to elect directors (or Persons having similar or corresponding powers and responsibilities) is at the time owned (beneficially or directly) by the Company and/or by one or more Restricted Subsidiaries of the Company; and
- (2) such joint venture, partnership or other Person is engaged in a Similar Business. Any such designation or designation to the contrary shall be evidenced to the Trustee by promptly filing with the Trustee a copy of the resolution giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing provisions.

"Permitted Junior Securities" means Equity Interests in the Company or debt securities that are subordinated to all Senior Debt (and any debt securities issued in exchange for Senior Debt) to substantially the same extent as, or to a greater extent than, the Notes and the Subsidiary Guarantees are subordinated to Senior Debt under the Indenture.

"Permitted Liens" means:

- (1) Liens securing Senior Debt of the Company or any Guarantor that was permitted by the terms of the Indenture to be incurred;
- (2) Liens in favor of the Company or any Guarantor;
- (3) Liens on property of a Person existing at the time such Person is merged into or consolidated with the Company or any Restricted Subsidiary of the Company; provided that such Liens were in existence prior to the contemplation of such merger or consolidation and do not extend to any assets other than those of the Person merged into or consolidated with the Company;
- (4) Liens on property existing at the time of acquisition thereof by the Company or any Subsidiary of the Company, provided that such Liens were in existence prior to the contemplation of such acquisition and do not extend to any other assets of the Company or any of its Restricted Subsidiaries;
- (5) Liens to secure the performance of statutory obligations, surety or appeal bonds, performance bonds or other obligations of a like nature incurred in the ordinary course of business;
- (6) Liens to secure Indebtedness (including Capital Lease Obligations) permitted by clause (4) of the second paragraph of the covenant entitled "— Incurrence of Indebtedness and Issuance of Preferred Stock" covering only the assets acquired with such Indebtedness;

- (7) Liens existing on the Issue Date;
- (8) Liens for taxes, assessments or governmental charges or claims that are not yet delinquent or that are being contested in good faith by appropriate proceedings promptly instituted and diligently concluded, provided that any reserve or other appropriate provision as shall be required in conformity with GAAP shall have been made therefor;
- (9) Liens incurred in the ordinary course of business of the Company or any Restricted Subsidiary of the Company with respect to obligations that do not exceed \$50.0 million at any one time outstanding;
- (10) Liens on assets of Guarantors to secure Senior Debt of such Guarantors that was permitted by the Indenture to be incurred;
- (11) Liens securing Permitted Refinancing Indebtedness, provided that any such Lien does not extend to or cover any property, shares or debt other than the property, shares or debt securing the Indebtedness so refunded, refinanced or extended;

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- (12) Liens incurred or deposits made to secure the performance of tenders, bids, leases, statutory obligations, surety and appeal bonds, government contracts, performance and return of money bonds and other obligations of a like nature, in each case incurred in the ordinary course of business (exclusive of obligations for the payment of borrowed money);
  - (13) Liens upon specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods in the ordinary course of business;
  - (14) Liens encumbering customary initial deposits and margin deposits, and other Liens incurred in the ordinary course of business that are within the general parameters customary in the industry, in each case securing Indebtedness under Hedging Obligations; and
  - (15) Liens encumbering deposits made in the ordinary course of business to secure nondelinquent obligations arising from statutory or regulatory, contractual or warranty requirements of the Company or its Subsidiaries for which a reserve or other appropriate provision, if any, as shall be required by GAAP shall have been made.

"Permitted Refinancing Indebtedness" means any Indebtedness of the Company or any of its Subsidiaries issued in exchange for, or the net proceeds of which are used to extend, refinance, renew, replace, defease or refund other Indebtedness of the Company or any of its Restricted Subsidiaries; provided that:

- (1) the principal amount (or accreted value, if applicable) of such Permitted Refinancing Indebtedness does not exceed the principal amount of (or accreted value, if applicable), plus accrued interest on, the Indebtedness so extended, refinanced, renewed, replaced, defeased or refunded (plus the amount of reasonable expenses and prepayment premiums incurred in connection therewith);
- (2) such Permitted Refinancing Indebtedness has a final maturity date no earlier than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness being extended, refinanced, renewed, replaced, defeased or refunded;
- (3) if the Indebtedness being extended, refinanced, renewed, replaced, defeased or refunded is subordinated in right of payment to the Notes, such Permitted Refinancing Indebtedness is subordinated in right of payment to the Notes on terms at least as favorable to the Holders of Notes as those contained in the documentation governing the Indebtedness being extended, refinanced, renewed, replaced, defeased or refunded; and
- (4) such Indebtedness is incurred either by the Company or by the Restricted Subsidiary who is the obligor on the Indebtedness being extended, refinanced, renewed, replaced, defeased or refunded.

"Permitted Securities" means, with respect to any Asset Sale, Voting Stock of a Person primarily engaged in one or more Similar Businesses; provided that after giving effect to the Asset Sale such Person shall become a Restricted Subsidiary and, unless the Asset Sale relates to a Foreign Subsidiary, a Guarantor.

"Principals" means any Lehman Investor, Frank C. Lanza and Robert V. LaPenta.

"Related Party" with respect to any Principal means:

- (1) any controlling stockholder, 50% (or more) owned Subsidiary, or spouse or immediate family member (in the case of an individual) of such Principal; or
- (2) any trust, corporation, partnership or other entity, the beneficiaries, stockholders, partners, owners or Persons beneficially holding a more than 50% controlling interest of which consist of such Principal and/or such other Persons referred to in the immediately preceding clause (1).

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"Representative" means the indenture trustee or other trustee, agent or representative for any Senior Debt.

"Restricted Investment" means an Investment other than a Permitted Investment.

"Restricted Subsidiary" means, with respect to any Person, each Subsidiary of such Person that is not an Unrestricted Subsidiary.

"Senior Credit Facilities" means the Second Amended and Restated 364 Day Credit Agreement, dated as of May 16, 2001, as in effect on the date of the Indenture among the Company, the lenders party thereto, Banc of America, N.A., as administrative agent, and Lehman Commercial Paper Inc., as syndication agent and documentation agent, and the Third Amended and Restated Credit Agreement, dated as of May 16, 2001, as in effect on the date of the Indenture among the Company, the lenders party thereto, Banc of America, N.A., as administrative agent, and Lehman Commercial Paper Inc., as syndication agent and documentation agent, and



any related notes, collateral documents, letters of credit and guarantees, including any appendices, exhibits or schedules to any of the foregoing (as the same may be in effect from time to time), in each case, as such agreements may be amended, modified, supplemented or restated from time to time, or refunded, refinanced, restructured, replaced, renewed, repaid or extended from time to time (whether with the original agents and lenders or other agents and lenders or otherwise, and whether provided under the original credit agreement or other credit agreements, indentures or otherwise).

"Senior Debt" means:

- (1) all Indebtedness of the Company or any of its Restricted Subsidiaries outstanding under Credit Facilities and all Hedging Obligations with respect thereto;
- (2) any other Indebtedness permitted to be incurred by the Company or any of its Restricted Subsidiaries under the terms of the Indenture, unless the instrument under which such Indebtedness is incurred expressly provides that it is on a parity with or subordinated in right of payment to the Notes; and
- (3) all Obligations with respect to the foregoing.

Notwithstanding anything to the contrary in the foregoing, Senior Debt will not include:

- (1) any liability for federal, state, local or other taxes owed or owing by the Company;
- (2) any Indebtedness of the Company to any of its Subsidiaries or other Affiliates;
- (3) any trade payables; or
- (4) any Indebtedness that is incurred in violation of the Indenture. The May 2003 Notes, the December 1998 Notes, the 2000 Convertible Notes, the 2001 CODES and the 2002 Notes will be pari passu with the Notes and will not constitute Senior Debt.

"Significant Subsidiary" means any Subsidiary which is a "significant subsidiary" within the meaning of Rule 405 under the Securities Act.

"Similar Business" means a business, a majority of whose revenues in the most recently ended calendar year were derived from:

- (1) the sale of defense products, electronics, communications systems, aerospace products, avionics products and/or communications products;
- (2) any services related thereto;
- (3) any business or activity that is reasonably similar thereto or a reasonable extension, development or expansion thereof or ancillary thereto; and
- (4) any combination of any of the foregoing.

"Stated Maturity" means, with respect to any installment of interest or principal on any series of Indebtedness, the date on which such payment of interest or principal was scheduled to be paid in the

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original documentation governing such Indebtedness, and shall not include any contingent obligations to repay, redeem or repurchase any such interest or principal prior to the date originally scheduled for the payment thereof.

"Subsidiary" means, with respect to any Person:

- (1) any corporation, association or other business entity of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and
- (2) any partnership (A) the sole general partner or the managing general partner of which is such Person or a Subsidiary of such Person or (B) the only general partners of which are such Person or of one or more Subsidiaries of such Person (or any combination thereof).

"S&P" means Standard and Poor's Corporation.

"Transaction Documents" means the Indenture, the Notes, the Purchase Agreement and the Registration Rights Agreement.

"Unrestricted Subsidiary" means any Subsidiary that is designated by the Board of Directors as an Unrestricted Subsidiary pursuant to a board resolution, but only to the extent that such Subsidiary:

- (1) has no Indebtedness other than Non-Recourse Debt;
- (2) is not party to any agreement, contract, arrangement or understanding with the Company or any Restricted Subsidiary of the Company unless the terms of any such agreement, contract, arrangement or understanding are no less favorable to the Company or such Restricted Subsidiary than those that might be obtained at the time from Persons who are not Affiliates of the Company;
- (3) is a Person with respect to which neither the Company nor any of its Restricted Subsidiaries has any direct or indirect obligation:
  - (a) to subscribe for additional Equity Interests; or
  - (b) to maintain or preserve such Person's financial condition or to cause such Person to achieve any specified levels of operating results;
- (4) has not guaranteed or otherwise directly or indirectly provided credit support for any Indebtedness of the Company or any of its Restricted Subsidiaries; and
- (5) has at least one director on its board of directors that is not a director or executive officer of the Company or any of its Restricted Subsidiaries.

Any such designation by the Board of Directors shall be evidenced to the Trustee by filing with the Trustee a certified copy of the Board Resolution giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing conditions and was permitted by the covenant described above under the caption "— Certain Covenants — Restricted Payments." If, at any time, any Unrestricted Subsidiary would fail to meet the foregoing requirements as an Unrestricted Subsidiary, it shall thereafter cease to be an Unrestricted Subsidiary for purposes of the Indenture and any Indebtedness of such Subsidiary shall be deemed to be incurred by a Restricted Subsidiary of the Company as of such date (and, if such Indebtedness is not permitted to be incurred as of such date under the covenant described under the caption "— Certain Covenants — Incurrence of Indebtedness and Issuance of Preferred Stock", the Company shall be in default of such covenant).

The Board of Directors of the Company may at any time designate any Unrestricted Subsidiary to be a Restricted Subsidiary; provided that such designation shall be deemed to be an incurrence of Indebtedness by a Restricted Subsidiary of the Company of any outstanding Indebtedness of such Unrestricted Subsidiary and such designation shall only be permitted if:

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- (1) such Indebtedness is permitted under the covenant described under the caption "— Certain Covenants — Incurrence of Indebtedness and Issuance of Preferred Stock," calculated on a pro forma basis as if such designation had occurred at the beginning of the four-quarter reference period; and
- (2) no Default or Event of Default would be in existence following such designation.

"Voting Stock" of any Person as of any date means the Capital Stock of such Person that is at the time entitled to vote in the election of the Board of Directors of such Person.

"Weighted Average Life to Maturity" means, when applied to any Indebtedness at any date, the number of years obtained by dividing:

- (1) the sum of the products obtained by multiplying (A) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect thereof, by (B) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment; by
- (2) the then outstanding principal amount of such Indebtedness.

"Wholly Owned" means, when used with respect to any Subsidiary or Restricted Subsidiary of a Person, a Subsidiary (or Restricted Subsidiary, as appropriate) of such Person all of the outstanding Capital Stock or other ownership interests of which (other than directors' qualifying shares) shall at the time be owned by such Person or by one or more Wholly Owned Subsidiaries (or Wholly Owned Restricted Subsidiaries, as appropriate) of such Person and one or more Wholly Owned Subsidiaries (or Wholly Owned Restricted Subsidiaries, as appropriate) of such Person.

## MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

### Exchange of Notes

The exchange of outstanding notes for exchange notes in the exchange offer will not constitute a taxable event to holders for United States federal income tax purposes. Consequently, no gain or loss will be recognized by a holder upon receipt of an exchange note, the holding period of the exchange note will include the holding period of the outstanding note exchanged therefor and the basis of the exchange note will be the same as the basis of the outstanding note immediately before the exchange.

**In any event, persons considering the exchange of outstanding notes for exchange notes should consult their own tax advisors concerning the United States federal income tax consequences in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction.**

### Introduction

The following is a summary of the material United States federal income tax consequences to non-United States holders as of the date of this prospectus regarding the ownership and disposition of the exchange notes. Except where noted, this summary deals only with exchange notes that are held as capital assets by a non-United States holder.

A "non-United States holder" means a holder of exchange notes (other than a partnership) that is not any of the following for United States federal income tax purposes:

- a citizen or resident of the United States;
- a corporation or partnership created or organized in or under the laws of the United States or any political subdivision thereof;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or

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- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all of its substantial decisions, or (2) has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial decisions as of the date of this prospectus. Those authorities may be changed, perhaps retroactively, so as to result in United States federal income tax consequences different from those summarized below. This summary does not represent a detailed description of the federal income tax consequences to you in light of your particular circumstances. In addition, it does not represent a detailed description of the United States federal income tax consequences applicable to you if you are subject to special treatment under the United States federal income tax laws (including if you are a United States expatriate, "controlled foreign corporation," "passive foreign investment company" or "foreign personal holding company").

We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership holds our exchange notes, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our exchange notes, you should consult your tax advisors.

**You should consult your own tax advisors concerning the United States federal income tax and estate tax consequences to you in light of your particular situation, as well as the consequences to you arising under the laws of any other taxing jurisdiction.**

**United States Federal Withholding Tax**

The 30% United States federal withholding tax will not apply to any payment of principal or interest on the exchange notes under the "portfolio interest rule," provided that:

- interest paid on the note is not effectively connected with your conduct of a trade or business in the United States;
- you do not actually or constructively own 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and applicable United States Treasury regulations;
- you are not a controlled foreign corporation that is related to us through stock ownership;
- you are not a bank whose receipt of interest on the exchange notes is described in Section 881(c)(3)(A) of the Code; and
- either (a) you provide your name and address on an IRS Form W-8BEN (or other applicable form), and certify, under penalties of perjury, that you are not a United States person or (b) you hold your exchange notes through certain foreign intermediaries and satisfy the certification requirements of applicable United States Treasury regulations.

Special certification rules apply to certain non-United States holders that are entities rather than individuals.

If you cannot satisfy the requirements described above, payments of premium, if any, and interest made to you will be subject to the 30% United States federal withholding tax, unless you provide us with a properly executed:

- IRS Form W-8BEN (or other applicable form) claiming an exemption from, or reduction in, withholding under the benefit of an applicable income tax treaty; or
- IRS Form W-8ECI (or successor form) stating that interest paid on the exchange notes is not subject to withholding tax because it is effectively connected with your conduct of a trade or business in the United States (as discussed below under "—United States Federal Income Tax").

The 30% United States federal withholding tax generally will not apply to any gain that you realize on the sale, exchange, retirement or other disposition of exchange notes.

**United States Federal Income Tax**

If you are engaged in a trade or business in the United States and premium, if any, or interest on the exchange notes is effectively connected with the conduct of that trade or business, you will be subject to United States federal income tax on that premium or interest on a net income basis (although exempt from the 30% withholding tax, provided certain certification and disclosure requirements discussed above under "—United States Federal Withholding Tax" are satisfied), in the same manner as if you were a United States person, as defined under the Code. In addition, if you are a foreign corporation, you may be subject to a branch profits tax equal to 30% (or lower applicable income tax treaty rate) of your effectively connected earnings and profits for the taxable year, subject to adjustments.

Any gain realized on the disposition of the exchange notes generally will not be subject to United States federal income tax unless:

- the gain is effectively connected with your conduct of a trade or business in the United States; or
- you are an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met.

**United States Federal Estate Tax**

Your estate will not be subject to United States federal estate tax on exchange notes beneficially owned by you at the time of your death provided that any payment to you on the exchange notes would be eligible for exemption from the 30% withholding tax under the "portfolio interest rule" described under "—United States Federal Withholding Tax" without regard to the fifth bullet point.

**Information Reporting and Backup Withholding**

Information reporting will generally apply to payments of interest on the exchange notes and the amount of tax, if any, withheld with respect to such payments. Copies of the information returns reporting such interest payments and any withholding may also be made available to the tax authorities in the country in which you reside under the provisions of an applicable income tax treaty.

In general, no backup withholding will be required with respect to payments if a statement described in the fifth bullet point under "—United States Federal Withholding Tax" has been received (and the payor does not have actual knowledge or reason to know that you are a United States person).

In addition, information reporting and, depending on the circumstances, backup withholding, will apply to the proceeds of the sale of a note within the United States or conducted through United States-related financial intermediaries unless the statement described in the fifth bullet point under "—United States Federal Withholding Tax" has been received (and the payor does not have actual knowledge or reason to know that you are a United States person) or you otherwise establish an exemption.

**PLAN OF DISTRIBUTION**

Each broker-dealer that receives exchange notes for its own account pursuant to the exchange offer must acknowledge that it will deliver a prospectus in connection with any resale of the exchange notes. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of exchange notes received in exchange for outstanding notes where the outstanding notes were acquired as a result of market-making activities or other trading activities. To the extent any such broker-dealer participates in the exchange offer and so notifies L-3, or causes L-3 to be so notified in writing, L-3 has agreed that for a period of 180 days after the date of this prospectus, it will make this prospectus, as amended or supplemented, available to such broker-dealer for use in connection with any such resale, and will promptly send additional copies of this prospectus and any amendment or supplement to this prospectus to any broker-dealer that requests such documents in the letter of transmittal.

We will not receive any proceeds from any sale of exchange notes by broker-dealers. Exchange notes received by broker-dealers for their own accounts pursuant to the exchange offer may be sold from time to time in one or more transactions in the over-the-counter market, in negotiated transactions, through the writing of options on the exchange notes or a combination of these methods of resale, at market prices prevailing at the time of resale, at prices related to the prevailing market prices or negotiated prices. Any resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any broker-dealer or the purchasers of any exchange notes. Any broker-dealer that resells exchange notes that were received by it for its own account pursuant to the exchange offer and any broker or dealer that participates in a distribution of the exchange notes may be deemed to be an "underwriter" within the meaning of the Securities Act and any profit on any resale of exchange notes and any commissions or concessions received by these persons may be deemed to be underwriting compensation under the Securities Act. The letter of transmittal states that by acknowledging that it will deliver and by delivering a prospectus, a broker-dealer will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act.

We have agreed to pay all expenses incident to the exchange offer, including the expenses of one counsel for the holders of the outstanding notes, other than commissions or concessions of any brokers or dealers and will indemnify the holders of outstanding notes, including any broker-dealers, against certain liabilities, including liabilities under the Securities Act.

By its acceptance of the exchange offer, any broker-dealer that receives exchange notes pursuant to the exchange offer hereby agrees to notify L-3 prior to using the prospectus in connection with the sale or transfer of exchange notes, and acknowledges and agrees that, upon receipt of notice from L-3 of the happening of any event which makes any statement in this prospectus untrue in any material respect or which requires the making of any changes in this prospectus in order to make the statements therein not misleading or which may impose upon L-3 disclosure obligations that may have a material adverse effect on L-3 (which notice L-3 agrees to deliver promptly to such broker-dealer) such broker-dealer will suspend use of this prospectus until L-3 has notified such broker-dealer that delivery of this prospectus may resume and has furnished copies of any amendment or supplement to this prospectus to such broker-dealer.

**LEGAL MATTERS**

The validity of the exchange notes offered by this prospectus will be passed upon for us by Simpson Thacher & Bartlett LLP, New York, New York.

**EXPERTS**

Our consolidated financial statements as of December 31, 2003 and 2002, and for the three years ended December 31, 2003 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, independent auditors, given on the authority of said firm as experts in auditing and accounting.

**INDEX TO FINANCIAL STATEMENTS**

Consolidated Financial Statements as of December 31, 2003 and 2002 and for the years ended December 31, 2003, 2002 and 2001

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# REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Shareholders of  
L-3 Communications Holdings, Inc.

We have audited the accompanying consolidated balance sheets of L-3 Communications Holdings, Inc. ("L-3 Holdings") and L-3 Communications Corporation ("L-3 Communications") and subsidiaries (collectively, the "Company") as of December 31, 2003 and 2002, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years ended December 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of L-3 Holdings and L-3 Communications and subsidiaries as of December 31, 2003 and 2002 and their respective consolidated results of operations and cash flows for each of the three years ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

As indicated in Note 5 to the financial statements, in 2002 the Company adopted the provisions of Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP  
New York, New York  
January 27, 2004

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

### CONSOLIDATED BALANCE SHEETS

(in thousands, except per share data)

	December 31,	
	2003	2002
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 134,876	\$ 134,856
Contracts in process	1,615,348	1,317,993
Deferred income taxes	152,785	143,634
Other current assets	34,693	42,891
Total current assets	<u>1,937,702</u>	<u>1,639,374</u>
Property, plant and equipment, net	519,749	458,639
Goodwill	3,652,436	2,794,548
Intangible assets	162,156	90,147
Deferred income taxes	100,482	147,190
Deferred debt issue costs	48,572	48,839
Other assets	71,793	63,571
Total assets	<u>\$6,492,890</u>	<u>\$5,242,308</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable, trade	\$ 195,548	\$ 167,240
Accrued employment costs	239,690	187,754
Accrued expenses	72,880	56,763
Customer advances	58,078	62,645
Accrued interest	25,898	18,395
Income taxes	70,159	33,729
Other current liabilities	261,959	183,416
Total current liabilities	<u>924,212</u>	<u>709,942</u>
Pension and postretirement benefits	359,020	343,527
Other liabilities	101,651	65,644
Long-term debt	<u>2,457,300</u>	<u>1,847,752</u>
Total liabilities	<u>3,842,183</u>	<u>2,966,865</u>
Commitments and contingencies		
Minority interest	<u>76,211</u>	<u>73,241</u>
Shareholders' equity:		
L-3 Holdings' common stock; \$.01 par value; authorized 300,000,000 shares, issued and outstanding 97,077,495 and 94,577,331 shares (L-3 Communications' common stock; \$.01 par value, 100 shares authorized, issued and outstanding)	1,893,488	1,794,976
Retained earnings	757,467	479,827
Unearned compensation	(3,622)	(3,302)
Accumulated other comprehensive loss	(72,837)	(69,299)
Total shareholders' equity	<u>2,574,496</u>	<u>2,202,202</u>



Shares issued:							
Sale of common stock	9,150	92	353,530				353,622
Employee savings plans	418	4	16,864				16,868
Acquisition consideration	588	6	17,351				17,357
Exercise of stock options	1,128	11	28,253				28,264
Employee stock purchase plan			4,861				4,861
Grant of restricted stock			2,118		(2,118)		—
Amortization of unearned compensation					1,370		1,370
Other			21				21
Balance December 31, 2001	78,497	785	938,252	301,730	(3,205)	(23,670)	1,213,892
Comprehensive income:							
Net income				178,097			178,097
Minimum pension liability, net of \$29,859 tax benefit						(45,580)	(45,580)
Foreign currency translation adjustment, net of \$1,626 tax benefit						65	65
Unrealized losses on hedging instruments reclassified to net income from other comprehensive loss, net of \$198 tax expense						323	323
Unrealized losses on hedging instruments, net of \$275 tax benefit						(437)	(437)
							132,468
Shares issued:							
Sale of common stock	14,000	140	766,640				766,780
Employee savings plans	529	5	28,133				28,138
Acquisition consideration	229	2	10,605				10,607
Exercise of stock options	970	10	30,665				30,675
Employee stock purchase plan	352	4	17,474				17,478
Grant of restricted stock			2,231		(2,231)		—
Amortization of unearned compensation					2,134		2,134
Other			30				30
Balance December 31, 2002	94,577	946	1,794,030	479,827	(3,302)	(69,299)	2,202,202
Comprehensive income:							
Net income				277,640			277,640
Minimum pension liability, net of \$2,313 tax benefit						(4,189)	(4,189)
Foreign currency translation adjustment, net of \$141 tax benefit						(245)	(245)
Unrealized gains on hedging instruments, net of \$571 tax expense						896	896
							274,102
Shares issued:							
Employee savings plans	912	9	39,485				39,494
Acquisition consideration	110	1	4,968				4,969
Exercise of stock options	835	8	22,722				22,730
Employee stock purchase plan	603	6	26,378				26,384
Conversion of 5¼ % Convertible Senior Subordinated Notes	40	1	1,629				1,630
Grant of restricted stock			3,295		(3,295)		—
Amortization of unearned compensation					2,975		2,975
Other			10				10
Balance December 31, 2003	97,077	971	1,892,517	757,467	(3,622)	(72,837)	2,574,496

See notes to consolidated financial statements.

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**(in thousands)**

	Year Ended December 31,		
	2003	2002	2001
<b>Operating activities:</b>			
Net income	\$ 277,640	\$ 178,097	\$ 115,458
Cumulative effect of a change in accounting principle	—	24,370	—
Loss on retirement of debt	11,225	16,187	—
Goodwill amortization	—	—	42,356
Depreciation	77,340	66,230	40,362
Amortization of intangibles and other assets	18,083	9,630	4,233
Amortization of deferred debt issue costs (included in interest expense)	7,977	7,392	6,388
Deferred income tax provision	94,747	79,092	52,638
Minority interest	3,515	6,198	4,457
Other non-cash items, principally contributions to employee savings plans in L-3 Holdings' common stock	39,773	28,653	17,576
Subtotal	530,300	415,849	283,468
Changes in operating assets and liabilities, excluding acquired amounts:			
Contracts in process	(120,397)	(75,031)	(40,652)
Other current assets	(1,731)	(15,257)	1,643
Other assets	(15,861)	(16,641)	(12,033)
Accounts payable	(19,503)	(21,904)	(43,165)
Accrued employment costs	20,558	30,100	11,931
Accrued expenses	5,646	(2,581)	(20,300)
Customer advances	(4,773)	(11,272)	12,627
Accrued interest	7,503	7,199	(3,047)
Income taxes	44,081	30,852	14,431
Other current liabilities	(25,384)	(41,206)	(37,555)
Pension and postretirement benefits	5,088	(1,670)	4,550
Other liabilities	19,008	20,517	1,423
All other operating activities, principally foreign currency translation	11,528	(495)	(353)
Subtotal	(74,237)	(97,389)	(110,500)
Net cash from operating activities	456,063	318,460	172,968
<b>Investing activities:</b>			
Acquisition of businesses, net of cash acquired	(1,014,439)	(1,742,133)	(446,911)
Proceeds from sale of businesses	8,795	—	75,206
Capital expenditures	(82,874)	(62,058)	(48,121)
Disposition of property, plant and equipment	3,854	3,548	1,237
Other investing activities	(3,393)	(9,885)	(6,301)
Net cash used in investing activities	(1,088,057)	(1,810,528)	(424,890)
<b>Financing activities:</b>			
Borrowings under revolving credit facilities	295,000	566,000	316,400
Repayment of borrowings under revolving credit facilities	(295,000)	(566,000)	(506,400)
Borrowings under bridge loan facility	—	500,000	—
Repayment of borrowings under bridge loan facility	—	(500,000)	—
Proceeds from sale of senior subordinated notes	790,788	750,000	420,000
Redemption of senior subordinated notes	(187,650)	(237,468)	—
Proceeds from sale of L-3 Holdings' common stock, net	—	766,780	353,622
Debt issuance costs	(9,591)	(19,759)	(16,671)
Proceeds from exercise of stock options	14,273	17,372	16,325

Proceeds from employee stock purchase plan	26,384	17,478	4,861
Distributions paid to minority interest	(1,975)	(2,854)	(2,530)
Other financing activities	(215)	(25,647)	(5,343)
Net cash from financing activities	<u>632,014</u>	<u>1,265,902</u>	<u>580,264</u>
Net increase (decrease) in cash	20	(226,166)	328,342
Cash and cash equivalents, beginning of the period	<u>134,856</u>	<u>361,022</u>	<u>32,680</u>
Cash and cash equivalents, end of the period	<u>\$ 134,876</u>	<u>\$ 134,856</u>	<u>\$ 361,022</u>

See notes to consolidated financial statements.

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(Dollars in thousands, except per share data)**

**1. Description of Business**

L-3 Communications Holdings, Inc. conducts its operations and derives all its operating income and cash flow through its wholly owned subsidiary, L-3 Communications Corporation ("L-3 Communications"). L-3 Communications Holdings, Inc. ("L-3 Holdings" and together with its subsidiaries, "L-3" or the "Company") is a leading supplier of a broad range of products used in a substantial number of aerospace and defense platforms. L-3 also is a major supplier of subsystems on many platforms, including those for secure communication networks, mobile satellite communications, information security systems, shipboard communications, naval power systems, fuzes and safety and arming devices for missiles and munitions, microwave assemblies for radars and missiles, telemetry and instrumentation and airport security systems. The Company also is a prime system contractor for aircraft modernization and maintenance, Intelligence, Surveillance and Reconnaissance (ISR) collection platforms, simulation and training, and government systems support services. The Company's customers include the U.S. Department of Defense (DoD) and its prime contractors, certain U.S. Government intelligence agencies, major aerospace and defense contractors, foreign governments, commercial customers and certain other U.S. federal, state and local government agencies.

The Company has four reportable segments: (1) Secure Communications & ISR; (2) Training, Simulation & Support Services; (3) Aviation Products & Aircraft Modernization; and (4) Specialized Products.

*Secure Communications & ISR.* The businesses in this segment provide products and services for the global ISR market, specializing in signals intelligence (SIGINT) and communications intelligence (COMINT) systems. These products and services provide to the warfighter in real-time the unique ability to collect and analyze unknown electronic signals from command centers, communication nodes and air defense systems for real-time situation awareness and response. The businesses in this segment also provide secure, high data rate communications systems for military and other U.S. Government and foreign government reconnaissance and surveillance applications. The Company believes that its systems and products are critical elements for a substantial number of major communication, command and control, intelligence gathering and space systems. The Company's systems and products are used to connect a variety of airborne, space, ground and sea-based communication systems and are used in the transmission, processing, recording, monitoring and dissemination functions of these communication systems. The major secure communications programs and systems include:

- secure data links for airborne, satellite, ground and sea-based remote platforms, both manned and unmanned, for real-time information collection and dissemination to users;
- highly specialized fleet management and support, including procurement, systems integration, sensor development, modifications and maintenance for signals intelligence and ISR special mission aircraft and airborne surveillance systems;
- strategic and tactical signals intelligence systems that detect, collect, identify, analyze and disseminate information;
- secure terminal and communication network equipment and encryption management; and
- communication systems for surface and undersea vessels and manned space flights.

*Training, Simulation & Support Services.* The businesses in this segment provide a full range of training, simulation and support services, including:

- services designed to meet customer training requirements for aircrews, navigators, mission operators, gunners and maintenance technicians for virtually any platform, including military fixed and rotary wing aircraft, air vehicles and various ground vehicles;

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)**  
**(Dollars in thousands, except per share data)**

- communication software support, information technology services and a wide range of engineering development services and integration support;
- high-end engineering and information support services used for command, control, communications and ISR architectures, as well as for air warfare modeling and simulation tools for applications used by the DoD, Department of Homeland Security and U.S. Government intelligence agencies, including missile and space systems, Unmanned Aerial Vehicles (UAVs) and military aircraft;
- developing and managing extensive programs in the United States and internationally that focus on teaching, training and education, logistics, strategic planning, organizational design, democracy transition and leadership development; and



- producing crisis management software and providing command and control for homeland security applications.
- Aviation Products & Aircraft Modernization.* The businesses in this segment provide aviation products and aircraft modernization services, including:
- airborne traffic and collision avoidance systems (TCAS) for commercial and military applications;
  - commercial, solid-state, crash-protected cockpit voice recorders, flight data recorders and maritime hardened voyage recorders;
  - ruggedized custom displays for military and high-end commercial applications;
  - turnkey aviation life cycle management services that integrate custom developed and commercial off-the-shelf products for various military fixed and rotary wing aircraft, including heavy maintenance and structural modifications and interior completion for Head-of-State aircraft;
  - engineering, modification, maintenance, logistics and upgrades for U.S. Special Operations Command aircraft, vehicles and personnel equipment;
  - aerospace and other technical services related to large fleet support, such as aircraft and vehicle modernization, maintenance, repair and overhaul, logistics support, and supply chain management, primarily for military training, tactical, cargo and utility aircraft, and the Patriot Missile System and M1 Abrams Main Battle Tank; and
  - advanced cockpit avionics products and specialized avionics repair and overhaul services for various segments of the aviation market.

- Specialized Products.* The businesses in this segment supply products, including components, subsystems and systems to military and commercial customers in several niche markets. These products include:
- naval warfare products, including acoustic undersea warfare products for mine hunting, dipping and anti-submarine sonars and naval power distribution, conditioning, switching and protection equipment for surface and undersea platforms;
  - ruggedization and integration of commercial off-the-shelf technology for displays, computers and electronic systems for military and commercial applications;
  - security and surveillance systems for aviation, port and border applications, including those for perimeter security and for detection of explosives, concealed weapons, contraband and illegal narcotics, and to inspect agricultural products and to examine cargo;

L-3 COMMUNICATIONS HOLDINGS, INC.  
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
(Dollars in thousands, except per share data)

- telemetry, instrumentation, space and navigation products, including tracking and flight termination;
- premium fuzing products and safety and arming devices for missiles and munitions;
- microwave components used in radar communication satellites, wireless communication equipment, electronic surveillance, communication and electronic warfare applications and countermeasure systems;
- high performance antennas and ground based radomes;
- training devices and motion simulators which produce advanced virtual reality simulation and high-fidelity representations of cockpits and mission stations for fixed and rotary wing aircraft and land vehicles; and
- precision stabilized electro-optic surveillance systems, including high magnification lowlight, daylight and forward looking infrared sensors, laser range finders, illuminators and designators, and digital and wireless communication systems.

2. Summary of Significant Accounting Policies

**Basis of Presentation:** The accompanying financial statements comprise the consolidated financial statements of L-3 Holdings and L-3 Communications. L-3 Holdings' only asset is its investment in the common stock of L-3 Communications, its wholly-owned subsidiary, and its only obligations are the 5¼% Convertible Senior Subordinated Notes due 2009, substantially all of which converted into L-3 Holdings' common stock in January 2004, and the 4% Senior Subordinated Convertible Contingent Debt Securities due 2011 (CODES). L-3 Holdings has also guaranteed the borrowings under the senior credit facilities of L-3 Communications. L-3 Holdings' obligations have been jointly, severally, fully and unconditionally guaranteed by L-3 Communications and certain of its domestic subsidiaries, and accordingly, such debt has been reflected as debt of L-3 Communications in its consolidated financial statements in accordance with the U.S. Securities and Exchange Commission's (SEC) Staff Accounting Bulletin (SAB) No. 54. In addition, all issuances of equity securities including grants of stock options and restricted stock by L-3 Holdings to employees of L-3 Communications have been reflected in the consolidated financial statements of L-3 Communications. As a result, the consolidated financial positions, results of operations and cash flows of L-3 Holdings and L-3 Communications are substantially the same. See Note 20 for additional information.

**Principles of Consolidation:** The consolidated financial statements of the Company include all wholly-owned and significant majority-owned subsidiaries. All significant intercompany transactions are eliminated in consolidation. Investments over which the Company has significant influence but does not have voting control are accounted for by the equity method.

**Sales and Costs and Expenses Presentation:** The Company presents its sales and costs and expenses in two categories on the statement of operations, "Contracts, primarily U.S. Government" and "Commercial, primarily products". Sales and costs and expenses for the Company's businesses that are primarily U.S. Government contractors are presented as "Contracts, primarily U.S. Government." The sales for the Company's

U.S. Government contractor businesses are transacted using written contractual arrangements, most of which require the Company to design, develop, manufacture, modify, test and integrate complex aerospace and electronic equipment, and to provide related engineering and technical services according to specifications provided by the customer. These contracts are within the scope of the American Institute of Certified Public Accountants Statement of Position 81-1, *Accounting for Performance of Construction – Type and certain Production-Type Contracts* (SOP 81-1) and Accounting Research Bulletin No. 43, Chapter 11, Section A, *Government Contracts, Cost-Plus-Fixed Fee Contracts* (ARB 43) and Accounting Research Bulletin No. 45,

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
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*Long-Term Construction Type Contracts* (ARB 45). Sales reported under "Contracts, primarily U.S. Government" also include certain sales by the Company's U.S. Government contractor businesses transacted using contracts for domestic and foreign commercial customers which also are within the scope of SOP 81-1 and ARB 45. Sales and costs and expenses for the Company's businesses whose customers are primarily commercial business enterprises are presented as "Commercial, primarily products". These sales are recognized in accordance with the SEC's SAB No. 104, *Revenue Recognition* and are not within the scope of SOP 81-1, ARB 43 or ARB 45. The Company's commercial businesses are substantially comprised of Aviation Communication & Surveillance Systems (ACSS), Aviation Recorders, Microwave Components, Detection Systems and Avionics Systems.

**Cash and Cash Equivalents:** Cash equivalents consist of highly liquid investments with a maturity of three months or less at time of purchase.

**Revenue Recognition:** The substantial majority of the Company's direct and indirect sales to the U.S. Government and certain of the Company's sales to foreign governments and commercial customers are within the scope of SOP 81-1 and ARB 45 and sales and profits on them are recognized using percentage-of-completion methods of accounting. Sales and profits on fixed-price production contracts whose units are produced and delivered in a continuous or sequential process are recorded as units are delivered based on their selling prices (the "units-of-delivery" method). Sales and profits on other fixed-price type contracts are recorded based on the ratio of total actual incurred costs to date to the total estimated costs for each contract (the "cost-to-cost" method). Amounts representing contract change orders or claims are included in sales and estimated contract values only when they can be reliably estimated and their realization is reasonably assured. Losses on contracts are recognized in the period in which they are determined. The impact of revisions of contract estimates, which may result from contract modifications, performance or other reasons, are recognized on a cumulative catch-up basis in the period in which the revisions are made.

Sales and profits on cost-reimbursable type contracts that are within the scope of ARB 43 in addition to SOP 81-1 are recognized as allowable costs are incurred on the contract and become billable to the customer, in an amount equal to the allowable costs plus the profit on those costs, which is generally fixed or variable based on the contract fee arrangement. Incentive and award fees on these contracts are recorded as revenue when the conditions under which they are earned are reasonably assured of being met.

Sales and profits on time and material type contracts are recognized on the basis of direct labor hours incurred at a fixed negotiated rate per hour that covers the profit, cost of direct labor and indirect expenses, plus the cost of materials or other specified costs.

Sales on arrangements that are not within the scope of SOP 81-1, ARB 43 or ARB 45 are recognized in accordance with the SEC's SAB No. 104. Sales are recognized when there is persuasive evidence of an arrangement, delivery has occurred or services have been performed, the selling price to the buyer is fixed or determinable and collectibility is reasonably assured.

**Contracts in Process:** Contracts in process include receivables and inventories for contracts that are within the scope of SOP 81-1, ARB 43 and ARB 45, as well as receivables and inventories related to other contractual arrangements. Billed Receivables represent the uncollected portion of amounts recorded as sales and billed to customers for all revenue arrangements, net of allowances for uncollectible accounts. Unbilled Contract Receivables represent accumulated incurred costs and earned profits or losses on contracts in process that have been recorded as sales, primarily using the cost-to-cost percentage of completion method, which have not yet been billed to customers. Inventoried Contract Costs represent incurred costs on contracts in process that have not yet been recognized as costs and expenses because the related sales, which are primarily recorded using the units-of-delivery percentage of completion method, have not been recognized. Contract costs include

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direct costs and indirect costs, including overhead costs. In accordance with SOP 81-1 and the AICPA Audit and Accounting Guidelines, *Audits of Federal Government Contractors*, the Company's inventoried contract costs for U.S. Government contracts, and contracts with prime contractors or subcontractors of the U.S. Government, also include allocated general and administrative costs, independent research and development costs and bid and proposal costs. Contracts in Process contain amounts relating to contracts and programs with long performance cycles, a portion of which may not be realized within one year. For contracts in a loss position, the unrecoverable costs expected to be incurred in future periods are recorded in Estimated Costs in Excess of Estimated Contract Value to Complete Contracts in Process, which is a component of Other Current Liabilities. Under the contractual arrangements on certain contracts with the U.S. Government, the Company receives progress payments as it incurs costs. The U.S. Government has a security interest in the Unbilled Contract Receivables and Inventoried Contract Costs to which progress payments have been applied, and such progress payments are reflected as a reduction of the related Unbilled Contract Receivables and Inventoried Contract Costs. Customer Advances are classified as current liabilities.

Inventories other than Inventoried Contract Costs are stated at the lower of cost or market primarily using the average cost method.

The Company values its acquired contracts in process on the date of acquisition at contract value less the Company's estimated costs to complete the contract and a reasonable profit allowance on the Company's

completion effort commensurate with the profit margin that the Company earns on similar contracts.

**Derivative Financial Instruments:** The Company has entered into interest rate swap agreements and foreign currency forward contracts. Derivative financial instruments also include embedded derivatives. The Company's interest rate swap agreements have been accounted for as fair value hedges. The difference between the variable interest rates paid on the interest rate swap agreements and the fixed interest rate on the debt instrument underlying the swap agreements is recorded as increases or decreases to interest expense. Upon termination of an interest rate swap agreement, the cash received or paid that relates to the future value of the swap agreements at the termination date is a deferred gain or loss, which is recognized as a decrease or increase to interest expense over the remaining term of the underlying debt instrument. Foreign currency forward contracts are accounted for as cash flow hedges. Gains and losses on foreign currency forward contracts are reported as a component of the underlying transaction within contracts in process. The embedded derivatives related to the issuance of the Company's debt are recorded at fair value with changes reflected in the statement of operations.

**Property, Plant and Equipment:** Property, plant and equipment are stated at cost, less accumulated depreciation. Depreciation is computed by applying principally the straight-line method to the estimated useful lives of the related assets. Useful lives range substantially from 10 to 40 years for buildings and improvements and 3 to 10 years for machinery, equipment, furniture and fixtures. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the improvements. When property or equipment is retired or otherwise disposed of, the net book value of the asset is removed from the Company's balance sheet and the net gain or loss is included in the determination of income.

**Debt Issuance Costs:** Costs to issue debt are capitalized and deferred when incurred, and subsequently amortized to interest expense over the term of the related debt using a method that approximates the effective interest method.

**Identifiable Intangible Assets:** Identifiable intangible assets represent assets acquired as part of the Company's business acquisitions and include customer relationships, technology and non-compete agreements. Effective January 1, 2002, the initial measurement of these intangible assets has been

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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based on their fair values. The values assigned to acquired identifiable intangible assets are determined, as of the date of acquisition, based on estimates and judgements regarding expectations for the estimated future after-tax cash flows from those assets over their lives, including the probability of expected future contract renewals and sales, less a cost-of-capital charge, all of which is discounted to present value. Identifiable intangible assets are amortized over their useful lives, which range from 5 to 20 years.

**Goodwill:** Effective January 1, 2002, the Company accounts for goodwill in accordance with Statement of Financial Accounting Standards (SFAS) No. 142, *Goodwill and other Intangible Assets*. The carrying value of goodwill and indefinite lived identifiable intangible assets are not amortized, but are tested for impairment based on their estimated fair values using discounted cash flows valuation at the beginning of each year, and whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Prior to January 1, 2002, goodwill was amortized on a straight-line basis over periods ranging from 15 to 40 years except for goodwill related to acquisitions consummated after June 30, 2001. Prior to the adoption of SFAS No. 142, the Company evaluated the carrying amount of goodwill by reference to current and estimated profitability and undiscounted cash flows.

**Income Taxes:** The Company provides for income taxes using the liability method. Deferred income tax assets and liabilities reflect tax carryforwards and the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes, as determined under enacted tax laws and rates. The effect of changes in tax laws or rates is accounted for in the period of enactment. Valuation allowances for deferred tax assets are provided when it is more likely than not that the assets will not be realized, considering, when appropriate, tax planning strategies.

**Research and Development:** Independent research and development costs sponsored by the Company include bid and proposal costs, and relate to both U.S. Government products and services and those for commercial and foreign customers. The independent research and development (IRAD) and bid and proposal costs (B&P) for the Company's businesses that are U.S. Government contractors are allowable indirect contract costs that are allocated to our U.S. Government contracts in accordance with U.S. Government regulations, and are specifically excluded from the scope of SFAS No. 2, *Accounting for Research and Development Costs* (SFAS No. 2). In accordance with SOP 81-1 and the AICPA Audit and Accounting Guide, *Audits of Federal Government Contractors*, the Company reports IRAD and B&P costs allocated to U.S. Government contracts as costs of sales when the related contract sales are recognized, and are not accounted for as period expenses. Research and development costs for the Company's businesses that are not U.S. Government contractors are expensed as incurred in accordance with SFAS No. 2.

Customer-funded research and development costs are incurred pursuant to contracts to perform research and development activities according to customer specifications. These costs are not accounted for as research and development expenses in accordance with SFAS No. 2, and are also not indirect contract costs. Instead, these costs are direct contract costs and are expensed when the corresponding revenue is recognized, which is generally as the research and development services are performed. Customer-funded research and development costs are substantially all incurred under cost-reimbursable type contracts with the U.S. Government.

**Computer Software Costs:** The Company's software development costs for computer software products to be sold, leased or marketed that are incurred after establishing technological feasibility for the computer software products are capitalized as other assets and amortized on a product by product basis using the amount that is the greater of the straight-line method over the useful life or the ratio of current revenues to total estimated revenues in accordance with SFAS No. 86, *Accounting for the*

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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*Costs of Computer Software to Be Sold, Leased or Otherwise Marketed.* Substantially all of the capitalized software development costs pertain to products of the Company's commercial and civil businesses. Capitalized software development costs, net of accumulated amortization, was \$29,990 at December 31, 2003 and \$25,724 at December 31, 2002, and is included in other assets on the consolidated balance sheets. Amortization expense for capitalized software development costs was \$6,917 for 2003, \$5,209 for 2002 and \$1,567 for 2001.

**Stock-Based Compensation:** The Company accounts for employee stock-based compensation under the recognition and measurement principles of Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*. Compensation expense for employee stock-based compensation is recognized in income based on the excess, if any, of L-3 Holdings' fair value of the stock at the grant date of the award or other measurement date over the amount an employee must pay to acquire the stock. When the exercise price for stock-based compensation arrangements granted to employees equals or exceeds the fair value of the L-3 Holdings common stock at the date of grant, the Company does not recognize compensation expense. The Company elected not to adopt the fair value based method of accounting for stock-based employee compensation as permitted by the Financial Accounting Standards Board's (FASB) Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation* (SFAS 123), as amended by SFAS No. 148, *Accounting for Stock-Based Compensation-Transition and Disclosure-an amendment of SFAS No. 123*. Had the Company adopted the fair value based method provisions of SFAS 123, it would have recorded a non-cash expense for the estimated fair value of the stock-based compensation arrangements that the Company has granted to its employees amortized over the vesting period of the grants. The table below compares the "as reported" net income and L-3 Holdings earnings per share (EPS) to the "pro forma" net income and L-3 Holdings EPS that the Company would have reported if the Company had elected to recognize compensation expense in accordance with the fair value based method of accounting of SFAS 123.

	Year Ended December 31,		
	2003	2002	2001
Net income:			
As reported	\$277,640	\$178,097	\$115,458
Pro forma	259,997	160,079	107,573
L-3 Holdings Basic EPS:			
As reported	\$ 2.89	\$ 2.05	\$ 1.54
Pro forma	2.71	1.84	1.44
L-3 Holdings Diluted EPS:			
As reported	\$ 2.71	\$ 1.93	\$ 1.47
Pro forma	2.54	1.75	1.38

The assumptions used to calculate the fair value of stock options at their grant dates are presented in Note 14.

**Product Warranties:** Product warranty costs are accrued when the covered products are shipped to customers. Product warranty expense is recognized based on the terms of the product warranty and the related estimated costs. Accrued warranty costs are reduced as these costs are incurred.

**Use of Estimates:** The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and costs and expenses during the reporting period. The most significant of these estimates and assumptions

L-3 COMMUNICATIONS HOLDINGS, INC.  
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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relate to contract revenue and profit recognition, market values for inventories reported at lower of cost or market, pension and postretirement benefit obligations, recoverability and valuation of recorded amounts of long-lived assets, identifiable intangible assets, including goodwill, income taxes, including the valuations of deferred tax assets, litigation reserves and environmental obligations. Changes in estimates are reflected in the periods during which they become known. Actual amounts will differ from these estimates.

**Recently Issued Accounting Standards:** In December of 2003, the FASB revised its FASB Interpretation No. 46, *Consolidation of Variable Interest Entities* (FIN 46R). FIN 46R clarifies the application of Accounting Research Bulletin No. 51, *Consolidated Financial Statements*. FIN 46R requires that a business enterprise review all of its legal structures used to conduct its business activities, including those to hold assets, and its majority-owned subsidiaries, to determine whether those legal structures are variable interest entities (VIEs) required to be consolidated for financial reporting purposes by the business enterprise. A VIE is a legal structure for which the holders of a majority voting interest may not have a controlling financial interest in the legal structure. FIN 46R provides guidance for identifying those legal structures and provides guidance for determining whether a business enterprise shall consolidate a VIE. FIN 46R requires that a business enterprise that holds a significant variable interest in a VIE make new disclosures in their financial statements. The Company is required to adopt the provisions of FIN 46R for its interim period ending March 31, 2004. The Company does not believe that it holds any significant interests in VIEs that would require consolidation or additional disclosures.

In March of 2003, the Emerging Issues Task Force (EITF) issued EITF No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables*. EITF No. 00-21 addresses how to determine whether a revenue arrangement involving multiple deliverables contains more than one unit of accounting for revenue recognition purposes, and how consideration should be measured and allocated to the separate accounting units. EITF No. 00-21 applies to all deliverables within contractually binding arrangements in all industries, except to the extent that a deliverable in a contractual arrangement is subject to other existing higher-level authoritative literature. EITF 00-21 became effective for revenue arrangements entered into after July 1, 2003. The adoption of EITF No. 00-21 did not have a material effect on the Company's financial position or results of operations.

In May of 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. This Statement applies to certain financial instruments, including mandatorily redeemable financial instruments that, prior to SFAS No. 150 could have been accounted for as a component of equity. SFAS No. 150 requires that those instruments be classified as liabilities in statements of financial position. SFAS No. 150 also requires disclosures about alternative ways of settling the instruments and the capital structure of entities whose shares are all mandatorily redeemable. SFAS No. 150 is effective for these financial instruments entered into or modified after May 31, 2003. For these financial instruments entered into before May 31, 2003, SFAS No. 150 became effective for the interim period beginning July 1, 2003. The

Company does not hold any financial instruments that are within the scope of SFAS No. 150. Accordingly, SFAS No. 150 is not expected to have a material effect on the Company's consolidated results of operations or financial position.

On December 8, 2003, President Bush signed the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (DIMA). This Act introduces a federal subsidy to sponsors of retiree health care benefit plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. In January of 2002, the FASB issued FASB Staff Position 106-1, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (FSP 106). In accordance with FSP 106, the Company is electing to defer recognition of any potential savings on the measure of the accumulated postretirement benefit or net periodic benefit cost as a

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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result of DIMA until specific authoritative guidance on the accounting of the federal subsidy is issued. Therefore, the consolidated financial statements and accompanying notes do not reflect the effects of the Act on the Company's postretirement medical plans.

**Reclassifications:** Certain reclassifications have been made to conform prior-year amounts to the current-year presentation.

3. Acquisitions, Divestiture and Other Transactions

Acquisitions

*Vertex Aerospace.* On December 1, 2003, the Company acquired Vertex Aerospace LLC (Vertex) for \$653,250 in cash, which includes \$650,000 for the original contract purchase price, and a purchase price adjustment paid on the closing date of \$3,250, plus acquisition costs. The acquisition was financed with cash on hand and approximately \$285,000 of borrowings under the Company's senior credit facilities. Vertex is a leading provider of aerospace and other technical services to the U.S. Department of Defense and other U.S. Government agencies. Vertex's services include logistics support, modernization and maintenance for fixed and rotary wing aircraft, supply chain management and pilot training. Vertex's engineering and technical staff support tactical, cargo and utility aircraft and other defense-related platforms. The acquisition will expand L-3's market for aircraft modernization and maintenance when combined with Integrated Systems, Spar and MAS, and will also provide complementary service offerings for L-3's existing customers. Based on a preliminary purchase price allocation for Vertex, goodwill of \$483,766 was assigned to the Aviation Products & Aircraft Modernization segment and goodwill of approximately \$440,000 is expected to be deductible for income tax purposes.

The table below presents a summary of the Vertex preliminary estimates of fair values of the assets acquired and liabilities assumed on the closing date of the acquisition (December 1, 2003), including preliminary valuations of acquired contracts in process. Final valuations for the estimated fair values of the assets acquired and liabilities assumed are expected to be completed during 2004. The Company does not expect material differences between the preliminary and final purchase price allocation for Vertex. The purchase price for Vertex is subject to adjustment based on the closing date net assets of the business. The Company expects to determine the final purchase price with the seller during 2004, and the Company estimates that such determination will result in a decrease of up to approximately \$14,000 to the purchase price because of adjustments to contracts in process and plant and equipment. Any adjustment to the purchase price will be recorded as an adjustment to the preliminary goodwill amount for Vertex.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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Cash	\$ 2,187
Contracts in process	161,663
Deferred income taxes	14,096
Other current assets	1,621
Property, plant and equipment	31,050
Goodwill	483,766
Intangible assets	50,000
Deferred income taxes	2,397
Total assets acquired	<u>746,780</u>
Current liabilities	<u>79,986</u>
Long-term liabilities	<u>12,894</u>
Total liabilities assumed	<u>92,880</u>
Net assets acquired	<u>\$653,900</u>

*Military Aviation Services, Klein Associates, Aeromet, Avionics Systems and certain defense and aerospace assets of IPICOM, Inc.* During 2003, in separate transactions, the Company acquired five businesses for an aggregate consideration of \$351,116 in cash, plus acquisition costs. These acquisitions were financed with cash on hand. The purchase prices for Military Aviation Services, Klein Associates, Aeromet and certain defense and aerospace assets of IPICOM, Inc. are subject to adjustment based on closing date net assets or net working capital of the acquired businesses. The Company acquired the following:

- Certain defense and aerospace assets of IPICOM, Inc. (IPICOM) on December 10, 2003. The Company paid \$8,676 of the purchase price on the closing date, and the balance of the purchase price of \$18,824 was recorded in other current liabilities at December 31, 2003 and subsequently paid in January of

2004. This acquisition adds innovative optical networking technology to the Company's existing and growing ISR and secure communications businesses;

- The net assets of the Military Aviation Services (MAS) business of Bombardier, Inc. on October 31, 2003. MAS provides a full range of technical services in the areas of aircraft maintenance, repair and upgrade for military aircraft, and the refurbishment and modernization of selected commercial aircraft. Its customers include the Canadian Armed Forces, the DoD, aerospace and defense prime contractors and foreign military organizations;
- All of the outstanding common stock of Klein Associates, Inc. (Klein), a business unit of OYO Corporation of Japan, on September 30, 2003. Klein designs, manufactures and supports side-scan sonar, sub-bottom profilers and related instruments and accessories for undersea search and survey, including intrusion detection systems for port security applications. Klein provides complimentary product capabilities, which the Company intends to integrate into L-3's port and maritime security systems offerings. Klein is also synergistic with the Company's acoustic undersea warfare products;
- All of the outstanding common stock of Aeromet, Inc. (Aeromet), on May 30, 2003. Aeromet designs, develops and integrates infrared and optical systems for airborne ISR. The acquisition advances the Company's strategy to expand its electro-optical and infrared product lines and provides the Company with the ability to apply Aeromet's technology to L-3's current ISR products; and
- All of the outstanding common stock of the avionics systems (Avionics Systems) business of Goodrich Corporation, on March 28, 2003. Avionics Systems develops and manufactures innovative avionics solutions for substantially all segments of the aviation market, and sells its

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
(Dollars in thousands, except per share data)**

products to the military, business jet, general aviation, rotary wing aircraft and air transport markets. The acquisition provides the Company with enhanced manufacturing capabilities, expanded marketing expertise, an expanded distribution network and increased efficiencies in research and development initiatives, which the Company expects to use to sell its avionics portfolio, including advanced displays, aviation recorders, transponders, collision avoidance and proximity awareness products. Avionics Systems also provides a unique set of products to add to the Company's existing product line for the commercial air transport, business jet and military aircraft markets.

Based on preliminary purchase price allocations, the goodwill recognized for the acquisitions of MAS, Klein, Aeromet, Avionics Systems and certain defense and aerospace assets of IPICOM was \$311,901 and goodwill of approximately \$281,000 is expected to be deductible for income tax purposes. Goodwill of \$43,068 was assigned to the Secure Communication & ISR segment, \$244,849 was assigned to the Aviation Products & Aircraft Modernization segment and \$23,984 was assigned to the Specialized Products segment.

*Aircraft Integration Systems.* On March 8, 2002, the Company acquired the assets of Aircraft Integration Systems (AIS), a division of Raytheon Company (Raytheon), for approximately \$1,148,700 in cash, which includes \$1,130,000 for the original contract purchase price, and an increase to the contract purchase price of approximately \$18,700 related to additional net assets received at closing, plus acquisition costs. Following the acquisition, the Company changed AIS's name to L-3 Communications Integrated Systems (IS). The purchase price is subject to adjustment based on the IS closing date net tangible book value, as defined in the asset purchase agreement. The acquisition was financed using approximately \$229,000 of cash on hand, borrowings under the Company's senior credit facilities of \$420,000 and a \$500,000 senior subordinated bridge loan (See Note 8). The Company acquired IS because it is a long-standing supplier of critical COMINT, SIGINT and unique sensor systems for special customers within the U.S. Government. The Company believes that IS has excellent operating prospects as its major customers increasingly focus on intelligence gathering and information distribution to the battlefield. The Company also believes there are significant opportunities to apply its proven business integration and cost control skills to further enhance IS's operating and financial performance. The Company also believes that IS creates significant opportunities for the sale of the Company's secure communications and aviation products, including communication links, signal processing, antennas, data recorders, displays and traffic control and collision avoidance systems.

The Company is continuing its discussions with Raytheon Company (Raytheon) regarding the adjustment of the purchase price for the acquisition of AIS. The AIS purchase price submitted by Raytheon to the Company amounted to approximately \$1,163,000. The Company believes that, in accordance with the terms of the AIS asset purchase agreement concerning the closing date balance sheet, the purchase price for AIS submitted by Raytheon should be reduced by \$100,000 to \$1,063,000. In accordance with the asset purchase agreement, the Company and Raytheon have begun the formal process to settle the disagreement and engage a neutral accountant to arbitrate the final purchase price. Any amount received by the Company for a reduction to the AIS purchase price will be reported as a reduction to goodwill.

*Detection Systems.* On June 14, 2002, the Company completed the acquisition of the detection systems business of PerkinElmer (Detection Systems) for \$110,000 in cash, which includes \$100,000 for the original contract purchase price, and an increase to the contract purchase price of \$10,000 related to a preliminary purchase price adjustment, plus acquisition costs. The purchase price is subject to final adjustment based on closing date net working capital, as defined. Detection Systems offers X-ray screening for several major security applications, including: (1) aviation systems for checked and oversized baggage, break bulk cargo and air freight; (2) port and border applications including pallets,

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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break bulk and air freight; and (3) facility protection such as parcels, mail and cargo. Detection Systems has a broad range of systems and technology, and an installed base of over 16,000 units. Detection Systems' customer base includes major airlines and airports, a number of domestic agencies, such as the U.S. Customs Service, U.S. Marshals Service, U.S. Department of Agriculture and U.S. Department of State, and international authorities throughout Europe, Asia and South America. The acquisition broadens the Company's capabilities and product offerings in the rapidly growing areas of airport security and other homeland defense markets, including explosive detection systems (EDS). The acquisition provides the Company with enhanced manufacturing and marketing capabilities, which will be used as the Company works to meet growing demand for its EDS products. Based on the final purchase price allocation for Detection Systems, goodwill of \$69,225 was assigned to the Specialized Products segment and is not expected to be deductible for income tax purposes.

*Telos, ComCept and TMA.* During the third quarter of 2002, in separate transactions, the Company acquired three businesses for an aggregate purchase price of \$105,824, which was comprised of \$90,248 in cash, 339,008 shares of L-3 Holdings common stock for part of the ComCept purchase price valued at \$15,576, plus acquisition costs. The aggregate purchase price includes net purchase price increases of \$1,891 based on closing date balance sheets of the acquired businesses and \$6,969 of additional purchase price based on the financial performance of the acquired businesses for various 12-month periods ending in 2003. The Company acquired:

- all of the outstanding common stock of Telos Corporation (Telos), a business incorporated in California, which provides software development for command, control and communications and other related services for military and national security requirements, on July 19, 2002;
- all of the outstanding common stock of ComCept, Inc. (ComCept), a company with network-centric warfare capabilities, including requirements development, modeling, simulation, communications and systems development and integration for ISR, on July 31, 2002. This acquisition is subject to additional consideration not to exceed 109,544 shares of L-3 Holdings common stock which is contingent upon the financial performance of ComCept for the fiscal year ending June 30, 2004; and which will be accounted for as goodwill; and
- all of the outstanding common stock of Technology, Management and Analysis Corporation (TMA), a provider of professional services to the DoD, primarily in support of the Naval surface and combat fleet, on September 23, 2002. The core competencies of TMA include engineering, logistics, ship test and trials, network engineering and support and hardware and software products.

Based on the final purchase price allocations, the goodwill recognized for the acquisitions of Telos, ComCept and TMA was \$95,053, of which \$41,771 is expected to be deductible for income tax purposes. Goodwill of \$29,003 was assigned to the Secure Communications & ISR segment and \$66,050 was assigned to the Training, Simulation & Support Services segment.

*Northrop Grumman's Electron Devices and Displays-Navigation Systems-San Diego Businesses, Wolf Coach Inc., International Microwave Corporation, Westwood Corporation, Wescam Inc. and Ship Analytics, Inc.* During the fourth quarter of 2002, in separate transactions, the Company acquired seven businesses for an aggregate purchase price of \$346,487 in cash plus acquisition costs. The aggregate purchase price includes net purchase price increases of \$2,043 based on closing date balance sheets of the acquired businesses and \$5,678 of additional purchase price based on the financial performance of the acquired businesses for the year ended December 31, 2003. The Company acquired:

- the net assets of Northrop Grumman's Electron Devices and Displays-Navigation Systems-San Diego businesses on October 25, 2002. Electron Devices is a supplier of microwave power

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued) (Dollars in thousands, except per share data)

devices to all major prime contractors on key military programs, including missile seekers, aircraft navigation and landing systems, airborne and ground radar's and electronic warfare and communications systems. Following the acquisition, the Company changed Electron Devices name to L-3 Communications Electron Devices (Electron Devices). Displays-Navigation Systems is a supplier of ruggedized displays and computer and electronic systems for both military and commercial applications. Following the acquisition, the Company changed Displays-Navigation Systems' name to L-3 Communications Ruggedized Command and Control Solutions (Ruggedized Command & Control);

- all of the outstanding common stock of Wolf Coach, Inc. (Wolf Coach), a producer of mobile communications vehicles, for customers in the television industry, the military and for the homeland defense market, on November 1, 2002. The acquisition is subject to additional purchase price not to exceed \$2,700 which is contingent upon the financial performance of Wolf Coach for the years ending December 31, 2004 and 2005, and which will be accounted for as goodwill;
- all of the outstanding common stock of International Microwave Corporation (IMC), a global communications company that provides wireless communications, network support services, information technology, defense communications and enhanced surveillance systems, on November 8, 2002;
- all of the outstanding common stock of Westwood Corporation (Westwood), a supplier of shipboard power control, switchgear and power distribution systems to the United States Navy, Army, Air Force and Coast Guard, on November 13, 2002;
- all of the outstanding common stock of Wescam Inc. (Wescam), a designer and manufacturer of systems for defense applications that capture images from mobile platforms and transmit them in real time to tactical command centers for interpretation and for commercial broadcast applications to production facilities; and
- all of the outstanding common stock of Ship Analytics, Inc (Ship Analytics), a producer of crisis management software, providing command and control for homeland security applications, on December 19, 2002. Ship Analytics also designs, manufactures and operates real-time simulation systems for critical shipboard operations for commercial maritime and naval customers. The acquisition is subject to additional purchase price not to exceed \$9,000 which is contingent upon the financial performance of Ship Analytics for the years ending December 31, 2004 and 2005, and which will be accounted for as goodwill.

Based on the final purchase price allocations, the goodwill recognized for the acquisitions of Electron Devices, Ruggedized Command & Control, Wolf Coach, IMC, Westwood, Wescam and Ship Analytics was \$237,946, of which \$40,606 is expected to be deductible for income tax purposes. Goodwill of \$225,668 was assigned to the Specialized Products segment and \$12,278 was assigned to the Training, Simulation & Support Services segment.

*KDI, EER, Spar Aerospace, Emergent, BT Fuze and SY Technology.* During 2001, in separate transactions, the Company acquired six businesses for an aggregate purchase price of \$501,694 in cash plus acquisition costs. The aggregate purchase price includes net purchase price increases of \$9,551 based on closing date balance sheets of the acquired businesses and \$9,800 of additional purchase price based on the financial performance of the acquired businesses for the years ended December 31, 2002 and 2003. The Company acquired:

- all of the outstanding common stock of KDI Precision Products (KDI) on May 4, 2001;
- all of the outstanding common stock of EER Systems (EER) on May 31, 2001;

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
(Dollars in thousands, except per share data)**

- all of the outstanding common stock of Spar Aerospace Limited (Spar), a leading provider of high-end aviation product modernization;
- all of the outstanding common stock of Emergent Government Services Group (Emergent), a provider of engineering and information services to the U.S. Air Force, Army, Navy and intelligence agencies, on November 30, 2001. Following the acquisition, the Company changed Emergent's name to L-3 Communications Analytics (L-3 Analytics);
- the net assets of Bulova Technologies, a producer of military fuzes that prevent the inadvertent firing and detonation of weapons during handling, on December 19, 2001. Bulova Technologies was later renamed BT Fuze Products (BT Fuze); and
- the net assets of SY Technology, Inc. (SY), a provider of air warfare simulation services, on December 31, 2001.

Additionally, during the years ended December 31, 2003, 2002 and 2001, the Company purchased other businesses, which individually and in the aggregate were not material to the Company's consolidated results of operations, financial position or cash flows in the year acquired.

Substantially all of the acquisitions were initially financed with cash on hand or borrowings under the Company's bank credit facilities.

All of the Company's acquisitions have been accounted for as purchase business combinations and are included in the Company's results of operations from their respective effective dates. The assets and liabilities recorded in connection with the purchase price allocations for the acquisitions of Avionics Systems, Aeromet, Klein, MAS, Vertex and certain defense and aerospace assets of IPICOM are based upon preliminary estimates of fair values for contracts in process, inventories, estimated costs in excess of billings to complete contracts in process, identifiable intangibles, plant and equipment, litigation liabilities and deferred income taxes. Actual adjustments will be based on the final purchase prices and final appraisals and other analyses of fair values which are in process. The Company expects to complete the purchase price allocations in 2004. The Company does not expect the differences between the preliminary and final purchase price allocations for these acquisitions to be material.

***Unaudited Pro Forma Statement of Operations Data***

Assuming the business acquisitions the Company completed during 2003 and the related financing transactions occurred on January 1, 2003, the unaudited pro forma sales, net income and diluted earnings per share would have been approximately \$5,817,700, \$298,100 and \$2.90, respectively, for the year ended December 31, 2003.

Assuming the business acquisitions the Company completed during 2003 and 2002 and the related financing transactions occurred on January 1, 2002, the unaudited pro forma sales, net income and diluted earnings per share would have been approximately \$5,474,500, \$174,100 and \$1.77, respectively, for the year ended December 31, 2002.

Assuming the business acquisitions the Company completed during 2002 and the related financing transactions occurred on January 1, 2002, the unaudited pro forma sales, net income and diluted earnings per share would have been approximately \$4,699,100, \$167,800 and \$1.71, respectively, for the year ended December 31, 2002.

Assuming the business acquisitions the Company completed during 2002 and 2001 and the related financing transactions occurred on January 1, 2001, the unaudited pro forma sales, net income and diluted earnings per share would have been approximately \$4,139,600, \$113,900 and \$1.21, respectively, for the year ended December 31, 2001.

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
(Dollars in thousands, except per share data)**

The pro forma results disclosed in the preceding paragraphs are based on various assumptions and are not necessarily indicative of the result of operations that would have occurred had the Company completed the acquisitions and the related financing transactions on January 1, 2001, January 1, 2002 and January 1, 2003.

***Divestiture and Other Transactions***



On May 31, 2001, the Company sold a 30% interest in Aviation Communications and Surveillance Systems LLC (ACSS) which comprised the Company's TCAS business to Thales Avionics, a wholly owned subsidiary of Thales (formerly Thomson-CSF), for \$75,206 of cash. L-3 continues to consolidate the financial statements of ACSS.

Interest and other income for the year ended December 31, 2003 includes net losses of \$1,292 from equity-method investments and a loss of \$2,180 in connection with the sale of the commercial broadband test equipment assets of the Celerity business. The net proceeds from the sale were \$8,795 and are included in Proceeds from Sale of Businesses in investing activities on the Statement of Cash Flows. Interest and other income for the year ended December 31, 2001 includes a gain of \$6,966 from the sale of a 30% interest in ACSS which was largely offset by a \$6,341 write-down in the carrying amount of an investment in common stock. Also included in interest and other income for 2001 is a charge of \$515 to account for the increase, in accordance with SFAS No. 133, in the fair value assigned to the embedded derivatives in L-3 Holdings' \$420,000 4% Senior Subordinated Contingent Debt Securities due 2011 sold in the fourth quarter of 2001, and a loss of \$751 from an equity method investment.

In March 2001, the Company settled certain items with a third party provider related to an existing services agreement. In connection with the settlement, L-3 received a net cash payment of \$14,200. The payment represents a credit for fees being paid over the term of the services agreement and incremental costs incurred by the Company over the same period arising from performance deficiencies under the services agreement. These incremental costs include additional operating costs for material management, vendor replacement, rework, warranty, manufacturing and engineering support, and administrative activities. The \$14,200 cash receipt was recorded as a reduction of costs and expenses in 2001.

#### 4. Contracts in Process

The components of contracts in process are presented in the table below. The unbilled contract receivables, inventoried contract costs and unliquidated progress payments are principally related to contracts with the U.S. Government and prime contractors or subcontractors of the U.S. Government.

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### L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued) (Dollars in thousands, except per share data)

	December 31,	
	2003	2002
Billed receivables, less allowances of \$25,221 and \$12,801	\$ 637,254	\$ 568,382
Unbilled contract receivables	676,604	490,678
Less: unliquidated progress payments	(193,672)	(171,457)
Unbilled contract receivables, net	482,932	319,221
Inventoried contract costs, gross	368,342	320,043
Less: unliquidated progress payments	(17,624)	(13,507)
Inventoried contract costs, net	350,718	306,536
Inventories at lower of cost or market	144,444	123,854
Total contracts in process	<u>\$1,615,348</u>	<u>\$1,317,993</u>

The Company believes that approximately 84% of the unbilled contract receivables at December 31, 2003 will be billed and collected within one year.

The table below presents a summary of SG&A, IRAD and B&P costs included in inventoried contract costs and the changes to them, including amounts used in the determination of cost of sales for "Contracts, primarily U.S. Government." The cost data in the tables below do not include the SG&A and research and development expenses for the Company's businesses that are primarily not U.S. government contractors, which are separately presented on the statements of operations under costs and expenses for "Commercial, primarily products" and expensed as incurred.

	Year Ended December 31,		
	2003	2002	2001
Balance in inventoried contract costs at beginning of period	\$ 52,253	\$ 19,970	\$ 24,396
Add: Acquired inventoried contract costs	—	34,417	1,575
Incurring costs <sup>(1)</sup>	496,461	429,386	298,317
Less: Amounts included in cost of sales	(509,314)	(431,520)	(304,318)
Balance in inventoried contract costs at end of period	<u>\$ 39,400</u>	<u>\$ 52,253</u>	<u>\$ 19,970</u>

(1) Incurred costs include IRAD and B&P costs of \$135,761, \$125,108, and \$81,019 for the years ended December 31, 2003, 2002 and 2001, respectively.

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### L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Dollars in thousands, except per share data)

#### 5. Goodwill and Other Intangible Assets

Effective January 1, 2002, the Company ceased recording goodwill amortization expense and began testing goodwill for impairment based on estimated fair values at the beginning of the year using a discounted cash flows

valuation. Based on the estimated fair values of the Company's reporting units as of January 1, 2002, the goodwill for certain space and broadband commercial communications businesses included in the Specialized Products segment was impaired. In the first quarter of 2002, the Company completed its valuation of the assets and liabilities for these businesses and has recorded an impairment charge of \$24,370, net of a \$6,428 income tax benefit. The impairment charge was recorded as a cumulative effect of a change in accounting principle effective January 1, 2002, in accordance with the adoption provisions of SFAS No. 142.

The table below presents net income and basic and diluted EPS for the year ended December 31, 2003 and 2002 compared with those amounts for the same period in 2001, adjusted to exclude goodwill amortization, net of income taxes for 2001.

	Year ended December 31,		
	2003	2002	2001
Reported income before cumulative effect of a change in accounting principle	\$277,640	\$202,467	\$115,458
Add: Goodwill amortization, net of income taxes and minority interest	—	—	33,899
Adjusted income before cumulative effect of a change in accounting principle	<u>\$277,640</u>	<u>\$202,467</u>	<u>\$149,357</u>
Adjusted net income	<u><u>\$277,640</u></u>	<u><u>\$178,097</u></u>	<u><u>\$149,357</u></u>
<b>Basic EPS:</b>			
Reported before cumulative effect of a change in accounting principle	\$ 2.89	\$ 2.33	\$ 1.54
Goodwill amortization, net of income tax and minority interest	—	—	0.45
Adjusted before cumulative effect of a change in accounting principle	<u>\$ 2.89</u>	<u>\$ 2.33</u>	<u>\$ 1.99</u>
Adjusted net income	<u><u>\$ 2.89</u></u>	<u><u>\$ 2.05</u></u>	<u><u>\$ 1.99</u></u>
<b>Diluted EPS:</b>			
Reported before cumulative effect of a change in accounting principle	\$ 2.71	\$ 2.18	\$ 1.47
Goodwill amortization, net of income tax and minority interest	—	—	0.40
Adjusted before cumulative effect of a change in accounting principle	<u>\$ 2.71</u>	<u>\$ 2.18</u>	<u>\$ 1.87</u>
Adjusted net income	<u><u>\$ 2.71</u></u>	<u><u>\$ 1.93</u></u>	<u><u>\$ 1.87</u></u>

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L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
(Dollars in thousands, except per share data)

*Goodwill.* The table below presents the changes in goodwill allocated to the reportable segments during the year ended December 31, 2003. During 2003, the Company reclassified the goodwill from the Microdyne acquired businesses among its reportable segments to the reportable segments where the goodwill is tested for impairment.

	Secure Communications & ISR	Training Simulation & Support Services	Aviation Products & Aircraft Modernization	Specialized Products	Consolidated Total
<b>Balance January 1, 2003</b>	\$722,135	\$445,427	\$ 620,289	\$1,006,697	\$2,794,548
Acquisitions	50,724	12,594	730,529	68,216	862,063
Reclassifications	(45,979)	22,869	—	23,110	—
Sale of businesses	—	—	—	(4,175)	(4,175)
<b>Balance December 31, 2003</b>	<u><u>\$726,880</u></u>	<u><u>\$480,890</u></u>	<u><u>\$1,350,818</u></u>	<u><u>\$1,093,848</u></u>	<u><u>\$3,652,436</u></u>

*Identifiable Intangible Assets.* The gross carrying amount and accumulated amortization balances of the Company's identifiable intangible assets that are subject to amortization are presented in the tables below. The Company has no indefinite-lived identifiable intangible assets.

	December 31, 2003		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Identifiable intangible assets that are subject to amortization:			
Customer relationships	\$154,770	\$6,519	\$148,251
Technology	14,500	2,325	12,175
Non-compete agreements	2,000	270	1,730
Total	<u><u>\$171,270</u></u>	<u><u>\$9,114</u></u>	<u><u>\$162,156</u></u>

	December 31, 2002		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Identifiable intangible assets that are subject to amortization:			
Customer relationships	\$80,826	\$ 600	\$80,226
Technology	9,825	1,844	7,981
Non-compete agreements	<u>2,000</u>	<u>60</u>	<u>1,940</u>

Total	<u>\$92,651</u>	<u>\$2,504</u>	<u>\$90,147</u>
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The Company recorded amortization expense for its identifiable intangible assets of \$6,610 for 2003 and \$1,337 for 2002. Based on gross carrying amounts at December 31, 2003, the Company's estimate for identifiable intangible assets amortization expense for the years ending December 31, 2004 through 2008 are presented in the table below.

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)**  
**(Dollars in thousands, except per share data)**

<u>Year Ending December 31,</u>	<u>Estimated Amortization Expense</u>
2004	\$ 17,007
2005	\$ 18,678
2006	\$ 17,543
2007	\$ 16,647
2008	\$ 14,247

**6. Other Current Liabilities and Other Liabilities**

The components of other current liabilities are presented in the table below.

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
Accrued product warranty costs	\$ 41,184	\$ 56,487
Billings and amounts in excess of costs incurred on contracts in process	71,235	45,947
Estimated cost in excess of estimated contract value to complete contracts in process	52,063	25,754
Aggregate purchase price payable for acquired businesses	28,331	13,329
Notes payable and capital lease obligations	9,312	3,380
Deferred revenues	5,826	3,581
Current portion of net deferred gains from terminated interest rate swap agreements	4,246	2,114
Other	49,762	32,824
Total other current liabilities	<u>\$261,959</u>	<u>\$183,416</u>

The table below presents the changes in the Company's accrued product warranty costs for the year ended December 31, 2003.

Balance January 1, 2003	\$ 56,487
Acquisitions during this period	2,886
Accruals for product warranties issued during the period	21,092
Accruals for product warranties existing before January 1, 2003	8,590
Settlements made during the period	(47,871)
Balance December 31, 2003	<u>\$ 41,184</u>

The components of other liabilities are presented in the table below.

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
Non-current portion of net deferred gains from terminated interest rate swap agreements	\$ 29,224	\$14,026
Accrued workers compensation	14,549	8,615
Notes payable and capital lease obligations	1,485	8,631
Other non-current liabilities	56,393	34,372
Total other liabilities	<u>\$101,651</u>	<u>\$65,644</u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)**  
**(Dollars in thousands, except per share data)**

**7. Property, Plant and Equipment**

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
Land	\$ 35,668	\$ 33,876
Buildings and improvements	147,860	121,830
Machinery, equipment, furniture and fixtures	417,978	372,602
Leasehold improvements	<u>138,654</u>	<u>121,814</u>

Gross property, plant and equipment	740,160	650,122
Less: accumulated depreciation and amortization	(220,411)	(191,483)
Property, plant and equipment, net	<u>\$ 519,749</u>	<u>\$ 458,639</u>

Depreciation expense for property, plant and equipment was \$77,340 for 2003, \$66,230 for 2002, and \$40,362 for 2001.

## 8. Debt

The components of long-term debt and a reconciliation to the carrying amount of long-term debt are presented in the table below.

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
<b>L-3 Communications:</b>		
Borrowings under Senior Credit Facilities	\$ —	\$ —
8½% Senior Subordinated Notes due 2008	—	180,000
8% Senior Subordinated Notes due 2008	200,000	200,000
7 5/8% Senior Subordinated Notes due 2012	750,000	750,000
6 1/8% Senior Subordinated Notes due 2013	400,000	—
6 1/8% Senior Subordinated Notes due 2014	400,000	—
	<u>1,750,000</u>	<u>1,130,000</u>
<b>L-3 Holdings:</b>		
5¼% Convertible Senior Subordinated Notes due 2009	298,370	300,000
4% Senior Subordinated Convertible Contingent Debt Securities due 2011 (CODES)	420,000	420,000
Principal amount of long-term debt	<u>2,468,370</u>	<u>1,850,000</u>
Less: Unamortized discounts	(11,070)	(2,248)
Carrying amount of long-term debt	<u><u>\$2,457,300</u></u>	<u><u>\$1,847,752</u></u>

## L-3 Communications

At December 31, 2003, the Company's Senior Credit Facilities were comprised of a \$500,000 five-year revolving credit facility maturing on May 15, 2006 and a \$250,000 364-day revolving facility. On February 24, 2004, the maturity date of the 364-day revolving credit facility was extended to February 22, 2005.

At December 31, 2003, available borrowings under the Company's Senior Credit Facilities were \$665,933, after reductions for outstanding letters of credit of \$84,067. There were no outstanding borrowings under the Senior Credit Facilities at December 31, 2003.

Borrowings under the Senior Credit Facilities bear interest, at L-3 Communications' option, at either: (i) a "base rate" equal to the higher of 0.50% per annum above the latest federal funds rate

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and the Bank of America "reference rate" (as defined) plus a spread ranging from 2.00% to 0.50% per annum depending on L-3 Communications' Debt Ratio at the time of determination or (ii) a "LIBOR rate" (as defined) plus a spread ranging from 3.00% to 1.50% per annum depending on L-3 Communications' Debt Ratio at the time of determination. The Debt Ratio is defined as the ratio of Consolidated Total Debt to Consolidated EBITDA. Consolidated Total Debt is equal to outstanding debt plus capitalized lease obligations and the outstanding amount of permitted convertible securities of L-3 Holdings guaranteed by L-3 Communications or its subsidiaries minus the lesser of actual unrestricted cash or \$50,000. Consolidated EBITDA is equal to consolidated net income (excluding (i) impairment losses incurred on goodwill and identifiable intangible assets or debt and equity investments, (ii) gains or losses incurred on the retirement of debt, (iii) extraordinary gains or losses, (iv) gains or losses in connection with asset dispositions, and (v) gains or losses from discontinued operations) for the most recent four quarters, plus consolidated interest expense, income taxes, depreciation and amortization minus depreciation and amortization related to minority interest. At December 31, 2003, there were no borrowings outstanding under the Senior Credit Facilities. L-3 Communications pays commitment fees calculated on the daily amounts of the available unused commitments under the Senior Credit Facilities at a rate ranging from 0.50% to 0.30% per annum, depending on L-3 Communications' Debt Ratio in effect at the time of determination. L-3 Communications pays letter of credit fees calculated at a rate ranging from 1.50% to 0.75% per annum for performance letters of credit and 3.00% to 1.50% for all other letters of credit, in each case depending on L-3 Communications' Debt Ratio at the time of determination.

On December 22, 2003, L-3 Communications sold \$400,000 of 6 1/8% Senior Subordinated Notes due January 15, 2014 (December 2003 Notes) at a discount of \$7,372. The discount was recorded as a reduction to the principal amount of the notes and will be amortized as interest expense over the term of the notes. The effective interest rate of the December 2003 Notes is 6.31% per annum. Interest is payable semi-annually on January 15 and July 15 of each year commencing July 15, 2004. The net cash proceeds from this offering amounted to approximately \$391,000 after deducting the discounts, commissions and other offering expenses. The net proceeds from this offering were used to repay \$275,000 of borrowings outstanding under the Senior Credit Facilities and to increase cash and cash equivalents. The December 2003 Notes are general unsecured obligations of L-3 Communications and are subordinated in right of payment to all existing and future senior debt of L-3 Communications. On or after January 15, 2009, the December 2003 Notes are subject to redemption at any time, at the option of L-3 Communications, in whole or in part, at redemption prices (plus accrued and unpaid interest) starting at 103.063% of the principal amount (plus accrued and unpaid interest) during the 12-month period beginning January 15, 2009 and declining annually to 100% of principal (plus accrued and unpaid interest) on January 15, 2012 and thereafter. Prior to January 15, 2007, L-3 Communications may redeem up to 35% of the December 2003 Notes with the proceeds of certain equity offerings at a redemption price of 106.125% of the principal amount (plus accrued and unpaid interest).

On May 21, 2003, L-3 Communications sold \$400,000 of 6 1/8% Senior Subordinated Notes due July 15, 2013 (May 2003 Notes) at a discount of \$1,840. The discount was recorded as a reduction to the principal amount of the notes and will be amortized as interest expense over the term of the notes. The effective interest rate of the

May 2003 Notes is 6.17% per annum. Interest is payable semi-annually on January 15 and July 15 of each year, commencing July 15, 2003. The net cash proceeds from this offering amounted to approximately \$391,100 after deducting discounts, commissions and other offering expenses. The net proceeds from this offering were used to redeem the 8½% Senior Subordinated Notes due 2008 and to increase cash and cash equivalents. The May 2003 Notes are general unsecured obligations of L-3 Communications and are subordinated in right of payment to all existing and future senior debt of L-3 Communications. On or after July 15, 2008, the

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May 2003 Notes are subject to redemption at any time, at the option of L-3 Communications, in whole or in part, at redemption prices (plus accrued and unpaid interest) starting at 103.063% of the principal amount (plus accrued and unpaid interest) during the 12-month period beginning July 15, 2008 and declining annually to 100% of principal (plus accrued and unpaid interest) on July 15, 2011 and thereafter. Prior to July 15, 2006, L-3 Communications may redeem up to 35% of the May 2003 Notes with the proceeds of certain equity offerings at a redemption price of 106.125% of the principal amount (plus accrued and unpaid interest).

On May 21, 2003, L-3 Communications initiated a full redemption of all its outstanding \$180,000 aggregate principal amount of 8½% Senior Subordinated Notes due 2008 (May 1998 Notes). On June 20, 2003, L-3 Communications purchased and paid cash for all the outstanding May 1998 Notes, including accrued interest. During 2003, L-3 Communications recorded a pre-tax charge of \$11,225, comprising of premiums and other transaction costs of \$7,795 and \$3,430 to write-off the unamortized balance of debt issue costs and the deferred loss on the terminated interest rate swap agreements related to the May 1998 Notes.

In June of 2002, L-3 Communications sold \$750,000 of 7 5/8% Senior Subordinated Notes due June 15, 2012 (June 2002 Notes) with interest payable semi-annually on June 15 and December 15 of each year commencing December 15, 2002. The net proceeds from this offering and the concurrent sale of common stock by L-3 Holdings (see Note 10) were used to (i) repay \$500,000 borrowed on March 8, 2002, under the Company's senior subordinated bridge loan facility, (ii) repay the indebtedness outstanding under the Company's senior credit facilities, (iii) repurchase and redeem the 10 3/8% Senior Subordinated Notes due 2007 and (iv) increase cash and cash equivalents. The June 2002 Notes are general unsecured obligations of L-3 Communications and are subordinated in right of payment to all existing and future senior debt of L-3 Communications. The June 2002 Notes are subject to redemption at any time, at the option of L-3 Communications, in whole or in part, on or after June 15, 2007 at redemption prices (plus accrued and unpaid interest) starting at 103.813% of the principal amount (plus accrued and unpaid interest) during the 12-month period beginning June 15, 2007 and declining annually to 100% of principal (plus accrued and unpaid interest) on June 15, 2010 and thereafter. Prior to June 15, 2005, L-3 Communications may redeem up to 35% of the June 2002 Notes with the proceeds of certain equity offerings at a redemption price of 107.625% of the principal amount (plus accrued and unpaid interest).

In June of 2002, L-3 Communications commenced a tender offer to purchase any and all of its \$225,000 aggregate principal amount of 10 3/8% Senior Subordinated Notes due 2007. The tender offer expired on July 3, 2002. On June 25, 2002, L-3 Communications sent a notice of redemption for all of its 10 3/8% Senior Subordinated Notes due 2007 that remained outstanding after the expiration of the tender offer. Upon sending the notice, the remaining notes became due and payable at the redemption price as of July 25, 2002. During 2002, the Company recorded a pre-tax charge of \$16,187 (\$9,858 after-tax), comprised of premiums, fees and other transaction costs of \$12,469 and \$3,718 to write-off the remaining balance of unamortized debt issue costs relating to these notes.

In December of 1998, L-3 Communications sold \$200,000 of 8% Senior Subordinated Notes due August 1, 2008 (December 1998 Notes) with interest payable semi-annually on February 1 and August 1 of each year commencing February 1, 1999. The December 1998 Notes are general unsecured obligations of L-3 Communications and are subordinated in right of payment to all existing and future senior debt of L-3 Communications. The December 1998 Notes are subject to redemption at any time, at the option of L-3 Communications, in whole or in part, on or after August 1, 2003 at redemption prices (plus accrued and unpaid interest) starting at 104% of principal (plus accrued and unpaid interest) during the 12-month period beginning August 1, 2003 and declining annually to 100% of principal (plus accrued and unpaid interest) on August 1, 2006 and thereafter.

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Depending on the interest rate environment the Company may enter into interest rate swap agreements to convert the fixed interest rates on the Company's fixed rate debt obligations to variable interest rates or terminate any existing interest rate swap agreements. At December 31, 2003, the Company does not have any interest rate swap agreements in place. The table below presents the Company's interest rate swap agreements activity through December 31, 2003.

Inception Date	Fixed Rate Debt Obligation	Notional Amount	Average Variable Rate Paid <sup>(1)</sup>	Termination Date	Cash Proceeds Received at Termination <sup>(2)</sup>			December 31, 2003	
					Interest Expense Reduction <sup>(3)</sup>	Deferred Gain (Loss) <sup>(4)</sup>	Total	Cumulative Recognized Deferred Gain (Loss) <sup>(5)</sup>	Balance of Unamortized Deferred Gain (Loss) <sup>(6)</sup>
July 2003	\$400,000 of 6 1/8 % Senior Subordinated Notes due 2013	\$ 400,000	2.1%	September 2003	\$ 2,687	\$ 8,017	\$10,704	\$ 205	\$ 7,812
March 2003	\$750,000 of 7 5/8 % Senior Subordinated	\$ 200,000	4.4%	June 2003	1,578	6,727	8,305	405	6,322

	Notes due 2012									
January 2003	\$750,000 of 7 5/8 % Senior Subordinated Notes due 2012	\$	200,000	4.0%	March 2003	1,202	5,238	6,440	448	4,790
June 2002	\$750,000 of 7 5/8 % Senior Subordinated Notes due 2012	\$	200,000	4.1%	September 2002	1,762	12,173	13,935	1,567	10,606
November 2001	\$180,000 of 8½ % Senior Subordinated Notes due 2008	\$	180,000	5.3%	August 2002	1,186	(559)	627	(559)	—
July 2001	\$200,000 of 8% Senior Subordinated Notes due 2008	\$	200,000	3.9%	June 2002					
						3,446	5,229	8,675	1,289	3,940
						<u>\$ 11,861</u>	<u>\$36,825</u>	<u>\$48,686</u>	<u>\$3,355</u>	<u>\$33,470</u>

- (1) Represents the average variable interest rate L-3 paid prior to the termination of the interest rate swap agreement.
- (2) Cash proceeds received at termination are included in cash from operating activities on L-3's statement of cash flows in the period received.
- (3) Represents interest savings earned for the period prior to the termination of the interest rate swap agreements.
- (4) Represents the future value of the interest rate swap agreements at termination date, which is being amortized over the remaining term of the underlying debt instrument.
- (5) Represents the cumulative amount of deferred gain recognized as a reduction to interest expense through December 31, 2003.
- (6) The current portion of unamortized deferred gains at December 31, 2003, aggregating \$4,246, is included in other current liabilities. The remaining \$29,224 is included in other liabilities.

## L-3 Holdings

On December 22, 2003, L-3 Holdings announced a full redemption of \$300,000 of its 5.25% Convertible Senior Subordinated Notes due 2009 (Convertible Notes), which expired on January 9, 2004. At December 31, 2003, holders of approximately \$1,630 of the Convertible Notes had exercised their conversion rights and converted such notes into 40,000 shares of L-3 Holdings common stock. On January 9, 2004, holders of \$298,183 of the Convertible Notes exercised their conversion rights and converted such notes into 7,317,327 shares of L-3 Holdings common stock. The remaining \$187 of Convertible Notes were redeemed on January 12, 2004 for cash. As a result of these conversions and redemptions, L-3's principal amount of long-term debt decreased by \$298,370 and shareholders' equity increased by \$292,334 in January 2004 compared to December 31, 2003.

In the fourth quarter of 2001, L-3 Holdings sold \$420,000 of 4% Senior Subordinated Convertible Contingent Debt Securities (CODES) due September 15, 2011. The net proceeds from this offering amounted to approximately \$407,200 after underwriting discounts and commissions and other offering expenses. Interest is payable semi-annually on March 15 and September 15 of each year commencing March 15, 2002. The CODES are convertible into L-3 Holdings' common stock at a conversion price of \$53.813 per share (7,804,878 shares) under any of the following circumstances: (i) during any Conversion Period (defined below) if the closing sales price of the common stock of L-3 Holdings is

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more than 120% of the conversion price (\$64.58) for at least 20 trading days in the 30 consecutive trading-day period ending on the first day of the respective Conversion Period; (ii) during the five business day period following any 10 consecutive trading-day period in which the average of the trading prices for the CODES was less than 105% of the conversion value; (iii) if the credit ratings assigned to the CODES by either Moody's or Standard & Poor's are below certain specified ratings, (iv) if they have been called for redemption by the Company, or (v) upon the occurrence of certain specified corporate transactions. A Conversion Period is the period from and including the thirtieth trading day in a fiscal quarter to, but not including, the thirtieth trading day of the immediately following fiscal quarter. There are four Conversion Periods in each fiscal year. The CODES are subject to redemption at any time at the option of L-3 Holdings, in whole or in part, on or after October 24, 2004 at redemption prices (plus accrued and unpaid interest — including contingent interest) starting at 102% of principal (plus accrued and unpaid interest — including contingent interest) during the 12 month period beginning October 24, 2004 and declining annually to 100% of principal (plus accrued and unpaid interest — including contingent interest) on September 15, 2006. The CODES are general unsecured obligations of L-3 Holdings and are subordinated in right of payment to all existing and future senior debt of L-3.

Additionally, holders of the CODES have a right to receive contingent interest payments, not to exceed a per annum rate of 0.5% of the outstanding principal amount of the CODES, which will be paid on the CODES during any six-month period following a six-month period in which the average trading price of the CODES exceeds 120% of the principal amount of the CODES. The contingent interest payment provision was triggered for the period beginning September 15, 2002 to March 14, 2003 and resulted in additional interest for that period of \$840.

The contingent interest payment provision as well as the ability of the holders of the CODES to exercise the conversion features as a result of changes in the credit ratings assigned to the CODES have been accounted for as embedded derivatives. The initial aggregate fair values assigned to the embedded derivatives was \$2,544, which was also recorded as a discount to the CODES. The carrying values assigned to the embedded derivatives were recorded in other liabilities and are adjusted periodically through other income (expense) for changes in their fair values.

## Covenants

The Senior Credit Facilities, Senior Subordinated Notes and CODES agreements contain financial and other restrictive covenants that limit, among other things, the ability of the Company to borrow additional funds, dispose of assets, or pay cash dividends. The Company's most restrictive covenants are contained in the Senior Credit Facilities, as amended. The covenants require that (i) the Company's Debt Ratio be less than or equal to 4.25 for quarters ending September 30, 2003 through June 30, 2004, 4.00 for quarters ending September 30, 2004 through June 30, 2005 and 3.50 for quarters ending September 30, 2005 and thereafter, (ii) the Company's Senior Debt Ratio be less than or equal to 2.50 to 1.0 and (iii) the Company's Interest Coverage Ratio be greater than or equal to 3.00. The Senior Debt Ratio is defined as the ratio of Consolidated Senior Debt to Consolidated

EBITDA. Consolidated Senior Debt is defined as Consolidated Total Debt other than subordinated debt. The Interest Coverage Ratio is equal to the ratio of Consolidated EBITDA to Consolidated Cash Interest Expense. Consolidated Cash Interest Expense is equal to interest expense less the amortization of deferred debt issue costs included in interest expense. For purposes of calculating the financial covenants under the Senior Credit Facilities, the CODES are considered debt of L-3 Communications. The Senior Credit Facilities also limit the payment of dividends by L-3 Communications to L-3 Holdings except for payment of franchise taxes, fees to maintain L-3 Holdings' legal existence, income taxes up to certain amounts, interest accrued on the CODES or to provide for operating costs of up to \$1,000 annually. Under the covenant, L-3 Communications may also pay permitted dividends to L-3 Holdings:

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- in an amount not to exceed \$25,000 in any fiscal quarter, so long as no default or event of default has occurred and is continuing;
- in an amount not to exceed \$200,000 to permit L-3 Holdings to repurchase its common stock, so long as those dividends are paid with the net proceeds of additional subordinated indebtedness issued by L-3 Communications after January 1, 2004. L-3 Holdings may repurchase its common stock in an amount not to exceed \$200,000, whether from the proceeds of dividends from L-3 Communications or of issuances of permitted convertible securities or capital stock of L-3 Holdings; and
- in an amount not to exceed \$10,000 in any fiscal year to fund certain repurchases of common stock of L-3 Holdings from beneficiaries of equity compensation plans of L-3 Communications, L-3 Holdings or their subsidiaries. L-3 Holdings may make further payments of up to \$2,000 from the proceeds of issuances of its common stock to repurchase common stock held by management.

The Senior Credit Facilities contain cross default provisions that are triggered when a payment default occurs or certain other defaults occur that would allow the acceleration of indebtedness, guarantee obligations or certain other agreements of L-3 Communications or its subsidiaries in an aggregate amount of at least \$15,000 and those defaults have not been cured after 10 days. The Senior Subordinated Notes and CODES indentures contain cross acceleration provisions that are triggered when holders of the indebtedness of L-3 Holdings, L-3 Communications or their restricted subsidiaries (or the payment of which is guaranteed by such entities) accelerate at least \$10,000 in aggregate principal amount of those obligations.

**Subordination and Guarantees**

In connection with the Senior Credit Facilities, the Company has granted the lenders a first priority lien on the stock of L-3 Communications and substantially all of its material domestic subsidiaries. The Company is also required to grant the lenders a first priority lien on up to 65% of the stock of any material foreign subsidiary that is directly held by L-3 Communications or its domestic subsidiaries. The borrowings under the Senior Credit Facilities are guaranteed by L-3 Holdings and by substantially all of the material domestic subsidiaries of L-3 Communications on a senior basis. The payment of principal and premium, if any, and interest on the Senior Subordinated Notes are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally, by substantially all of L-3 Communications' restricted subsidiaries other than its foreign subsidiaries. The guarantees of the Senior Subordinated Notes are junior to the guarantees of the Senior Credit Facilities and rank *pari passu* with each other and the guarantees of the CODES. The CODES are unconditionally guaranteed, on an unsecured senior subordinated basis, jointly and severally, by L-3 Communications and substantially all of its restricted subsidiaries other than its foreign subsidiaries. These guarantees rank junior to the guarantees of the Senior Credit Facilities and rank *pari passu* with each other and the guarantees of the Senior Subordinated Notes.

**9. Financial Instruments**

*Fair Value of Financial Instruments.* The Company's financial instruments consist primarily of cash and cash equivalents, billed receivables, debt securities, equity securities, trade accounts payable, customer advances, Senior Credit Facilities, Senior Subordinated Notes, Convertible Notes, CODES, foreign currency forward contracts, interest rate swap agreements and embedded derivatives related to the issuance of the CODES. The carrying amounts of cash and cash equivalents, billed receivables, trade accounts payable, Senior Credit Facilities, and customer advances are representative of their respective fair values because of the short-term maturities or expected settlement dates of these

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instruments. The Company's investments are stated at fair value, which is based on quoted market prices for investments which are readily marketable securities, and estimated fair value for nonreadily marketable securities which is generally equal to historical cost, except for those that have experienced other-than-temporary impairments. Adjustments to the fair value of investments, which are classified as available-for-sale, are recorded, as an increase or decrease in shareholders' equity and are included as a component of accumulated other comprehensive income, except for other-than-temporary impairment losses, which are included in income from continuing operations. The Senior Subordinated Notes are registered, unlisted public debt which are traded in the over-the-counter market and their fair values are based on quoted trading activity. The fair values of the Convertible Notes and CODES are based on quoted prices for the same or similar issues. The fair values of foreign currency forward contracts were estimated based on exchange rates at December 31, 2003 and 2002. The fair values of the embedded derivatives were estimated by discounting expected cash flows using quoted market interest rates. The carrying amounts and estimated fair values of the Company's financial instruments are presented in the table below.

	December 31,			
	2003		2002	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Investments in equity securities accounted for using the equity method	\$ 15,780	\$ 15,780	\$ 8,481	\$ 8,481
Investments in equity securities accounted for using the cost method	4,133	4,133	16,140	16,140
Securities available-for-sale	100	100	100	100
Senior Subordinated Notes	1,740,923	1,775,375	1,130,000	1,170,500
Convertible Notes	298,370	375,946	300,000	385,500
CODES	418,007	460,950	417,752	469,350
Foreign currency forward contracts	1,153	1,153	(454)	(454)
Embedded derivatives	(2,666)	(2,666)	(3,087)	(3,087)

*Interest Rate Risk Management.* The Company had previously entered into interest rate swap agreements on certain of its Senior Subordinated Notes to take advantage of variable interest rates, which were lower than the fixed rates on those notes. These swap agreements exchanged the fixed interest rate for a variable interest rate on a notional amount equal to either a portion or the entire principal amount of the related notes, were denominated in U.S. dollars and had designated maturities which occurred on the interest payment dates of the related Senior Subordinated Notes. Cash payments received from or paid to the counterparties on the interest rate swap agreements are the difference between the amount that the fixed interest rates are greater than or less than the variable contract rates on the designated maturity dates, multiplied by the notional amounts underlying the respective interest rate swap agreements. Cash payments or receipts between the Company and counterparties were recorded as a component of interest expense. The Company manages exposure to counterparty credit risk by entering into the interest rate swap agreements only with major financial institutions that are expected to fully perform under the terms of such agreements. The notional amounts are used to measure the volume of these agreements and do not represent exposure to credit loss. There were no outstanding interest rate swap agreements at December 31, 2003 and 2002.

*Foreign Currency Exchange Risk Management.* Some of the Company's U.S. and foreign operations have contracts with customers which are denominated in currencies other than the functional currencies of those operations. To mitigate the risk associated with certain of these contracts denominated in foreign currency, the Company has entered into foreign currency forward

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contracts. The Company's activities involving foreign currency forward contracts are designed to hedge the foreign denominated cash paid or received, primarily Euro, British Pound and U.S. dollar. The Company manages exposure to counterparty credit risk by entering into foreign currency forward contracts only with major financial institutions that are expected to fully perform under the terms of such contracts. The notional amounts are used to measure the volume of these contracts and do not represent exposure to foreign currency losses.

Information with respect to foreign currency forward contracts is presented in the table below.

	December 31,			
	2003		2002	
	Notional Amount	Unrealized Gain	Notional Amount	Unrealized (Loss)
Foreign currency forward contracts	\$71,390	\$1,153	\$6,048	\$(454)

**10. L-3 Holdings Common Stock**

On January 26, 2004, L-3 Holdings announced that its Board of Directors had declared its first quarterly cash dividend of \$0.10 per share, payable March 15, 2004, to shareholders of record at the close of business on February 17, 2004. On February 17, 2004, L-3 Holdings had 105,227,879 shares of common stock outstanding.

On June 28, 2002, L-3 Holdings sold 14,000,000 shares of its common stock in a public offering for \$56.60 per share. Upon closing, L-3 Holdings received net proceeds after deducting discounts, commissions and other offering expenses of \$766,780. The net proceeds from this sale, which were contributed to L-3 Communications, and the concurrent sale of senior subordinated notes by L-3 Communications (See Note 8) were used to (i) repay \$500,000 borrowed on March 8, 2002, under the Company's senior subordinated bridge loan facility, (ii) repay the indebtedness outstanding under the Company's Senior Credit Facilities, (iii) repurchase and redeem the 10 3/8% Senior Subordinated Notes due 2007 and (iv) increase cash and cash equivalents.

On April 23, 2002, the Company announced that its Board of Directors authorized a two-for-one stock split on all shares of L-3 Holdings common stock. The stock split entitled all shareholders of record at the close of business on May 6, 2002 to receive one additional share of L-3 Holdings common stock for every share held on that date. The additional shares were distributed to shareholders in the form of a stock dividend on May 20, 2002. Upon completion of the stock split, L-3 Holdings had approximately 80 million shares of common stock outstanding. All of L-3 Holdings' historical share and earnings per share (EPS) data have been restated to give effect to the stock split.

On April 23, 2002, the Company's shareholders approved an increase in the number of authorized shares of L-3 Holdings common stock from 100,000,000 to 300,000,000 and an increase in the number of authorized shares of L-3 Holdings preferred stock from 25,000,000 to 50,000,000.

On June 29, 2001, the Company established the L-3 Communications Corporation Employee Stock Purchase Plan (ESPP) and registered 3,000,000 shares of L-3 Holdings common stock, which may be purchased by employees of L-3 Communications Corporation, its U.S. subsidiaries and certain of its foreign subsidiaries through payroll deductions. In general, an eligible employee who participates in the ESPP may purchase L-3 Holdings' common stock at a fifteen percent discount. The ESPP is not subject to the Employment Retirement Income Security Act of 1974, as amended. The Company received \$26,384, \$17,478 and \$4,861 of employee contributions for the ESPP in 2003, 2002 and 2001, respectively. These contributions were recorded as a component of shareholders' equity in the consolidated balance sheet. L-3 Holdings issued 603,599 shares in 2003



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of L-3 Holdings' common stock to the trustee of the ESPP relating to contributions received during the period July 1, 2003 to December 31, 2003.

On May 2, 2001, L-3 Holdings sold 13,800,000 shares of common stock in a public offering for \$40.00 per share. L-3 Holdings sold 9,150,000 shares and other selling stockholders, including affiliates of Lehman Brothers Inc., sold 4,650,000 secondary shares. Upon closing, L-3 Holdings received net proceeds after underwriting discounts and commissions and other offering expenses of \$353,622. The net proceeds were contributed to L-3 Communications and were used to repay borrowings under the Senior Credit Facilities, pay for the KDI and EER acquisitions and to increase cash and cash equivalents.

**11. Accumulated Other Comprehensive Loss**

The changes in the Company's accumulated other comprehensive balances for each of the three years ended December 31, 2003 are presented in the table below.

	Foreign currency translation adjustments	Unrealized gains (losses) on securities	Unrealized gains (losses) on hedging instruments	Minimum pension liability adjustments	Accumulated other comprehensive loss
Balance at January 1, 2001	<u>\$ (2,584)</u>	<u>\$ (3,698)</u>	<u>\$ —</u>	<u>\$ (890)</u>	<u>\$ (7,172)</u>
Period change	<u>(268)</u>	<u>3,452</u>	<u>(163)</u>	<u>(19,519)</u>	<u>(16,498)</u>
Balance at December 31, 2001	<u>(2,852)</u>	<u>(246)</u>	<u>(163)</u>	<u>(20,409)</u>	<u>(23,670)</u>
Period change	<u>65</u>	<u>—</u>	<u>(114)</u>	<u>(45,580)</u>	<u>(45,629)</u>
Balance at December 31, 2002	<u>(2,787)</u>	<u>(246)</u>	<u>(277)</u>	<u>(65,989)</u>	<u>(69,299)</u>
Period change	<u>(245)</u>	<u>—</u>	<u>896</u>	<u>(4,189)</u>	<u>(3,538)</u>
Balance at December 31, 2003	<u><u>\$ (3,032)</u></u>	<u><u>\$ (246)</u></u>	<u><u>\$ 619</u></u>	<u><u>\$ (70,178)</u></u>	<u><u>\$ (72,837)</u></u>

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)  
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**12. L- 3 Holdings Earnings Per Share**

A reconciliation of basic and diluted earnings per share (EPS) is presented in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
<b>Basic:</b>			
Income before cumulative effect of a change in accounting principle	\$277,640	\$202,467	\$115,458
Cumulative effect of a change in accounting principle, net of income taxes	—	(24,370)	—
Net income	<u>\$277,640</u>	<u>\$178,097</u>	<u>\$115,458</u>
Weighted average common shares outstanding	<u>96,022</u>	<u>86,943</u>	<u>74,880</u>
Basic earnings per share before cumulative effect of a change in accounting principle	<u>\$ 2.89</u>	<u>\$ 2.33</u>	<u>\$ 1.54</u>
Basic earnings per share	<u><u>\$ 2.89</u></u>	<u><u>\$ 2.05</u></u>	<u><u>\$ 1.54</u></u>
<b>Diluted:</b>			
Income before cumulative effect of a change in accounting principle	\$277,640	\$202,467	\$115,458
After-tax interest expense savings on the assumed conversion of Convertible Notes	<u>9,549</u>	<u>10,316</u>	<u>10,502</u>
Income before cumulative effect of a change in accounting principle, including assumed conversion of Convertible Notes	<u>287,189</u>	<u>212,783</u>	<u>125,960</u>
Cumulative effect of a change in accounting principle, net of income taxes	—	(24,370)	—
Net income, including assumed conversion of Convertible Notes	<u><u>\$287,189</u></u>	<u><u>\$188,413</u></u>	<u><u>\$125,960</u></u>
Common and potential common shares:			
Weighted average common shares outstanding	96,022	86,943	74,880
Assumed exercise of stock options	7,573	7,750	7,692
Assumed purchase of common shares for treasury	(4,888)	(4,642)	(4,496)
Assumed conversion of Convertible Notes	<u>7,361</u>	<u>7,362</u>	<u>7,362</u>
Common and potential common shares	<u><u>106,068</u></u>	<u><u>97,413</u></u>	<u><u>85,438</u></u>
Diluted earnings per share before cumulative effect of a change in accounting principle	<u>\$ 2.71</u>	<u>\$ 2.18</u>	<u>\$ 1.47</u>
Diluted earnings per share	<u><u>\$ 2.71</u></u>	<u><u>\$ 1.93</u></u>	<u><u>\$ 1.47</u></u>

The 7,804,878 shares of L-3 Holdings' common stock that are issuable upon conversion of the \$420,000 of 4% Senior Subordinated Convertible Contingent Debt Securities (CODES) were not included in the computation of diluted EPS for the years ended December 31, 2003 and 2002 because the conditions required for them to become convertible were not satisfied.

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**13. Income Taxes**

Income before income taxes and cumulative effect of a change in accounting principle is summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Domestic	\$404,340	\$295,405	\$179,498
Foreign	29,473	18,618	6,724
Income before income taxes and cumulative effect of a change in accounting principle	<u>\$433,813</u>	<u>\$314,023</u>	<u>\$186,222</u>

The components of the Company's current and deferred portions of the provision for income taxes are presented in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Current income tax provision:			
Federal	\$ 36,251	\$ 26,759	\$14,727
State and local	11,966	1,254	1,253
Foreign	13,209	4,451	2,146
Subtotal	<u>\$ 61,426</u>	<u>\$ 32,464</u>	<u>\$18,126</u>
Deferred income tax provision (benefit):			
Federal	87,343	63,593	43,333
State and local	9,301	11,568	8,673
Foreign	(1,897)	3,931	632
Subtotal	<u>94,747</u>	<u>79,092</u>	<u>52,638</u>
Total provision for income taxes	<u>\$156,173</u>	<u>\$111,556</u>	<u>\$70,764</u>

A reconciliation of the statutory federal income tax rate to the effective income tax rate of the Company is presented in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Statutory federal income tax rate	35.0%	35.0%	35.0%
State and local income taxes, net of federal income tax benefit	3.4	3.8	5.3
Foreign income taxes	0.7	0.2	0.6
Foreign sales corporation and extraterritorial income exclusion benefits	(1.5)	(1.9)	(3.6)
Nondeductible goodwill amortization and other expenses	—	—	4.8
Research and experimentation and other tax credits	(1.9)	(2.1)	(5.0)
Other, net	0.3	0.5	0.9
Effective income tax rate	<u>36.0%</u>	<u>35.5%</u>	<u>38.0%</u>

The provision for income taxes excludes current tax benefits related to compensation expense deductions for income tax purposes arising from the exercise of stock options by the Company's

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employees, which were credited directly to shareholders' equity of \$8,457 for 2003, \$13,303 for 2002, and \$11,939 for 2001. These tax benefits reduced current income taxes payable.

The significant components of the Company's net deferred tax assets and liabilities are presented in the table below.

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
Deferred tax assets:		
Inventoried costs	\$ 29,036	\$ 43,678
Compensation and benefits	36,173	15,796
Pension and postretirement benefits	139,308	136,699
Property, plant and equipment	6,347	33,669
Income recognition on contracts in process	48,621	59,663
Loss carryforwards	17,184	6,579
Tax credit carryforwards	36,066	38,385
Other, net	25,094	24,533
Total deferred tax assets	<u>337,829</u>	<u>359,002</u>
Deferred tax liabilities:		

Goodwill	84,476	49,317
Other, net	86	18,861
Total deferred tax liabilities	<u>84,562</u>	<u>68,178</u>
Net deferred tax assets	<u>\$253,267</u>	<u>\$290,824</u>

The following table presents the classification of the Company's net deferred tax assets.

Current deferred tax assets	\$152,785	\$143,634
Long-term deferred tax assets	<u>100,482</u>	<u>147,190</u>
Total net deferred tax assets	<u>\$253,267</u>	<u>\$290,824</u>

At December 31, 2003, the Company's loss carryforwards included, \$9,580 of federal net operating loss carryforwards, most of which are subject to limitations, which will expire if unused between 2011 and 2021, \$18,086 of capital loss carryforwards that will expire, if unused, in 2007 and \$46,474 of state net operating losses that will expire, if unused, between 2005 and 2021. The Company also has \$36,066 of tax credit carryforwards primarily related to U.S. state research and experimentation credits and state investment tax credits that will expire, if unused, primarily beginning in 2012. The Company believes that it will generate sufficient taxable income, of the appropriate character, to utilize these loss and credit carryforwards before they expire.

The Company is subject to ongoing tax examinations in various jurisdictions, which may result in challenges to tax positions taken and, accordingly, the Company may record adjustments to provisions based on the probable outcomes of such matters. However, the Company believes that the resolution of these matters will not have a material effect on its financial position, results of operations or cash flows.

#### 14. Stock Options

In April 1999, the Company adopted the 1999 Long Term Performance Plan (1999 Plan). Awards under the 1999 Plan may be granted to any employee or to any other individual who provides services to or on behalf of the Company or any of its subsidiaries, subject to the discretion of the

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Compensation Committee of the Board of Directors. Awards under the 1999 Plan may be in the form of non-qualified stock options, incentive stock options, stock appreciation rights (SARs), restricted stock and other incentive awards, consistent with the 1999 Plan. In April 1997, the Company adopted the 1997 Stock Option Plan (1997 Plan). The 1997 Plan authorizes the Compensation Committee of the Board of Directors to grant incentive stock options to key employees of the Company and its subsidiaries. Awards under both plans are in the form of L-3 Holdings common stock. At December 31, 2003, the number of shares of L-3 Holdings' common stock authorized for grant under the 1999 Plan and 1997 Plan was 16,611,630, of which 954,914 shares were available for awards under these plans. The price at which non-qualified and incentive stock options may be granted shall not be less than 100% of the fair market value of L-3 Holdings' common stock on the date of grant. In general, options expire after 10 years and are exercisable ratably over a three year period.

At December 31, 2003, the Company has granted restricted stock awards of 371,181 shares, of which 55,637 shares have been forfeited. The Company awarded 88,245 shares on January 1, 2003, 54,958 shares on January 1, 2002, and 60,928 shares on January 1, 2001. The aggregate fair values of the restricted stock awards on their grant dates were \$3,963 in 2003, \$2,473 in 2002 and \$2,346 in 2001. The restricted stock awards granted on January 1, 2003, January 1, 2002 and January 1, 2001 vest over three years. Compensation expense charged against earnings for these restricted stock awards was \$2,975 in 2003, \$2,134 in 2002 and \$1,370 in 2001. Shareholders' Equity has been reduced by \$3,622 at December 31, 2003 for unearned compensation on these restricted stock awards.

The table below presents the Company's non-qualified and incentive stock option activity over the past three years under the 1999 Plan and 1997 Plan.

	Number of Options	Weighted Average Exercise Price
	<i>(in thousands)</i>	
Outstanding at January 1, 2001 (3,858 exercisable)	7,256	\$ 10.71
Options granted	2,214	35.81
Options exercised	(1,128)	14.57
Options cancelled	<u>(362)</u>	<u>21.23</u>
Outstanding at January 1, 2002 (4,216 exercisable)	7,980	16.68
Options granted	2,169	52.02
Options exercised	(970)	17.99
Options cancelled	<u>(155)</u>	<u>35.62</u>
Outstanding at January 1, 2003 (5,216 exercisable)	9,024	24.71
Options granted	2,301	40.92
Options exercised	(835)	17.24
Options cancelled	<u>(406)</u>	<u>39.95</u>
Outstanding at December 31, 2003 (5,919 exercisable)	<u>10,084</u>	<u>\$ 28.41</u>

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The table below summarizes information about the Company's non-qualified and incentive stock options outstanding at December 31, 2003.

Range of Exercise Prices	Outstanding			Exercisable		
	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
\$3.24	3,174	3.5	\$ 3.24	3,174	3.5	\$ 3.24
\$11.00	89	4.3	11.00	89	4.3	11.00
\$16.38 – \$19.84	372	5.7	18.76	372	5.7	18.76
\$20.25 – \$23.13	376	5.5	20.79	376	5.5	20.79
\$29.00	211	6.6	29.00	211	6.6	29.00
\$32.50 – \$35.00	918	7.3	33.28	547	7.3	33.28
\$35.60	1,031	9.2	35.60	—	—	—
\$39.19 – \$39.70	755	7.9	39.69	481	7.9	39.70
\$45.11 – \$45.80	1,152	9.7	45.48	—	—	—
\$49.00 – \$53.75	1,976	8.4	52.10	659	8.4	52.10
\$60.83	30	8.3	60.83	10	8.3	60.83
Total	<u>10,084</u>	6.7	\$28.41	<u>5,919</u>	5.1	\$17.64

The weighted average fair values of non-qualified and incentive stock options at their grant date during 2003, 2002 and 2001, where the exercise price equaled the market price (estimated fair value) on the grant date were \$13.22, \$18.75 and \$14.87, respectively. In accordance with APB No. 25, no compensation expense was recognized.

For purposes of determining the impact of the fair value provisions of SFAS No. 123, the Company estimates the fair value of its stock options at the date of grant using the Black-Scholes option-pricing valuation model. The weighted average assumptions used in the valuation models are presented in the table below.

	Year Ended December 31,		
	2003	2002	2001
Expected holding period (in years)	4.0	4.0	5.0
Expected volatility	38.3%	39.2%	39.5%
Expected dividend yield	0.2%	—	—
Risk-free interest rate	2.5%	4.0%	4.5%

#### 15. Commitments and Contingencies

The Company leases certain facilities and equipment under agreements expiring at various dates through 2028. The following table presents future minimum payments under non-cancelable operating leases with initial or remaining terms in excess of one year at December 31, 2003.

	Real Estate	Equipment	Total
2004	\$ 62,892	\$ 19,713	\$ 82,605
2005	79,897	15,927	95,824
2006	50,173	12,336	62,509
2007	44,606	9,070	53,676
2008	45,745	7,226	52,971
Thereafter	168,207	59,053	227,260
Total	<u>\$451,520</u>	<u>\$123,325</u>	<u>\$574,845</u>

Real estate lease commitments have been reduced by minimum sublease rental income of \$1,613 due in the future under non-cancelable subleases. Leases covering major items of real estate and

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equipment contain renewal and/or purchase options. Rent expense, net of sublease income was \$71,779 for 2003, \$65,277 for 2002 and \$41,370 for 2001.

On December 31, 2002, the Company entered into two real estate lease agreements, as lessee, with a third-party lessor, which expire on December 31, 2005 and are accounted for as operating leases. On or before the lease expiration date, the Company can exercise options under the lease agreements to either renew the leases, purchase both properties for \$28,000, or sell both properties on behalf of the lessor (the "Sale Option"). If the Company elects the Sale Option, the Company must pay the lessor a residual guarantee amount of \$22,673 for both properties, on or before the lease expiration date, and at the time both properties are sold, the Company must pay the lessor a supplemental rent equal to the gross sales proceeds in excess of the residual guarantee amount not to exceed \$5,327. For these real estate lease agreements, if the gross sales proceeds are less than the sum of the residual guarantee amount and the supplemental rent, the Company is required to pay a supplemental rent to the extent the reduction in the fair value of the properties are demonstrated by an independent appraisal to have been caused by the Company's failure to properly maintain the properties. The aggregate residual guarantee amounts of \$22,673 has been included in the non-cancelable real estate operating lease payments relating to the expiration of such leases.

The Company has a contract to provide and operate for the U.S. Air Force (USAF) a full-service training facility, including simulator systems near a USAF base. The Company acted as the construction agent on behalf of the third-party owner-lessors for procurement and construction for the simulator systems, which were completed and delivered in August 2002. On December 31, 2002, the Company, as lessee, entered into an operating lease agreement for a term of 15 years for one of the simulator systems with the owner-lessor. At the end of the lease term, the Company may elect to purchase the simulator system at fair market value, which can be

no less than \$2,552 and no greater than \$6,422. If the Company does not elect to purchase the simulator system then on the date of expiration, the Company shall pay to the lessor, as additional rent, \$2,552 and return the simulator system to the lessor. The aggregate non-cancelable rental payments under this operating lease are \$32,480 including the additional rent of \$2,552. On February 27, 2003, the Company, as lessee, entered into an operating lease agreement for a term of 15 years for the remaining simulation systems with the owner-lessor. At the end of the lease term, the Company may elect to purchase the simulator systems at fair market value, which can be no less than \$4,146 and no greater than \$14,544. If the Company does not elect to purchase the simulator systems, then on the date of expiration, the Company shall return the simulator systems to the lessor. The aggregate non-cancelable rental payments under this operating lease are \$53,254.

The Company is engaged in providing products and services under contracts with the U.S. Government and to a lesser degree, under foreign government contracts, some of which are funded by the U.S. Government. All such contracts are subject to extensive legal and regulatory requirements, and, from time to time, agencies of the U.S. Government investigate whether such contracts were and are being conducted in accordance with these requirements. Under U.S. Government procurement regulations, an indictment of the Company by a federal grand jury could result in the Company being suspended for a period of time from eligibility for awards of new government contracts. A conviction could result in debarment from contracting with the federal government for a specified term. Additionally, in the event that U.S. Government expenditures for products and services of the type manufactured and provided by the Company are reduced, and not offset by greater commercial sales or other new programs or products, or acquisitions, there may be a reduction in the volume of contracts or subcontracts awarded to the Company.

In connection with the acquisition on March 8, 2002 of the Aircraft Integration Systems business from Raytheon, the Company assumed responsibility for implementing certain corrective actions,

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required under federal law to remediate the Greenville, Texas site location, and to pay a portion of those remediation costs. The hazardous substances requiring remediation have been substantially characterized, and the remediation system has been partially implemented. The Company has estimated that its share of the remediation cost will not exceed \$2,500, and will be incurred over a period of 25 years. The Company has established adequate reserves for these costs in the purchase price allocation for this acquisition.

The Company has been periodically subject to litigation, claims or assessments and various contingent liabilities incidental to its business. Management continually assesses the Company's obligations with respect to applicable environmental protection laws. While it is difficult to determine the timing and ultimate cost to be incurred by the Company in order to comply with these laws, based upon available internal and external assessments, with respect to those environmental loss contingencies of which management is aware, the Company believes that even without considering potential insurance recoveries, if any, there are no environmental loss contingencies that, individually or in the aggregate, would be material to the Company's consolidated results of operations. The Company accrues for these contingencies when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

On August 6, 2002, Aviation Communications & Surveillance Systems, LLC (ACSS), a subsidiary of L-3 Communications Corporation, was sued by Honeywell International Inc. and Honeywell Intellectual Properties, Inc. (collectively, "Honeywell") for alleged infringement of patents that relate to terrain awareness avionics. The lawsuit was filed in the United States District Court for the District of Delaware. In December of 2002, Honeywell withdrew without prejudice the lawsuit against ACSS and agreed to proceed with non-binding arbitration. We had previously investigated the Honeywell patents and believe that ACSS has valid defenses against Honeywell's patent infringement suit. In addition, ACSS has been indemnified to a certain extent by Thales Avionics, which provided ACSS with the alleged infringing technology. Thales Avionics owns 30% of ACSS. In the opinion of management, the ultimate disposition of Honeywell's pending claim will not result in a material liability to us.

L-3 Integrated Systems and its predecessors have been involved in a litigation with Kalitta Air (Kalitta Air) arising from a contract to convert Boeing 747 aircraft from passenger configuration to cargo freighters. The lawsuit was brought in the northern district of California on January 31, 1997. The aircraft were modified using Supplemental Type Certificates (STCs) issued in 1988 by the Federal Aviation Administration (FAA) to Hayes International, Inc. (Hayes/Pemco) as a subcontractor to GATX/Airlog Company (GATX). Between 1988 and 1990, Hayes/Pemco modified five aircraft as a subcontractor to GATX using the STCs. Between 1990 and 1994, Chrysler Technologies Airborne Systems, Inc. (CTAS), a predecessor to L-3 Integrated Systems, performed as a subcontractor to GATX and modified an additional five aircraft using the STCs. Two of the aircraft modified by CTAS were owned by American International Airways, the predecessor to Kalitta Air. In 1996, the FAA determined that the engineering data provided by Hayes/Pemco supporting the STCs was inadequate and issued an Airworthiness Directive that effectively grounded the ten modified aircraft. The Kalitta Air aircraft have not been in revenue service since that date. The matter was tried in January 2001 against GATX and CTAS with the jury finding fault on the part of GATX but rendering a unanimous defense verdict in favor of CTAS. Certain co-defendants had settled prior to trial. The Ninth Circuit Court of Appeals has reversed and remanded the trial court's summary judgment rulings in favor of CTAS regarding a negligence claim by Kalitta Air, which asserts that CTAS as an expert in aircraft modification should have known that the STCs were deficient, and excluding certain evidence at trial. Based on this ruling, it appears likely that the matter will have to be retried. In August of 2003, Kalitta Air has recalculated its damages based on consequential damage theories of lost revenues and income and diminution in value of the business and is asserting damages in excess of \$500,000. CTAS'

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insurance carrier has accepted defense of the matter with a reservation of rights. The Company continues to believe that it has meritorious defenses and intends to vigorously defend this matter.

The Company and L-3 Communications Security and Detection Systems (L-3 SDS) have been named, along with many other defendants, including other security screening systems manufacturers, as defendants in a number of lawsuits brought in the Southern District of New York by or on behalf of the victims of the terrorist attacks on September 11, 2001. Counsel for the plaintiffs have represented to the court that they intend to amend some or all of their complaints to delete certain of the defendants, including the Company and L-3 SDS, and to date, approximately 60 of the complaints have been amended to drop the Company and L-3 SDS as a defendant. In addition, the court has ruled that the plaintiffs who complete their applications for relief under a federal fund may not pursue judicial action. The court has ordered that the plaintiffs file final amended complaints by March 31, 2004, at which time the Company and L-3 SDS will know how many, if any, actions will be pending against them. The complaints allege various causes of action, including claims of wrongful death, negligence, strict liability and breach of contract, and seek compensatory and punitive damages. The Company and L-3 SDS believe that they have meritorious defenses to these actions and intend to vigorously defend the lawsuits. The Company purchased L-3 SDS from PerkinElmer, Inc. (PerkinElmer) on June 14, 2002. The actions have been tendered to the Company's and PerkinElmer's insurance carriers, who have accepted the defense of the these matters.

On November 18, 2002, we initiated a proceeding against OSI Systems, Inc. (OSI) in the United States District Court sitting in the Southern District of New York seeking, among other things, a declaratory judgment that we had fulfilled all of our obligations under a letter of intent with OSI (the "OSI Letter of Intent"). Under the OSI Letter of Intent, we were to negotiate definitive agreements with OSI for the sale of certain businesses we acquired from PerkinElmer, Inc. on June 14, 2002. On February 7, 2003, OSI filed an answer and counterclaims in the New York action alleging, among other things, that we breached our obligations under the OSI Letter of Intent and seeking damages in excess of \$100,000, not including punitive damages. Under the OSI Letter of Intent, we proposed selling to OSI the conventional detection business and the ARGUS business that we acquired from PerkinElmer, Inc. Negotiations with OSI lasted for almost one year and ultimately broke down over issues regarding, among other things, intellectual property, product-line definitions, allocation of employees and due diligence. We believe that the claims asserted by OSI in its suit are without merit and intend to defend against the OSI claims vigorously.

L-3 Communications Vertex Aerospace LLC (formerly known as Vertex Aerospace LLC and acquired by the Company on December 1, 2003) (L-3 Vertex) is named as a defendant in nine wrongful death lawsuits in the District Court, 17th Judicial District, Tarrant County, Texas; in the Circuit Court of the 17th Judicial Circuit, Broward County, Florida; and in the United States District Court, Western District of North Carolina arising from the crash of Air Midwest Flight 5481 at Charlotte-Douglas International Airport in Charlotte, North Carolina on January 8, 2003. The crash resulted in the deaths of nineteen passengers and two crewmembers. Each of the lawsuits alleges contributing factors including that the accident was caused by the improper maintenance of the aircraft by L-3 Vertex, and seeks to recover compensatory and punitive damages. No discovery has taken place in the lawsuits at this time. Eight claims resulting from this incident have previously settled. The National Transportation Safety Board (NTSB) investigated the cause of the crash and has concluded that the crash was caused by the incorrect rigging of the elevator control system compounded by the airplane's center of gravity, which was substantially aft of the certified limit, with several other contributing factors. L-3 Vertex believes that it has meritorious defenses to the pending lawsuits, and intends to defend the cases vigorously. The actions have been tendered to L-3 Vertex's insurance carrier, who has accepted the defense of each action served upon L-3 Vertex to date. L-3 Vertex was also indemnified by Air Midwest for losses L-3 Vertex incurred arising out of its provision

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of maintenance services to Air Midwest. Based on the availability of insurance and the indemnification from Air Midwest, we do not believe we will have a material liability in this matter.

With respect to those investigative actions, items of litigation, claims or assessments of which it is aware, management of the Company is of the opinion that the probability is remote that, after taking into account certain provisions that have been made with respect to these matters, the ultimate resolution of any such investigative actions, items of litigation, claims or assessments will have a material adverse effect on the consolidated financial position, results of operations or cash flows of the Company.

**16. Pensions and Other Employee Benefits**

The Company maintains multiple pension plans, both contributory and non-contributory, covering employees at certain locations. Eligibility for participation in these plans varies and benefits are generally based on the participant's compensation and/or years of service. The Company's funding policy is generally to contribute in accordance with cost accounting standards that affect government contractors, subject to the Internal Revenue Code and regulations thereon. Plan assets are invested primarily in listed stocks, mutual funds and bonds and U.S. Government and U.S. Government agency obligations.

The Company also provides postretirement medical and life insurance benefits for retired employees and dependents at certain locations. Participants are eligible for these benefits when they retire from active service and meet the eligibility requirements for the Company's pension plans. These benefits are funded primarily on a pay-as-you-go basis with the retiree generally paying a portion of the cost through contributions, deductibles and coinsurance provisions.

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The following table summarizes the aggregate balance sheet impact, as well as the benefit obligations, assets and funded status for all of the Company's pension and postretirement benefit plans. The Company uses a November 30 measurement date to calculate its end of year (December 31) benefit obligations, fair value of plan assets and annual net periodic benefit cost.

	Pension Plans		Postretirement Benefit Plans	
	2003	2002	2003	2002
<b>Change in benefit obligation:</b>				
Benefit obligation at beginning of year	\$ 713,925	\$ 533,451	\$ 129,406	\$ 87,143
Service cost	45,901	35,825	3,803	3,777
Interest cost	49,789	43,108	7,781	7,779
Participants' contributions	246	260	1,006	720
Amendments	9,657	(2,554)	(6,796)	(10,032)
Actuarial loss	76,863	49,990	6,972	4,411
Acquisitions	25,754	77,066	2,272	41,639
Settlement	—	—	(107)	—
Foreign currency exchange rate changes	8,452	—	2,965	—
Benefits paid	(28,455)	(23,221)	(6,149)	(6,031)
Benefit obligation at end of year	<u>\$ 902,132</u>	<u>\$ 713,925</u>	<u>\$ 141,153</u>	<u>\$ 129,406</u>
<b>Change in plan assets:</b>				
Fair value of plan assets at beginning of year	\$ 431,771	\$ 430,915	\$ —	\$ —
Actual return on plan assets	64,043	(27,819)	121	—
Acquisitions	24,122	4,250	—	—
Employer contributions	60,846	47,386	13,761	5,311
Participants' contributions	246	260	1,006	720
Foreign currency exchange rate changes	9,180	—	—	—
Benefits paid	(28,455)	(23,221)	(6,149)	(6,031)
Fair value of plan assets at end of year	<u>\$ 561,753</u>	<u>\$ 431,771</u>	<u>\$ 8,739</u>	<u>\$ —</u>
<b>Funded status of the plans</b>	<u>\$(340,379)</u>	<u>\$(282,154)</u>	<u>\$(132,414)</u>	<u>\$(129,406)</u>
Unrecognized actuarial loss (gain)	224,641	184,894	7,706	(188)
Unrecognized prior service cost	9,631	560	(13,347)	(8,877)
Net amount recognized	<u>\$(106,107)</u>	<u>\$ (96,700)</u>	<u>\$(138,055)</u>	<u>\$(138,471)</u>
<b>Amounts recognized in the balance sheets consist of:</b>				
Net amount recognized	\$(106,107)	\$ (96,700)	\$(138,055)	\$(138,471)
Additional minimum liability	(114,858)	(108,356)	—	—
Accrued benefit liability	<u>\$(220,965)</u>	<u>\$(205,056)</u>	<u>\$(138,055)</u>	<u>\$(138,471)</u>

The aggregate accumulated benefit obligation (ABO) for all of the Company's pension plans combined was \$721,123 at year end 2003 and \$582,861 at year end 2002. The table below presents the aggregate ABO and fair value of plan assets for those pension plans with ABO in excess of the fair value of plan assets at year end 2003 and 2002.

	2003	2002
Accumulated benefit obligation	\$701,855	\$565,904
Fair value of plan assets	534,338	406,809

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)**

**(Dollars in thousands, except per share data)**

The table below summarizes the weighted average assumptions used to determine the benefit obligations for the Company's pension and postretirement plans recorded at December 31, 2003 and 2002.

	Pension Plans		Postretirement Benefit Plans	
	2003	2002	2003	2002
<b>Benefit obligations</b>				
Discount rate	6.25%	6.75%	6.25%	6.75%
Rate of compensation increase	4.50%	4.50%	4.50%	4.50%

The following table summarizes the components of net periodic benefit cost for the Company's pension and postretirement benefit plans for the years ended 2003, 2002 and 2001.

	Pension Plans			Postretirement Benefit Plans		
	2003	2002	2001	2003	2002	2001
<b>Components of net periodic benefit cost:</b>						
Service cost	\$ 45,901	\$ 35,825	\$ 18,516	\$ 3,803	\$ 3,777	\$1,709
Interest cost	49,789	43,108	31,428	7,781	7,779	4,746
Amortization of prior service cost	625	312	351	(2,326)	(1,701)	(99)
Expected return on plan assets	(39,357)	(40,663)	(37,716)	(155)	—	—
Recognized actuarial (gain) loss	13,591	3,246	(424)	(743)	(530)	(887)
Recognition due to settlement	—	62	—	(155)	—	—
Net periodic benefit cost	<u>\$ 70,549</u>	<u>\$ 41,890</u>	<u>\$ 12,155</u>	<u>\$ 8,205</u>	<u>\$ 9,325</u>	<u>\$5,469</u>

The table below summarizes the weighted average assumptions used to determine the net periodic benefit cost for the years ended 2003, 2002 and 2001.

	Pension Plans			Postretirement Benefit Plans		
	2003	2002	2001	2003	2002	2001
<b>Net periodic benefit cost</b>						
Discount rate	6.75%	7.25%	7.50%	6.75%	7.25%	7.50%
Expected long-term return on plan assets	9.00%	9.50%	9.50%	9.00%	n.a.	n.a.
Rate of compensation increase	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%

The expected long-term return on plan asset assumption at year-end 2003 and 2002 is 9.00%. This assumption represents the average rate that the Company expects to earn over the long-term on the assets of the Company's benefit plans, including those from dividends, interest income and capital appreciation. The assumption has been determined based on expectations regarding future rates of return for the plans' investment portfolio, with consideration given to the allocation of investments by asset class and historical rates of return for each individual asset class.

The annual increase in cost of benefits (health care cost trend rate) is assumed to be an average of 11.50% in 2004 and is assumed to gradually decrease to a rate of 5.0% thereafter. Assumed health care cost trend rates have a significant effect on amounts reported for postretirement medical benefit plans. A one percentage point decrease in the assumed health care cost trend rates would have the effect of decreasing the aggregate service and interest cost by \$577 and the postretirement medical obligations by \$7,345. A one percentage point increase in the assumed health care cost trend rate would have the effect of increasing the aggregate service and interest cost by \$711 and the postretirement medical obligations by \$8,977.

*Plan Assets.* The Company's Benefit Plan Committee (Committee) has the responsibility to formulate the investment policies and strategies for the plans' assets. These policies and strategies are: (1) invest assets of the plans in a manner consistent with the fiduciary standards of ERISA; (2)

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

preserve the plans' assets; (3) maintain sufficient liquidity to fund benefit payments and pay expenses; (4) evaluate the performance of investment managers; and (5) achieve, on average, a minimum total rate of return equal to the established benchmarks for each asset category.

The Committee retains a professional investment consultant to advise and help ensure that the above policies and strategies are met. The Committee does not involve itself with the day to day operations and selection process of individual securities and investments, and, accordingly, has retained the professional services of investment management organizations to fulfill those tasks. The investment management organizations have investment discretion over the assets placed under their management. The Committee provides each investment manager with specific investment guidelines relevant to its asset class.

The Committee has established the allowable range that plans' assets may be invested in for each major asset category and regularly monitors each to make sure that the actual investment allocation remains within guidelines. The table below presents the range for each major category of the plans' assets at December 31, 2003.

Asset Category	Range
Domestic equity	40%-60%
International equity	5%-15%
Fixed income	25%-35%
Real estate securities	5%-15%
Cash and cash equivalents	0%-20%

The following table presents the Company's pension plan and postretirement benefit plan weighted-average asset allocations at year-end 2003 and 2002, by asset category.

Asset Category	2003	2002
Domestic equity	44%	38%
International equity	7	7
Fixed income	25	31
Real estate securities	7	7
Other, primarily cash and cash equivalents	17	17
Total	100%	100%

*Contributions.* During 2002 and 2003, U.S. Congress had granted plan sponsors an interest rate reduction for calculating minimum pension plan contributions. For 2004, the Company expects to contribute approximately \$55,000 to its pension plans, assuming the extension of such interest rate reduction, or \$75,000 if the interest rate reduction is not extended and \$13,000 to its postretirement benefit plans.

In connection with the Company's acquisition in 1997 of the ten business units from Lockheed Martin and the formation of the Company, the Company assumed certain defined benefit pension plan liabilities for present and former employees and retirees of certain businesses, which were transferred from Lockheed Martin to the Company. Lockheed Martin also has provided the Pension Benefit Guaranty Corporation (PBGC) with commitments to assume sponsorship or other forms of financial support under certain circumstances with respect to the Company's pension plans for Communication Systems West and Aviation Recorders (the "Subject Plans"). Upon the occurrence of certain events, Lockheed Martin, at its option, has the right to decide whether to cause the Company to transfer sponsorship of any or all of the Subject Plans to Lockheed Martin, even if the PBGC has not sought

L-3 COMMUNICATIONS HOLDINGS, INC.  
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

to terminate the Subject Plans. If Lockheed Martin did assume sponsorship of these plans, it would be primarily liable for the costs associated with funding the Subject Plans or any costs associated with the termination of the



Subject Plans but the Company would be required to reimburse Lockheed Martin for these costs. To date, there has been no impact on pension expense and funding requirements resulting from this arrangement. However, should Lockheed Martin assume sponsorship of the Subject Plans or if these plans were terminated, the impact of any increased pension expenses or funding requirements could be material to the Company. For the year ended December 31, 2003, the Company contributed \$4,808 to the Subject Plans. The Company has performed its obligations under the letter agreement with Lockheed Martin and the Lockheed Martin Commitment and has not received any communications from the PBGC concerning actions which the PBGC contemplates taking in respect of the Subject Plans.

*Employee Savings Plans.* Under its various employee savings plans, the Company matches the contributions of participating employees up to a designated level. The extent of the match, vesting terms and the form of the matching contributions vary among the plans. Under these plans, the Company's matching contributions in L-3 Holdings' common stock and cash were \$43,262 for 2003, \$36,120 for 2002 and \$21,462 for 2001.

## 17. Supplemental Cash Flow Information

	Year Ended December 31,		
	2003	2002	2001
Interest paid	\$119,940	\$109,301	\$81,552
Income tax payments, net of refunds	17,298	2,127	4,904
Noncash transactions:			
Common stock issued for acquisition consideration	4,969	10,607	17,357
Company's employer contribution to savings plans paid in common stock	39,494	28,138	16,868
Conversion of 5¼% convertible senior subordinated notes to equity	1,630	—	—

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued) (Dollars in thousands, except per share data)

## 18. Segment Information

The Company has four reportable segments: (1) Secure Communications & ISR, (2) Training, Simulation & Support Services, (3) Aviation Products & Aircraft Modernization and (4) Specialized Products, which are described in Note 1. The Company evaluates the performance of its operating segments and reportable segments based on their sales and operating income. All corporate expenses are allocated to the Company's divisions using an allocation methodology prescribed by U.S. Government regulations for government contractors. Accordingly, all costs and expenses are included in the Company's measure of segment profitability.

	Secure Communications & ISR	Training Simulation & Support Services	Aviation Products & Aircraft Modernization	Specialized Products	Corporate	Elimination of Intersegment Sales	Consolidated Total
<b>2003</b>							
Sales	\$1,440,596	\$1,008,596	\$1,021,861	\$1,663,596	\$ —	\$(73,055)	\$5,061,594
Operating income	172,903	111,581	147,834	148,703	—	—	581,021
Total assets	1,201,187	741,059	2,043,677	2,001,881	505,086	—	6,492,890
Capital expenditures	25,982	2,920	10,281	43,368	323	—	82,874
Depreciation and amortization	29,169	7,892	18,720	39,642	—	—	95,423
<b>2002</b>							
Sales	\$1,054,297	\$ 826,286	\$ 677,846	\$1,479,996	\$ —	\$(27,196)	\$4,011,229
Operating income	103,449	96,513	105,680	148,337	—	—	453,979
Total assets	1,149,016	648,554	965,038	1,940,982	538,718	—	5,242,308
Capital expenditures	19,350	4,957	14,035	23,542	174	—	62,058
Depreciation and amortization	23,692	6,857	15,513	29,798	—	—	75,860
<b>2001</b>							
Sales	\$ 452,152	\$ 597,029	\$ 263,450	\$1,040,753	\$ —	\$ (5,962)	\$2,347,422
Operating income	31,975	65,715	85,602	92,038	—	—	275,330
Total assets	366,482	497,368	545,517	1,382,010	547,872	—	3,339,249
Capital expenditures	11,561	2,999	9,625	23,657	279	—	48,121
Depreciation and amortization	13,839	13,207	12,064	47,841	—	—	86,951

Corporate assets not allocated to the reportable segments primarily include cash and cash equivalents, corporate office fixed assets, deferred income tax assets and deferred debt issuance costs.

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**  
**(Dollars in thousands, except per share data)**

The Company's sales attributable to U.S. customers and foreign customers is summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
U.S.	\$4,208,273	\$3,436,219	\$1,927,538
Foreign:			
United Kindgom	158,836	115,910	49,244
Canada	127,936	63,447	26,020
Germany	60,763	61,024	50,089
Australia	51,949	62,103	2,392
Japan	46,868	60,074	42,541
Other	406,969	212,452	249,598
Total foreign	<u>853,321</u>	<u>575,010</u>	<u>419,884</u>
Consolidated	<u><u>\$5,061,594</u></u>	<u><u>\$4,011,229</u></u>	<u><u>\$2,347,422</u></u>

Sales to principal customers are summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
U.S. Government agencies	\$3,843,025	\$3,107,271	\$1,614,858
Foreign governments	506,508	395,062	200,913
Commercial export	346,813	179,948	218,971
Other (principally U.S. commercial)	<u>365,248</u>	<u>328,948</u>	<u>312,680</u>
Consolidated	<u><u>\$5,061,594</u></u>	<u><u>\$4,011,229</u></u>	<u><u>\$2,347,422</u></u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.**  
**AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**  
**(Dollars in thousands, except per share data)**

The Company's sales by product and services are summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Intelligence, surveillance and reconnaissance products	\$ 817,909	\$ 410,412	\$ —
Aircraft modification, maintenance and technical services	733,744	517,309	15,067
Naval warfare products	418,019	280,564	299,684
Communication systems for intelligence collection and imagery processing	396,383	306,650	231,895
Avionics products	305,726	229,734	254,983
Security and detection systems	282,261	431,325	18,058
Information security systems	232,728	201,934	140,153
Space and commercial communications, satellite control and tactical sensor systems	210,701	155,578	136,023
Telemetry and instrumentation	181,631	193,926	206,866
Microwave components	164,952	93,365	112,896
Training devices and motion simulators	160,718	144,310	160,549
Guidance and navigation products	151,916	141,778	128,690
Fuzing products	<u>111,719</u>	<u>142,135</u>	<u>62,973</u>
Subtotal products	<u>4,168,407</u>	<u>3,249,020</u>	<u>1,767,837</u>
Simulation, engineering and support services	705,974	569,351	378,186
Training services	<u>302,622</u>	<u>256,935</u>	<u>218,843</u>
Subtotal Services	1,008,596	826,286	597,029
Intercompany eliminations	<u>(115,409)</u>	<u>(64,077)</u>	<u>(17,444)</u>
Consolidated	<u><u>\$5,061,594</u></u>	<u><u>\$4,011,229</u></u>	<u><u>\$2,347,422</u></u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.**  
**AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**  
**(Dollars in thousands, except per share data)**

**19. Unaudited Quarterly Financial Data**

Unaudited summarized financial data by quarter for the years ended December 31, 2003 and 2002 is presented in the table below.

	<b>March 31</b>	<b>June 30</b>	<b>September 30</b>	<b>December 31</b>
<b>2003</b>				
Sales	\$1,089,047	\$1,226,881	\$1,264,611	\$1,481,055

Operating income	108,837	128,746	152,372	191,066
Net income	49,737	53,379	76,107	98,417
Basic EPS	\$ 0.52	\$ 0.56	\$ 0.79	\$ 1.02
Diluted EPS	\$ 0.50	\$ 0.53	\$ 0.74	\$ 0.94

## 2002

Sales	\$ 696,840	\$ 955,189	\$ 1,053,613	\$ 1,305,587
Operating income	\$ 71,307	\$ 97,688	\$ 127,387	\$ 157,597

Income before cumulative effect of a change in accounting principle	\$ 29,279	\$ 31,640	\$ 61,760	\$ 79,788
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Cumulative effect of a change in accounting principle, net of income taxes	(24,370)	—	—	—
Net income	\$ 4,909	\$ 31,640	\$ 61,760	\$ 79,788

## Basic EPS:

Income before cumulative effect of a change in accounting principle	\$ 0.37	\$ 0.40	\$ 0.66	\$ 0.84
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Cumulative effect of a change in accounting principle	(0.31)	—	—	—
Net income	\$ 0.06	\$ 0.40	\$ 0.66	\$ 0.84

## Diluted EPS:

Income before cumulative effect of a change in accounting principle	\$ 0.36	\$ 0.38	\$ 0.62	\$ 0.79
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Cumulative effect of a change in accounting principle	(0.30)	—	—	—
Net income	\$ 0.06	\$ 0.38	\$ 0.62	\$ 0.79

## 20. Financial Information of L-3 Communications and Its Subsidiaries

Total shareholders' equity for L-3 Communications equals that of L-3 Holdings, but the components, common stock and additional paid-in capital, are different. The table below presents information regarding the balances and changes in common stock and additional paid-in capital of L-3 Communications for each of the three years ended December 31, 2003.

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued) (Dollars in thousands, except per share data)

	L-3 Communications Common Stock		Additional Paid-in Capital	Total
	Shares Issued	Par Value		
Balance at December 31, 2000	100	\$ —	\$ 515,926	\$ 515,926
Contributions from L-3 Holdings			830,561	830,561
Push down of CODES			(407,450)	(407,450)
Balance at December 31, 2001	100	—	939,037	939,037
Contributions from L-3 Holdings			855,939	855,939
Balance at December 31, 2002	100	—	1,794,976	1,794,976
Contributions from L-3 Holdings	—	—	98,512	98,512
Balance at December 31, 2003	100	\$ —	\$ 1,893,488	\$ 1,893,488

The net proceeds received by L-3 Holdings from the sale of its common stock, exercise of L-3 Holdings employee stock options and L-3 Holdings common stock contributed to the Company's savings plans are contributed to L-3 Communications. The net proceeds from the sale of the Convertible Notes and CODES by L-3 Holdings were also contributed to L-3 Communications and are reflected as indebtedness of L-3 Communications. See Notes 2 and 8.

The debt of L-3 Communications, including the Senior Subordinated Notes and borrowings under amounts drawn against the Senior Credit Facilities are guaranteed, on a joint and several, full and unconditional basis, by certain of its wholly-owned domestic subsidiaries (the "Guarantor Subsidiaries"). See Note 8. The foreign subsidiaries and certain domestic subsidiaries of L-3 Communications (the "Non-Guarantor Subsidiaries") do not guarantee the debt of L-3 Communications. None of the debt of L-3 Communications has been issued by its subsidiaries. There are no restrictions on the payment of dividends from the Guarantor Subsidiaries to L-3 Communications.

In lieu of providing separate audited financial statements for the Guarantor Subsidiaries, the Company has included the accompanying condensed combining financial statements based on Rule 3-10 of SEC Regulation S-X. The Company does not believe that separate financial statements of the Guarantor Subsidiaries are material to users of the financial statements.

The following condensed combining financial information present the results of operations, financial position and cash flows of (i) L-3 Holdings excluding L-3 Communications, (ii) L-3 Communications excluding its consolidated subsidiaries (the "Parent") (iii) the Guarantor Subsidiaries, (iv) the Non-Guarantor Subsidiaries and (v) the eliminations to arrive at the information for L-3 Communications on a consolidated basis.

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## L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**  
**(Dollars in thousands, except per share data)**

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b><u>Condensed Combining Balance Sheets:</u></b>						
<b><u>At December 31, 2003:</u></b>						
Current assets:						
Cash and cash equivalents	\$ —	\$ 155,375	\$ (41,291)	\$ 20,792	\$ —	\$ 134,876
Contracts in process	—	528,056	817,547	269,745	—	1,615,348
Other current assets	—	159,194	21,928	6,356	—	187,478
Total current assets	—	<u>842,625</u>	<u>798,184</u>	<u>296,893</u>	—	<u>1,937,702</u>
Goodwill	—	805,388	2,425,591	421,457	—	3,652,436
Other assets	—	343,914	446,403	112,435	—	902,752
Investment in and amounts due from consolidated subsidiaries	3,290,873	3,708,989	596,696	21,052	(7,617,610)	—
Total assets	<u>\$3,290,873</u>	<u>\$5,700,916</u>	<u>\$4,266,874</u>	<u>\$851,837</u>	<u>\$(7,617,610)</u>	<u>\$6,492,890</u>
Current liabilities	\$ —	\$ 396,868	\$ 370,468	\$156,876	\$ —	\$ 924,212
Other long-term liabilities	—	272,252	167,275	21,144	—	460,671
Long-term debt	716,377	2,457,300	—	—	(716,377)	2,457,300
Minority interest	—	—	—	76,211	—	76,211
Shareholders' equity	2,574,496	2,574,496	3,729,131	597,606	(6,901,233)	2,574,496
Total liabilities and shareholders' equity	<u>\$3,290,873</u>	<u>\$5,700,916</u>	<u>\$4,266,874</u>	<u>\$851,837</u>	<u>\$(7,617,610)</u>	<u>\$6,492,890</u>

<b><u>At December 31, 2002:</u></b>						
Current assets:						
Cash and cash equivalents	\$ —	\$ 126,421	\$ (7,248)	\$ 15,683	\$ —	\$ 134,856
Contracts in process	—	524,500	630,351	163,142	—	1,317,993
Other current assets	—	155,387	28,319	2,819	—	186,525
Total current assets	—	<u>806,308</u>	<u>651,422</u>	<u>181,644</u>	—	<u>1,639,374</u>
Goodwill	—	753,672	1,702,384	338,492	—	2,794,548
Other assets	—	372,207	355,866	80,313	—	808,386
Investment in and amounts due from consolidated subsidiaries	2,919,954	2,688,750	398,282	53,779	(6,060,765)	—
Total assets	<u>\$2,919,954</u>	<u>\$4,620,937</u>	<u>\$3,107,954</u>	<u>\$654,228</u>	<u>\$(6,060,765)</u>	<u>\$5,242,308</u>
Current liabilities	\$ —	\$ 336,050	\$ 298,646	\$ 75,246	\$ —	\$ 709,942
Other long-term liabilities	—	234,933	166,188	8,050	—	409,171
Long-term debt	717,752	1,847,752	—	—	(717,752)	1,847,752
Minority interest	—	—	—	73,241	—	73,241
Shareholders' equity	2,202,202	2,202,202	2,643,120	497,691	(5,343,013)	2,202,202
Total liabilities and shareholders' equity	<u>\$2,919,954</u>	<u>\$4,620,937</u>	<u>\$3,107,954</u>	<u>\$654,228</u>	<u>\$(6,060,765)</u>	<u>\$5,242,308</u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**  
**(Dollars in thousands, except per share data)**

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b><u>Condensed Combining Statements of Operations:</u></b>						
<b><u>For the year ended December 31, 2003:</u></b>						
Sales	\$ —	\$1,918,288	\$2,715,558	\$445,485	\$ (17,737)	\$5,061,594
Costs and expenses	—	<u>1,635,998</u>	<u>2,464,534</u>	<u>397,778</u>	<u>(17,737)</u>	<u>4,480,573</u>
Operating income	—	282,290	251,024	47,707	—	581,021
Interest and other income (expense)	—	9,575	(92)	(784)	(8,484)	215
Interest expense	34,058	131,734	501	8,932	(42,542)	132,683
Minority interest	—	—	—	3,515	—	3,515
Loss on retirement of debt	—	11,225	—	—	—	11,225
Provision (benefit) for income taxes	(12,261)	53,607	90,155	12,411	12,261	156,173
Equity in net income of consolidated subsidiaries	299,437	182,341	—	—	(481,778)	—
Net income	<u>\$277,640</u>	<u>\$ 277,640</u>	<u>\$ 160,276</u>	<u>\$ 22,065</u>	<u>\$(459,981)</u>	<u>\$ 277,640</u>

<b><u>For the year ended December 31, 2002:</u></b>						
Sales	\$ —	\$1,875,389	\$1,895,410	\$260,799	\$ (20,369)	\$4,011,229
Costs and expenses	—	<u>1,622,200</u>	<u>1,736,233</u>	<u>219,186</u>	<u>(20,369)</u>	<u>3,557,250</u>
Operating income	—	253,189	159,177	41,613	—	453,979
Interest and other income (expense)	—	11,202	(286)	262	(6,257)	4,921
Interest expense	35,499	120,774	1,622	6,353	(41,756)	122,492
Minority interest	—	—	—	6,198	—	6,198
Loss on retirement of debt	—	16,187	—	—	—	16,187
Provision (benefit) for income taxes	(13,880)	44,942	56,145	10,469	13,880	111,556

Cumulative effect of a change in accounting principle	—	(14,749)	—	(9,621)	—	(24,370)
Equity in net income of consolidated subsidiaries	199,716	110,358	—	—	(310,074)	—
Net income	<u>\$178,097</u>	<u>\$ 178,097</u>	<u>\$ 101,124</u>	<u>\$ 9,234</u>	<u>\$(288,455)</u>	<u>\$ 178,097</u>
<b><u>For the year ended December 31, 2001:</u></b>						
Sales	\$ —	\$1,328,702	\$ 854,094	\$168,558	\$ (3,932)	\$2,347,422
Costs and expenses	—	1,109,329	823,857	142,838	(3,932)	2,072,092
Operating income	—	219,373	30,237	25,720	—	275,330
Interest and other income (expense)	—	8,335	(515)	(6,081)	—	1,739
Interest expense	20,400	86,024	51	315	(20,400)	86,390
Minority interest	—	—	—	4,457	—	4,457
Provision (benefit) for income taxes	(7,976)	53,840	11,275	5,649	7,976	70,764
Equity in net income of consolidated subsidiaries	127,882	27,614	—	—	(155,496)	—
Net income	<u>\$115,458</u>	<u>\$ 115,458</u>	<u>\$ 18,396</u>	<u>\$ 9,218</u>	<u>\$(143,072)</u>	<u>\$ 115,458</u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)  
(Dollars in thousands, except per share data)**

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b><u>Condensed Combining Statements of Cash Flows:</u></b>						
<b><u>For the year ended December 31, 2003:</u></b>						
<b>Operating activities:</b>						
Net cash from (used in) operating activities	<u>\$ —</u>	<u>\$ 219,890</u>	<u>\$ 240,672</u>	<u>\$ (4,499)</u>	<u>\$ —</u>	<u>\$ 456,063</u>
<b>Investing activities:</b>						
Acquisition of businesses, net of cash acquired	—	(53,626)	(869,863)	(90,950)		(1,014,439)
Other investing activities	<u>(98,512)</u>	<u>(1,000,542)</u>	<u>(23,530)</u>	<u>(10,359)</u>	<u>1,059,325</u>	<u>(73,618)</u>
Net cash used in investing activities	<u>(98,512)</u>	<u>(1,054,168)</u>	<u>(893,393)</u>	<u>(101,309)</u>	<u>1,059,325</u>	<u>(1,088,057)</u>
<b>Financing activities:</b>						
Proceeds from sale of senior subordinated notes	—	790,788	—	—	—	790,788
Redemption of senior subordinated notes	—	(187,650)		—	—	(187,650)
Other financing activities net	<u>98,512</u>	<u>260,094</u>	<u>618,678</u>	<u>110,917</u>	<u>(1,059,325)</u>	<u>28,876</u>
Net cash from financing activities	<u>98,512</u>	<u>863,232</u>	<u>618,678</u>	<u>110,917</u>	<u>(1,059,325)</u>	<u>632,014</u>
Net increase (decrease) in cash	—	28,954	(34,043)	5,109	—	20
Cash and cash equivalents, beginning of the period	—	126,421	(7,248)	15,683	—	134,856
Cash and cash equivalents, end of the period	<u>\$ —</u>	<u>\$ 155,375</u>	<u>\$ (41,291)</u>	<u>\$ 20,792</u>	<u>\$ —</u>	<u>\$ 134,876</u>
<b><u>For the year ended December 31, 2002:</u></b>						
<b>Operating activities:</b>						
Net cash from operating activities	<u>\$ —</u>	<u>\$ 137,837</u>	<u>\$ 169,221</u>	<u>\$ 11,402</u>	<u>\$ —</u>	<u>\$ 318,460</u>
<b>Investing activities:</b>						
Acquisition of businesses, net of cash acquired	—	(146,913)	(1,499,891)	(95,329)	—	(1,742,133)
Other investing activities	<u>(855,939)</u>	<u>(1,627,853)</u>	<u>(27,130)</u>	<u>(8,632)</u>	<u>2,451,159</u>	<u>(68,395)</u>
Net cash used in investing activities	<u>(855,939)</u>	<u>(1,774,766)</u>	<u>(1,527,021)</u>	<u>(103,961)</u>	<u>2,451,159</u>	<u>(1,810,528)</u>
<b>Financing activities:</b>						
Proceeds from sale of senior subordinated notes	—	750,000	—	—	—	750,000
Redemption of senior subordinated notes	—	(237,468)	—	—	—	(237,468)
Proceeds from sale of L-3 Holdings' common stock, net	766,780	—	—	—	—	766,780
Other financing activities	<u>89,159</u>	<u>930,608</u>	<u>1,354,964</u>	<u>63,018</u>	<u>(2,451,159)</u>	<u>(13,410)</u>
Net cash from financing activities	<u>855,939</u>	<u>1,443,140</u>	<u>1,354,964</u>	<u>63,018</u>	<u>(2,451,159)</u>	<u>1,265,902</u>
Net decrease in cash	—	(193,789)	(2,836)	(29,541)	—	(226,166)
Cash and cash equivalents, beginning of the period	—	320,210	(4,412)	45,224	—	361,022
Cash and cash equivalents, end of the period	<u>\$ —</u>	<u>\$ 126,421</u>	<u>\$ (7,248)</u>	<u>\$ 15,683</u>	<u>\$ —</u>	<u>\$ 134,856</u>

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)  
(Dollars in thousands, except per share data)**

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b>For the year ended December 31, 2001:</b>						
<b>Operating activities:</b>						
Net cash from operating activities	\$ —	\$ 104,169	\$ 30,014	\$ 38,785	\$ —	\$ 172,968
<b>Investing activities:</b>						
Acquisition of businesses, net of cash acquired	—	(112,691)	(212,556)	(121,664)	—	(446,911)
Other investing activities	(830,561)	(357,400)	(14,643)	59,844	1,164,781	22,021
Net cash used in investing activities	(830,561)	(470,091)	(227,199)	(61,820)	1,164,781	(424,890)
<b>Financing activities:</b>						
Repayment of borrowings under revolving credit facilities, net	—	(190,000)	—	—	—	(190,000)
Proceeds from sale of senior subordinated notes	420,000	—	—	—	—	420,000
Proceeds from sale of L-3 Holdings' common stock, net	353,622	—	—	—	—	353,622
Other financing activities	56,939	857,424	187,862	59,198	(1,164,781)	(3,358)
Net cash from financing activities	830,561	667,424	187,862	59,198	(1,164,781)	580,264
Net increase (decrease) in cash	—	301,502	(9,323)	36,163	—	328,342
Cash and cash equivalents, beginning of the period	—	18,708	4,911	9,061	—	32,680
Cash and cash equivalents, end of the period	\$ —	\$ 320,210	\$ (4,412)	\$ 45,224	\$ —	\$ 361,022

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OFFER TO EXCHANGE ALL OUTSTANDING 6 1/8% SENIOR SUBORDINATED NOTES DUE 2014 FOR 6 1/8% SERIES B SENIOR SUBORDINATED NOTES DUE 2014, WHICH HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933

PROSPECTUS

UNTIL \_\_\_\_\_, 2004 ALL DEALERS THAT EFFECT TRANSACTIONS IN THESE SECURITIES, WHETHER OR NOT PARTICIPATING IN THIS OFFERING, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN ADDITION TO THE DEALERS' OBLIGATION TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

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**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 20. Indemnification of Directors and Officers.**

Section 145 of the Delaware General Corporation Law (the "DGCL") provides for, among other things:

- a. permissive indemnification for expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by designated persons, including directors and officers of a corporation, in the event such persons are parties to litigation other than stockholder derivative actions if certain conditions are met;
- b. permissive indemnification for expenses (including attorneys' fees) actually and reasonably incurred by designated persons, including directors and officers of a corporation, in the event such persons are parties to stockholder derivative actions if certain conditions are met;
- c. mandatory indemnification for expenses (including attorneys' fees) actually and reasonably incurred by designated persons, including directors and officers of a corporation, in the event such persons are successful on the merits or otherwise in defense of litigation covered by a. and b. above; and
- d. that the indemnification provided for by Section 145 is not deemed exclusive of any other rights which may be provided under any by-law, agreement, stockholder or disinterested director vote, or otherwise.

In addition to the indemnification provisions of the DGCL described above, the Registrant's certificate of incorporation (the "Certificate of Incorporation") authorizes indemnification of the Registrant's officers and directors, subject to a case-by-case determination that they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the Company, and in the case of any criminal proceeding, they had no reasonable cause to believe their conduct was unlawful. In the event that a Change in Control (as defined in the Certificate of Incorporation) shall have occurred, the proposed indemnitee director or officer may require that the determination of whether he met the standard of conduct be made by special legal counsel selected by him. In addition, whereas the DGCL would require court-ordered indemnification, if any, in cases in which a person has been adjudged to be liable to the Registrant, the Certificate of Incorporation also permits indemnification in such cases if and to the extent that the reviewing party determines that such indemnity is fair and reasonable under the circumstances.

The Certificate of Incorporation requires the advancement of expenses to an officer or director (without a determination as to his conduct) in advance of the final disposition of a proceeding if such person furnishes a written affirmation of his good faith belief that he has met the applicable standard of conduct and furnishes a written undertaking to repay any advances if it is ultimately determined that he is not entitled to indemnification. In connection with proceedings by or in the right of the Registrant, the Certificate of Incorporation provides that indemnification shall include not only reasonable expenses, but also penalties, fines and amounts paid in settlement. Unless ordered by a court, such indemnification shall not include judgments. Under the Certificate of Incorporation, no officer or director is entitled to indemnification or advancement of expenses with respect to a proceeding brought by him against the Registrant other than a proceeding seeking or defending such officer's or director's right to indemnification or advancement of expenses. Finally, the Certificate of Incorporation provides that the Company may, subject to authorization on a case by case basis, indemnify and advance expenses to employees or agents to the same extent as a director or to a lesser extent (or greater, as permitted by law) as determined by the Board of Directors.

The Certificate of Incorporation purports to confer upon officers and directors contractual rights to indemnification and advancement of expenses as provided therein. In addition, as permitted by the DGCL, the Registrant has entered into indemnity agreements with its directors and selected officers that provide contract rights substantially identical to the rights to indemnification and advancement of expenses set forth in the Certificate of Incorporation, as described above.

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The Certificate of Incorporation limits the personal liability of directors to the Registrant or its stockholders for monetary damages for breach of the duty as a director, other than liability as a director (i) for breach of duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL (certain illegal distributions), or (iv) for any transaction for which the director derived an improper personal benefit.

The Registrant maintains officers' and directors' insurance covering certain liabilities that may be incurred by officers and directors in the performance of their duties.

**Item 21. Exhibits and Financial Statement Schedules.**

The following exhibits are filed pursuant to Item 601 of Regulation S-K.

Exhibit No.	Description of Exhibit
3.1	Certificate of Incorporation of L-3 Communications Corporation (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-4 No. 333-31649).
3.2	By-Laws of L-3 Communications Corporation (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-4 No. 333- 31649).
3.3	Certificate of Incorporation of Hygienetics Environmental Services, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1 No. 333-46983).
3.4	By-laws of Hygienetics Environmental Services, Inc. (incorporated by reference to Exhibit 3.4 to the Company's Registration Statement on Form S-1 No. 333- 46983).
3.5	Certificate of Incorporation of L-3 Communications ILEX Systems, Inc. (incorporated by reference to Exhibit 3.5 to the Company's Registration Statement on Form S-1 (No. 333-46983).
3.6	By-laws of L-3 Communications ILEX Systems, Inc. (incorporated by reference to Exhibit 3.6 to the Company's Registration Statement on Form S-1 No. 333- 46983).

3.7	Certificate of Incorporation of L-3 Communications ESSCO, Inc. (incorporated by reference to Exhibit 3.11 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.8	By-laws of L-3 Communications ESSCO, Inc. (incorporated by reference to Exhibit 3.12 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.9	Certificate of Incorporation of L-3 Communications Storm Control Systems, Inc. (incorporated by reference to Exhibit 3.13 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.10	By-laws of L-3 Communications Storm Control Systems, Inc. (incorporated by reference to Exhibit 3.14 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.11	Certificate of Incorporation of SPD Electrical Systems, Inc. (incorporated by reference to Exhibit 3.17 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.12	By-laws of SPD Electrical Systems, Inc. (incorporated by reference to Exhibit 3.18 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.13	Certificate of Incorporation of SPD Switchgear Inc. (incorporated by reference to Exhibit 3.19 to the Company's Registration Statement on Form S-4 No. 333-70199).

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Exhibit No.	Description of Exhibit
3.14	By-laws of SPD Switchgear Inc. (incorporated by reference to Exhibit 3.20 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.15	Certificate of Incorporation of Pac Ord Inc. (incorporated by reference to Exhibit 3.21 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.16	By-laws of Pac Ord Inc. (incorporated by reference to Exhibit 3.22 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.17	Certificate of Incorporation of Henschel Inc. (incorporated by reference to Exhibit 3.23 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.18	By-laws of Henschel Inc. (incorporated by reference to Exhibit 3.24 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.19	Certificate of Incorporation of Power Paragon, Inc. (incorporated by reference to Exhibit 3.25 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.20	By-laws of Power Paragon, Inc. (incorporated by reference to Exhibit 3.26 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.21	Certificate of Incorporation of Apcom, Inc. (incorporated by reference to Exhibit 3.31 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.22	By-laws of Apcom, Inc. (incorporated by reference to Exhibit 3.32 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.23	Certificate of Incorporation of L-3 Communications CSI, Inc. (incorporated by reference to Exhibit 3.34 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.24	By-laws of L-3 Communications CSI, Inc. (incorporated by reference to Exhibit 3.34 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.25	Certificate of Incorporation of L-3 Communications Government Services, Inc. (incorporated by reference to Exhibit 3.37 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.26	By-laws of L-3 Communications Government Services, Inc. (incorporated by reference to Exhibit 3.38 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.27	Certificate of Incorporation of Electrodynamics, Inc. (incorporated by reference to Exhibit 3.39 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.28	By-laws of Electrodynamics, Inc. (incorporated by reference to Exhibit 3.40 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.29	Certificate of Incorporation of Interstate Electronics Corporation (incorporated by reference to Exhibit 3.41 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.30	By-laws of Interstate Electronics Corporation (incorporated by reference to Exhibit 3.42 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.31	Certificate of Incorporation of KDI Precision Products, Inc. (incorporated by reference to Exhibit 3.43 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.32	By-laws of KDI Precision Products, Inc. (incorporated by reference to Exhibit 3.44 to the Company's Registration Statement on Form S-4 No. 333-99757)

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Exhibit No.	Description of Exhibit
3.33	Certificate of Incorporation of L-3 Communications AIS GP Corporation (incorporated by reference to Exhibit 3.45 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.34	By-laws of L-3 Communications AIS GP Corporation (incorporated by reference to Exhibit 3.46 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.35	Certificate of Incorporation of L-3 Communications Aydin Corporation (incorporated by reference to Exhibit 3.51 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.36	By-laws of L-3 Communications Aydin Corporation (incorporated by reference to Exhibit 3.52 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.37	Certificate of Limited Partnership of L-3 Communications Integrated Systems L.P (incorporated by reference to Exhibit 3.53 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.38	Limited Partnership Agreement of L-3 Communications Integrated Systems L.P. (incorporated by reference to Exhibit 3.54 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.39	Certificate of Incorporation of L-3 Communications Investments Inc. (incorporated by reference to Exhibit 3.55 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.40	By-laws of L-3 Communications Investments Inc. (incorporated by reference to Exhibit 3.56 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.41	Certificate of Incorporation of Microdyne Communications Technologies Incorporated (incorporated by reference to Exhibit 3.57 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.42	By-laws of Microdyne Communications Technologies Incorporated (incorporated by reference to Exhibit 3.58 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.43	Certificate of Incorporation of Microdyne Corporation (incorporated by reference to Exhibit 3.59 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.44	By-laws of Microdyne Corporation (incorporated by reference to Exhibit 3.60 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.45	Certificate of Incorporation of Microdyne Outsourcing Incorporated (incorporated by reference to Exhibit 3.61 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.46	By-laws of Microdyne Outsourcing Incorporated (incorporated by reference to Exhibit 3.62 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.47	Certificate of Incorporation of MPRI, Inc. (incorporated by reference to Exhibit 3.63 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.48	By-laws of MPRI, Inc. (incorporated by reference to Exhibit 3.64 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.49	Certificate of Incorporation of MCTI Acquisition Corporation (incorporated by reference to Exhibit 3.65 to the Company's Registration Statement on Form S-4 No. 333-99757).

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Exhibit No.	Description of Exhibit
3.50	Bylaws of MCTI Acquisition Corporation (incorporated by reference to Exhibit 3.66 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.51	Certificate of Incorporation of L-3 Communications Security and Detection Systems Corporation Delaware (incorporated by reference to Exhibit 3.67 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.52	Bylaws of L-3 Communications Security and Detection Systems Corporation Delaware (incorporated by reference to Exhibit 3.68 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.53	Certificate of Incorporation of Broadcast Sports, Inc. (incorporated by reference to Exhibit 3.69 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.54	Bylaws of Broadcast Sports, Inc. (incorporated by reference to Exhibit 3.70 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.55	Certificate of Incorporation of L-3 Communications Avionics Systems, Inc. (incorporated by reference to Exhibit 3.73 to the Company's Registration Statement on Form S-4 No. 333-106106).
3.56	Bylaws of L-3 Communications Avionics Systems, Inc. (incorporated by reference to Exhibit 3.74 to the Company's Registration Statement on Form S-4 No. 333-106106).
3.57	Certificate of Incorporation of L-3 Communications Security and Detection Systems Corporation California (incorporated by reference to Exhibit 3.79 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.58	Bylaws of L-3 Communications Security and Detection Systems Corporation California (incorporated by reference to Exhibit 3.80 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.59	Certificate of Restated and Amended Articles of Incorporation of L-3 Communications Westwood Corporation (incorporated by reference to Exhibit 3.83 to the Company's Registration Statement on

Form S-4 No. 333-106106)

- 3.60 Bylaws of L-3 Communications Westwood Corporation (incorporated by reference to Exhibit 3.84 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.61 Certificate of Incorporation of Ship Analytics, Inc. (incorporated by reference to Exhibit 3.85 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.62 Bylaws of Ship Analytics, Inc. (incorporated by reference to Exhibit 3.86 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.63 Certificate of Incorporation Ship Analytics International, Inc. (incorporated by reference to Exhibit 3.87 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.64 Bylaws of Ship Analytics International, Inc. (incorporated by reference to Exhibit 3.88 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.65 Certificate of Incorporation of Ship Analytics USA, Inc. (incorporated by reference to Exhibit 3.89 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.66 Bylaws of Ship Analytics USA, Inc. (incorporated by reference to Exhibit 3.90 to the Company's Registration Statement on Form S-4 No. 333-106106)
- 3.67 Certificate of Incorporation of SYColeman Corporation (incorporated by reference to Exhibit 3.91 to the Company's Registration Statement on Form S-4 No. 333-106106)

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Exhibit No.	Description of Exhibit
3.68	Bylaws of SYColeman Corporation (incorporated by reference to Exhibit 3.92 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.69	Certificate of Incorporation of Troll Technology Corporation (incorporated by reference to Exhibit 3.95 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.70	Bylaws of Troll Technology Corporation (incorporated by reference to Exhibit 3.96 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.71	Certificate of Incorporation of Wescam Air Ops Inc. (incorporated by reference to Exhibit 3.97 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.72	Bylaws of Wescam Air Ops Inc. (incorporated by reference to Exhibit 3.98 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.73	Certificate of Formation of Wescam Air Ops LLC (incorporated by reference to Exhibit 3.99 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.74	Limited Liability Company Agreement of Wescam Air Ops LLC (incorporated by reference to Exhibit 3.100 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.75	Articles of Incorporation of Wescam Incorporated (incorporated by reference to Exhibit 3.101 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.76	Bylaws of Wescam Incorporated (incorporated by reference to Exhibit 3.102 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.77	Certificate of Formation of Wescam LLC (incorporated by reference to Exhibit 3.103 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.78	Limited Liability Company Agreement of Wescam LLC (incorporated by reference to Exhibit 3.104 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.79	Articles of Incorporation of Wescam Sonoma Inc. (incorporated by reference to Exhibit 3.105 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.80	Bylaws of Wescam Sonoma Inc. (incorporated by reference to Exhibit 3.106 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.81	Certificate of Incorporation of Wescam Holdings (US) Inc. (incorporated by reference to Exhibit 3.107 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.82	Bylaws of Wescam Holdings (US) Inc. (incorporated by reference to Exhibit 3.108 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.83	Articles of Organization of Wolf Coach, Inc. (incorporated by reference to Exhibit 3.109 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.84	Bylaws of Wolf Coach, Inc. (incorporated by reference to Exhibit 3.110 to the Company's Registration Statement on Form S-4 No. 333-106106)
**3.85	Certificate of Formation of L-3 Communications Vertex Aerospace LLC
**3.86	Limited Liability Company Agreement of L-3 Communications Vertex Aerospace LLC
**3.87	Certificate of Formation of L-3 Communications Flight International Aviation LLC
**3.88	Limited Liability Company Agreement of L-3 Communications Flight International Aviation LLC

\*\*3.89 Certificate of Formation of L-3 Communications Flight Capital LLC

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Exhibit No.	Description of Exhibit
**3.90	Limited Liability Company Agreement of L-3 Communications Flight Capital LLC
**3.91	Certificate of Formation of L-3 Communications Vector International Aviation LLC
**3.92	Limited Liability Company Agreement of L-3 Communications Vector International Aviation LLC
**3.93	Certificate of Incorporation of L-3 Communications Klein Associates, Inc.
**3.94	Bylaws of L-3 Communications Klein Associates, Inc.
**3.95	Certificate of Incorporation of L-3 Communications MAS (US) Corporation
**3.96	Bylaws of L-3 Communications MAS (US) Corporation
**3.97	Articles of Incorporation of L-3 Communications Aeromet, Inc.
**3.98	Bylaws of L-3 Communications Aeromet, Inc.
**3.99	Certificate of Incorporation of L-3 Communications Security Systems Corporation.
**3.100	Bylaws of L-3 Communications Security Systems Corporation.
4.1	Indenture dated as of December 22, 2003 among L-3 Communications Corporation, the Guarantors and The Bank of New York, as Trustee (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
4.2	Form of 6 1/8% Senior Subordinated Note due 2014 (attached as Exhibit A to Exhibit 4.1).
4.3	Form of 6 1/8% Series B Senior Subordinated Note due 2014 (attached as Exhibit A to Exhibit 4.1).
**4.4	Registration Rights Agreement, dated as of December 22, 2003, among L-3 Communications Corporation, the Guarantors, Lehman Brothers Inc., Morgan Stanley & Co. Incorporated, Banc of America Securities LLC, SG Cowen Securities Corporation and Wachovia Capital Markets, LLC.
**5	Opinion of Simpson Thacher and Bartlett LLP.
10.6	Employment Agreement dated April 30, 1997 between Frank C. Lanza and L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 10.5 to L-3 Communications Holdings' Registration Statement on Form S-1 No. 333-46975).
10.11	1997 Stock Option Plan for Key Employees (incorporated by reference to Exhibit 10.11 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.12	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Frank C. Lanza (incorporated by reference to Exhibit 10.12 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.13	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Robert V. LaPenta (incorporated by reference to Exhibit 10.13 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.15	Option Plan for Non-Employee Directors of L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 10.15 to the Registrant's Annual Report on Form 10-K filed on March 31, 1999).

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Exhibit No.	Description of Exhibit
10.16	1999 Long Term Performance Plan dated as of April 27, 1999 (incorporated by reference to Exhibit 10.16 to the Registrant's annual report on Form 10-K filed on March 30, 2000).
10.20	L-3 Communications Corporation Pension Plan (incorporated by reference to Exhibit 10.10 to L-3 Communications Holdings' Registration Statement on Form S-1 No. 333-46975).
10.25	L-3 Communications Corporation Employee Stock Purchase Plan (incorporated by reference to Appendix A of L-3 Communications Holdings' Definitive Proxy Statement filed April 2, 2001).
10.32	Indenture dated as of December 11, 1998 ("December 1998 Indenture") among L-3 Communications Corporation, the Guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 10.32 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.33	Indenture dated as of May 21, 2003 ("May 2003 Indenture") among L-3 Communications Corporation, the Guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-4, No. 333-106106).
10.40	Third Amended and Restated Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.40 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.41	Second Amended and Restated 364-Day Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated

	by reference to Exhibit 10.41 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.42	First Amendment to Third Amended and Restated Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.42 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.43	First Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.43 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.44	Second Amendment to Third Amended and Restated Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.44 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.45	Consent and Second Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named herein and the other parties thereto (incorporated by reference to Exhibit 10.45 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.46	Consent, Waiver and Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.46 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002).

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Exhibit No.	Description of Exhibit
10.47	Consent, Waiver and Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002).
10.48	Second Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.48 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.49	Second Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.49 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.50	Consent, Waiver and Third Omnibus Amendment Regarding Second Amended and Restated 364 Day Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.50 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.51	Third Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.51 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.53	Indenture dated as of October 24, 2001 ("2001 Indenture") among L-3 Communications Holdings, Inc., the guarantors named therein and the Bank of New York, as Trustee (incorporated by reference to Exhibit 4.f of L-3 Communications Holdings' Registration Statement on Form S-3, No. 333-75558).
10.55	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the May 2003 Indenture (incorporated by reference to Exhibit 10.55 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.56	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the December 1998 Indenture (incorporated by reference to Exhibit 10.56 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.57	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, L-3 Holdings, Inc., The Bank of New York, as trustee, and the guarantors named therein to the 2001 Indenture (incorporated by reference to Exhibit 10.58 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.58	Asset Purchase Agreement dated as of January 11, 2002 among Raytheon Company, Raytheon Australia Pty Ltd. and L-3 Communications Corporation (incorporated by reference to Exhibit 10.59 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.59	Amendment dated as of March 8, 2002 among Raytheon Company, Raytheon Australia Pty Ltd., L-3 Communications Corporation, L-3 Communications Integrated Systems L.P. and L-3 Communications Australia Pty Ltd to the Asset Purchase Agreement dated as of January 11, 2002 (incorporated by reference to Exhibit 10.60 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).

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Exhibit No.	Description of Exhibit
10.62	Indenture dated as of June 28, 2002, ("2002 Indenture") among L-3 Communications Corporation, the guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form S-4, No. 333-99757).
10.63	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the 2002 Indenture (incorporated by reference to Exhibit 10.94 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).

10.64	Transaction Agreement dated as of October 21, 2003 by and among L-3 Communications Corporation, RAAH I, LLC and Vertex Aerospace LLC (incorporated by reference to Exhibit 10.95 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.65	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the December 2003 Indenture (incorporated by reference to Exhibit 10.96 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
*11	L-3 Communications Holdings, Inc. Computation of Basic Earnings Per Share and Diluted Earnings Per Share.
12	Ratio of Earnings to Fixed Charges (incorporated by reference to Exhibit 12 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
21	Subsidiaries of the Registrant (incorporated by reference to Exhibit 21 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
**23	Consent of PricewaterhouseCoopers LLP.
24	Powers of Attorney L-3 Communications Corporation and the Additional Registrants (included on the signature pages hereto).
**25	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939 of The Bank of New York, as Trustee.
**99.1	Letter of Transmittal.
**99.2	Notice of Guaranteed Delivery.

\* The information required in this exhibit is presented on Note 12 to the Consolidated Financial Statements as of December 31, 2003 in accordance with the provisions of SFAS No. 128, *Earnings Per Share*.

\*\* Filed herewith

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## Item 22. Undertakings.

The undersigned registrants hereby undertake:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrants pursuant to the foregoing provisions, or otherwise, the registrants have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrants of expenses incurred or paid by the director, officer or controlling person of the registrants in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrants will, unless in the opinion of their counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrants hereby undertake to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11, or 13 of this form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

The undersigned registrants hereby undertake to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

L-3 COMMUNICATIONS CORPORATION

By: /s/ Christopher C. Cambria

Christopher C. Cambria, Senior Vice President –

**SIGNATURES AND POWERS OF ATTORNEY**

Each person whose signature appears below authorizes Christopher C. Cambria, Michael T. Strianese, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrant to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Frank C. Lanza	Chairman, Chief Executive Officer and Director	March 22, 2004
Frank C. Lanza		
/s/ Robert V. LaPenta	President, Chief Financial Officer and Director	March 22, 2004
Robert V. LaPenta		
/s/ Michael T. Strianese	Senior Vice President – Finance	March 22, 2004
Michael T. Strianese		
/s/ Claude R. Canizares	Director	March 22, 2004
Claude R. Canizares		
/s/ Thomas A. Corcoran	Director	March 22, 2004
Thomas A. Corcoran		
/s/ Robert B. Millard	Director	March 22, 2004
Robert B. Millard		
/s/ John M. Shalikashvili	Director	March 22, 2004
John M. Shalikashvili		
/s/ Arthur L. Simon	Director	March 22, 2004
Arthur L. Simon		
/s/ Alan H. Washkowitz	Director	March 22, 2004
Alan H. Washkowitz		

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

ELECTRODYNAMICS, INC.  
MICRODYNE CORPORATION

By: /s/ Christopher C. Cambria

Christopher C. Cambria, Vice President  
and Secretary

**SIGNATURES AND POWERS OF ATTORNEY**

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Frank C. Lanza	Chief Executive Officer and Director	March 22, 2004

Frank C. Lanza		
/s/ Robert V. LaPenta	Chief Financial Officer and Director	March 22, 2004
Robert V. LaPenta		
/s/ Christopher C. Cambria	Vice President, Secretary and Director	March 22, 2004
Christopher C. Cambria		

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants certifies has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

APCOM, INC.  
BROADCAST SPORTS, INC.  
HENSCHEL INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
INTERSTATE ELECTRONICS CORPORATION  
KDI PRECISION PRODUCTS, INC.  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS INVESTMENTS INC.  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION DELAWARE  
L-3 COMMUNICATIONS SECURITY SYSTEMS  
CORPORATION  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS,  
INC.  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES  
INCORPORATED  
MICRODYNE OUTSOURCING INCORPORATED  
MPRI, INC.  
PAC ORD INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION  
WESCAM AIR OPS INC.  
WESCAM INCORPORATED  
WESCAM HOLDINGS (US) INC.

By: /s/ Christopher C. Cambria  
\_\_\_\_\_  
Christopher C. Cambria, Vice President  
and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Frank C. Lanza	Chief Executive Officer	March 22, 2004
Frank C. Lanza		
/s/ Robert V. LaPenta	Chief Financial Officer	March 22, 2004

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.

By: L-3 COMMUNICATIONS AIS GP CORPORATION,  
as General Partner

By: /s/ Christopher C. Cambria

Name: Christopher C. Cambria  
Title: Vice President and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Frank C. Lanza	Chief Executive Officer	March 22, 2004
Frank C. Lanza		
/s/ Robert V. LaPenta	Chief Financial Officer	March 22, 2004
Robert V. LaPenta		
/s/ Christopher C. Cambria	Vice President, Secretary and Director of L-3 Communications AIS GP Corporation	March 22, 2004
Christopher C. Cambria		

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

L-3 COMMUNICATIONS VERTEX AEROSPACE LLC

By: L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.,  
as Sole Member

By: L-3 COMMUNICATIONS AIS GP CORPORATION,  
as General Partner

By: /s/ Christopher C. Cambria

Name: Christopher C. Cambria  
Title: Vice President and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments



thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<div>/s/ Frank C. Lanza</div> <div>Frank C. Lanza</div>	Chief Executive Officer	March 22, 2004
<div>/s/ Robert V. LaPenta</div> <div>Robert V. LaPenta</div>	Chief Financial Officer	March 22, 2004
<div>/s/ Christopher C. Cambria</div> <div>Christopher C. Cambria</div>	Vice President, Secretary and Director of L-3 Communications AIS GP Corporation	March 22, 2004

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

L-3 COMMUNICATIONS FLIGHT INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC

By: L-3 COMMUNICATIONS VERTEX AEROSPACE LLC

By: L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.,  
as Sole Member

By: L-3 COMMUNICATIONS AIS GP CORPORATION, as  
General Partner

By: 

/s/ Christopher C. Cambria

Name: Christopher C. Cambria  
Title: Vice President and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<div>/s/ Frank C. Lanza</div> <div>Frank C. Lanza</div>	Chief Executive Officer	March 22, 2004
<div>/s/ Robert V. LaPenta</div> <div>Robert V. LaPenta</div>	Chief Financial Officer	March 22, 2004
<div>/s/ Christopher C. Cambria</div> <div>Christopher C. Cambria</div>	Vice President, Secretary and Director of L-3 Communications AIS GP Corporation	March 22, 2004

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

L-3 COMMUNICATIONS MAS (US) CORPORATION

By: /s/ Christopher C. Cambria  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Frank C. Lanza</u> Frank C. Lanza	Chief Executive Officer	March 22, 2004
<u>/s/ Robert V. LaPenta</u> Robert V. LaPenta	Chief Financial Officer	March 22, 2004
<u>/s/ Christopher C. Cambria</u> Christopher C. Cambria	Vice President and Secretary	March 22, 2004
<u>/s/ Oris W. Dunham, Jr.</u> Oris W. Dunham, Jr.	Director	March 22, 2004
<u>/s/ Buddy G. Beck</u> Buddy G. Beck	Director	March 22, 2004
<u>/s/ J.B. Davis</u> J.B. Davis	Director	March 22, 2004
<u>/s/ Sylvain Bedard</u> Sylvain Bedard	Director	March 22, 2004
<u>/s/ Anthony Caputo</u> Anthony Caputo	Director	March 22, 2004

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

WOLF COACH, INC.

By: /s/ Christopher C. Cambria  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described

matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Frank C. Lanza	Chief Executive Officer	March 22, 2004
Frank C. Lanza		
/s/ Robert V. LaPenta	Chief Financial Officer	March 22, 2004
Robert V. LaPenta		
/s/ Christopher C. Cambria	Vice President, Secretary and Director	March 22, 2004
Christopher C. Cambria		
/s/ David M. Reilly	Director	March 22, 2004
David M. Reilly		
/s/ Michael T. Strianese	Director	March 22, 2004
Michael T. Strianese		

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

WESCAM SONOMA, INC.

By: /s/ Christopher C. Cambria

Christopher C. Cambria, Vice President  
and Secretary

SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Frank C. Lanza	Chief Executive Officer	March 22, 2004
Frank C. Lanza		
/s/ Robert V. LaPenta	Chief Financial Officer	March 22, 2004
Robert V. LaPenta		
/s/ John Dehne	Director	March 22, 2004
John Dehne		
/s/ Steve Mazzo	Director	March 22, 2004
Steve Mazzo		
/s/ Gary Findlay	Director	March 22, 2004
Gary Findlay		
/s/ Bruce Latimer	Director	March 22, 2004
Bruce Latimer		
/s/ George Worthington	Director	March 22, 2004
George Worthington		

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

WESCAM AIR OPS LLC

By: WESCAM INCORPORATED,  
as Sole Member

By: /s/ Christopher C. Cambria

Name: Christopher C. Cambria  
Title: Vice President and Secretary

## SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Frank C. Lanza</u> Frank C. Lanza	Chief Executive Officer	March 22, 2004
<u>/s/ Robert V. LaPenta</u> Robert V. LaPenta	Chief Financial Officer	March 22, 2004
<u>/s/ Christopher C. Cambria</u> Christopher C. Cambria	Vice President, Secretary and Director of Wescam Incorporated	March 22, 2004

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each of the registrants has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, state of New York, on March 22, 2004.

WESCAM LLC

By: L-3 COMMUNICATIONS CORPORATION,  
as Sole Member

By: /s/ Christopher C. Cambria

Name: Christopher C. Cambria  
Title: Vice President and Secretary

## SIGNATURES AND POWERS OF ATTORNEY

Each person whose signature appears below authorizes Christopher C. Cambria, Frank C. Lanza, Robert V. LaPenta, or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-4 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462 (b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the registrants to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Frank C. Lanza</u>	Chief Executive Officer and Director of L-3	March 22, 2004

Frank C. Lanza	Communications Corporation	
/s/ Robert V. LaPenta	Chief Financial Officer and Director of L-3 Communications Corporation	March 22, 2004
Robert V. LaPenta		
/s/ Christopher C. Cambria	Director of L-3 Communications Corporation	March 22, 2004
Claude R. Canizares		
/s/ Thomas A. Corcoran	Director of L-3 Communications Corporation	March 22, 2004
Thomas A. Corcoran		
/s/ Robert B. Millard	Director of L-3 Communications Corporation	March 22, 2004
Robert B. Millard		
/s/ John M. Shalikashvili	Director of L-3 Communications Corporation	March 22, 2004
John M. Shalikashvili		
Arthur L. Simon	Director of L-3 Communications Corporation	March 22, 2004
Arthur L. Simon		
/s/ Alan H. Washkowitz	Director of L-3 Communications Corporation	March 22, 2004
Alan H. Washkowitz		

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## EXHIBIT INDEX

Exhibit No.	Description of Exhibit
3.1	Certificate of Incorporation of L-3 Communications Corporation (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-4 No. 333-31649).
3.2	By-Laws of L-3 Communications Corporation (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-4 No. 333- 31649).
3.3	Certificate of Incorporation of Hygienetics Environmental Services, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1 No. 333-46983).
3.4	By-laws of Hygienetics Environmental Services, Inc. (incorporated by reference to Exhibit 3.4 to the Company's Registration Statement on Form S-1 No. 333- 46983).
3.5	Certificate of Incorporation of L-3 Communications ILEX Systems, Inc. (incorporated by reference to Exhibit 3.5 to the Company's Registration Statement on Form S-1 (No. 333-46983).
3.6	By-laws of L-3 Communications ILEX Systems, Inc. (incorporated by reference to Exhibit 3.6 to the Company's Registration Statement on Form S-1 No. 333- 46983).
3.7	Certificate of Incorporation of L-3 Communications ESSCO, Inc. (incorporated by reference to Exhibit 3.11 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.8	By-laws of L-3 Communications ESSCO, Inc. (incorporated by reference to Exhibit 3.12 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.9	Certificate of Incorporation of L-3 Communications Storm Control Systems, Inc. (incorporated by reference to Exhibit 3.13 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.10	By-laws of L-3 Communications Storm Control Systems, Inc. (incorporated by reference to Exhibit 3.14 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.11	Certificate of Incorporation of SPD Electrical Systems, Inc. (incorporated by reference to Exhibit 3.17 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.12	By-laws of SPD Electrical Systems, Inc. (incorporated by reference to Exhibit 3.18 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.13	Certificate of Incorporation of SPD Switchgear Inc. (incorporated by reference to Exhibit 3.19 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.14	By-laws of SPD Switchgear Inc. (incorporated by reference to Exhibit 3.20 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.15	Certificate of Incorporation of Pac Ord Inc. (incorporated by reference to Exhibit 3.21 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.16	By-laws of Pac Ord Inc. (incorporated by reference to Exhibit 3.22 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.17	Certificate of Incorporation of Henschel Inc. (incorporated by reference to Exhibit 3.23 to the Company's Registration Statement on Form S-4 No. 333-70199).

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
3.18	By-laws of Henschel Inc. (incorporated by reference to Exhibit 3.24 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.19	Certificate of Incorporation of Power Paragon, Inc. (incorporated by reference to Exhibit 3.25 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.20	By-laws of Power Paragon, Inc. (incorporated by reference to Exhibit 3.26 to the Company's Registration Statement on Form S-4 No. 333-70199).
3.21	Certificate of Incorporation of Apcom, Inc. (incorporated by reference to Exhibit 3.31 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.22	By-laws of Apcom, Inc. (incorporated by reference to Exhibit 3.32 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.23	Certificate of Incorporation of L-3 Communications CSI, Inc. (incorporated by reference to Exhibit 3.34 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.24	By-laws of L-3 Communications CSI, Inc. (incorporated by reference to Exhibit 3.34 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.25	Certificate of Incorporation of L-3 Communications Government Services, Inc. (incorporated by reference to Exhibit 3.37 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.26	By-laws of L-3 Communications Government Services, Inc. (incorporated by reference to Exhibit 3.38 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.27	Certificate of Incorporation of Electrodynamics, Inc. (incorporated by reference to Exhibit 3.39 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.28	By-laws of Electrodynamics, Inc. (incorporated by reference to Exhibit 3.40 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.29	Certificate of Incorporation of Interstate Electronics Corporation (incorporated by reference to Exhibit 3.41 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.30	By-laws of Interstate Electronics Corporation (incorporated by reference to Exhibit 3.42 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.31	Certificate of Incorporation of KDI Precision Products, Inc. (incorporated by reference to Exhibit 3.43 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.32	By-laws of KDI Precision Products, Inc. (incorporated by reference to Exhibit 3.44 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.33	Certificate of Incorporation of L-3 Communications AIS GP Corporation (incorporated by reference to Exhibit 3.45 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.34	By-laws of L-3 Communications AIS GP Corporation (incorporated by reference to Exhibit 3.46 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.35	Certificate of Incorporation of L-3 Communications Aydin Corporation (incorporated by reference to Exhibit 3.51 to the Company's Registration Statement on Form S-4 No. 333-99757).

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
3.36	By-laws of L-3 Communications Aydin Corporation (incorporated by reference to Exhibit 3.52 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.37	Certificate of Limited Partnership of L-3 Communications Integrated Systems L.P (incorporated by reference to Exhibit 3.53 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.38	Limited Partnership Agreement of L-3 Communications Integrated Systems L.P. (incorporated by reference to Exhibit 3.54 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.39	Certificate of Incorporation of L-3 Communications Investments Inc. (incorporated by reference to Exhibit 3.55 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.40	By-laws of L-3 Communications Investments Inc. (incorporated by reference to Exhibit 3.56 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.41	Certificate of Incorporation of Microdyne Communications Technologies Incorporated (incorporated by reference to Exhibit 3.57 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.42	By-laws of Microdyne Communications Technologies Incorporated (incorporated by reference to Exhibit 3.58 to the Company's Registration Statement on Form S-4 No. 333-99757).

3.43	Certificate of Incorporation of Microdyne Corporation (incorporated by reference to Exhibit 3.59 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.44	By-laws of Microdyne Corporation (incorporated by reference to Exhibit 3.60 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.45	Certificate of Incorporation of Microdyne Outsourcing Incorporated (incorporated by reference to Exhibit 3.61 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.46	By-laws of Microdyne Outsourcing Incorporated (incorporated by reference to Exhibit 3.62 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.47	Certificate of Incorporation of MPRI, Inc. (incorporated by reference to Exhibit 3.63 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.48	By-laws of MPRI, Inc. (incorporated by reference to Exhibit 3.64 to the Company's Registration Statement on Form S-4 No. 333-99757)
3.49	Certificate of Incorporation of MCTI Acquisition Corporation (incorporated by reference to Exhibit 3.65 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.50	Bylaws of MCTI Acquisition Corporation (incorporated by reference to Exhibit 3.66 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.51	Certificate of Incorporation of L-3 Communications Security and Detection Systems Corporation Delaware (incorporated by reference to Exhibit 3.67 to the Company's Registration Statement on Form S-4 No. 333-99757).

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<u>Exhibit No.</u>	<u>Description of Exhibit</u>
3.52	Bylaws of L-3 Communications Security and Detection Systems Corporation Delaware (incorporated by reference to Exhibit 3.68 to the Company's Registration Statement on Form S-4 No. 333-99757).
3.53	Certificate of Incorporation of Broadcast Sports, Inc. (incorporated by reference to Exhibit 3.69 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.54	Bylaws of Broadcast Sports, Inc. (incorporated by reference to Exhibit 3.70 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.55	Certificate of Incorporation of L-3 Communications Avionics Systems, Inc. (incorporated by reference to Exhibit 3.73 to the Company's Registration Statement on Form S-4 No. 333-106106).
3.56	Bylaws of L-3 Communications Avionics Systems, Inc. (incorporated by reference to Exhibit 3.74 to the Company's Registration Statement on Form S-4 No. 333-106106).
3.57	Certificate of Incorporation of L-3 Communications Security and Detection Systems Corporation California (incorporated by reference to Exhibit 3.79 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.58	Bylaws of L-3 Communications Security and Detection Systems Corporation California (incorporated by reference to Exhibit 3.80 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.59	Certificate of Restated and Amended Articles of Incorporation of L-3 Communications Westwood Corporation (incorporated by reference to Exhibit 3.83 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.60	Bylaws of L-3 Communications Westwood Corporation (incorporated by reference to Exhibit 3.84 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.61	Certificate of Incorporation of Ship Analytics, Inc. (incorporated by reference to Exhibit 3.85 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.62	Bylaws of Ship Analytics, Inc. (incorporated by reference to Exhibit 3.86 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.63	Certificate of Incorporation Ship Analytics International, Inc. (incorporated by reference to Exhibit 3.87 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.64	Bylaws of Ship Analytics International, Inc. (incorporated by reference to Exhibit 3.88 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.65	Certificate of Incorporation of Ship Analytics USA, Inc. (incorporated by reference to Exhibit 3.89 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.66	Bylaws of Ship Analytics USA, Inc. (incorporated by reference to Exhibit 3.90 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.67	Certificate of Incorporation of SYColeman Corporation (incorporated by reference to Exhibit 3.91 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.68	Bylaws of SYColeman Corporation (incorporated by reference to Exhibit 3.92 to the Company's Registration Statement on Form S-4 No. 333-106106)

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
3.69	Certificate of Incorporation of Troll Technology Corporation (incorporated by reference to Exhibit 3.95 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.70	Bylaws of Troll Technology Corporation (incorporated by reference to Exhibit 3.96 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.71	Certificate of Incorporation of Wescam Air Ops Inc. (incorporated by reference to Exhibit 3.97 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.72	Bylaws of Wescam Air Ops Inc. (incorporated by reference to Exhibit 3.98 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.73	Certificate of Formation of Wescam Air Ops LLC (incorporated by reference to Exhibit 3.99 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.74	Limited Liability Company Agreement of Wescam Air Ops LLC (incorporated by reference to Exhibit 3.100 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.75	Articles of Incorporation of Wescam Incorporated (incorporated by reference to Exhibit 3.101 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.76	Bylaws of Wescam Incorporated (incorporated by reference to Exhibit 3.102 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.77	Certificate of Formation of Wescam LLC (incorporated by reference to Exhibit 3.103 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.78	Limited Liability Company Agreement of Wescam LLC (incorporated by reference to Exhibit 3.104 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.79	Articles of Incorporation of Wescam Sonoma Inc. (incorporated by reference to Exhibit 3.105 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.80	Bylaws of Wescam Sonoma Inc. (incorporated by reference to Exhibit 3.106 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.81	Certificate of Incorporation of Wescam Holdings (US) Inc. (incorporated by reference to Exhibit 3.107 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.82	Bylaws of Wescam Holdings (US) Inc. (incorporated by reference to Exhibit 3.108 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.83	Articles of Organization of Wolf Coach, Inc. (incorporated by reference to Exhibit 3.109 to the Company's Registration Statement on Form S-4 No. 333-106106)
3.84	Bylaws of Wolf Coach, Inc. (incorporated by reference to Exhibit 3.110 to the Company's Registration Statement on Form S-4 No. 333-106106)
**3.85	Certificate of Formation of L-3 Communications Vertex Aerospace LLC
**3.86	Limited Liability Company Agreement of L-3 Communications Vertex Aerospace LLC
**3.87	Certificate of Formation of L-3 Communications Flight International Aviation LLC
**3.88	Limited Liability Company Agreement of L-3 Communications Flight International Aviation LLC

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
**3.89	Certificate of Formation of L-3 Communications Flight Capital LLC
**3.90	Limited Liability Company Agreement of L-3 Communications Flight Capital LLC
**3.91	Certificate of Formation of L-3 Communications Vector International Aviation LLC
**3.92	Limited Liability Company Agreement of L-3 Communications Vector International Aviation LLC
**3.93	Certificate of Incorporation of L-3 Communications Klein Associates, Inc.
**3.94	Bylaws of L-3 Communications Klein Associates, Inc.
**3.95	Certificate of Incorporation of L-3 Communications MAS (US) Corporation
**3.96	Bylaws of L-3 Communications MAS (US) Corporation
**3.97	Articles of Incorporation of L-3 Communications Aeromet, Inc.
**3.98	Bylaws of L-3 Communications Aeromet, Inc.



**3.99	Certificate of Incorporation of L-3 Communications Security Systems Corporation.
**3.100	Bylaws of L-3 Communications Security Systems Corporation.
4.1	Indenture dated as of December 22, 2003 among L-3 Communications Corporation, the Guarantors and The Bank of New York, as Trustee (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
4.2	Form of 6 1/8% Senior Subordinated Note due 2014 (attached as Exhibit A to Exhibit 4.1).
4.3	Form of 6 1/8% Series B Senior Subordinated Note due 2014 (attached as Exhibit A to Exhibit 4.1).
**4.4	Registration Rights Agreement, dated as of December 22, 2003, among L-3 Communications Corporation, the Guarantors, Lehman Brothers Inc., Morgan Stanley & Co. Incorporated, Banc of America Securities LLC, SG Cowen Securities Corporation and Wachovia Capital Markets, LLC.
**5	Opinion of Simpson Thacher and Bartlett LLP.
10.6	Employment Agreement dated April 30, 1997 between Frank C. Lanza and L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 10.5 to L-3 Communications Holdings' Registration Statement on Form S-1 No. 333-46975).
10.11	1997 Stock Option Plan for Key Employees (incorporated by reference to Exhibit 10.11 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.12	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Frank C. Lanza (incorporated by reference to Exhibit 10.12 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.13	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Robert V. LaPenta (incorporated by reference to Exhibit 10.13 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.15	Option Plan for Non-Employee Directors of L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 10.15 to the Registrant's Annual Report on Form 10-K filed on March 31, 1999).
10.16	1999 Long Term Performance Plan dated as of April 27, 1999 (incorporated by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K filed on March 30, 2000).
10.20	L-3 Communications Corporation Pension Plan (incorporated by reference to Exhibit 10.10 to L-3 Communications Holdings' Registration Statement on Form S-1 No. 333-46975).
10.25	L-3 Communications Corporation Employee Stock Purchase Plan (incorporated by reference to Appendix A of L-3 Communications Holdings' Definitive Proxy Statement filed April 2, 2001).
10.32	Indenture dated as of December 11, 1998 ("December 1998 Indenture") among L-3 Communications Corporation, the Guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 10.32 to L-3 Communications Holdings' Registration Statement on Form S-1, No. 333-70125).
10.33	Indenture dated as of May 21, 2003 ("May 2003 Indenture") among L-3 Communications Corporation, the Guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-4, No. 333-106106).
10.40	Third Amended and Restated Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.40 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.41	Second Amended and Restated 364-Day Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.41 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.42	First Amendment to Third Amended and Restated Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.42 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.43	First Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.43 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.44	Second Amendment to Third Amended and Restated Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.44 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.45	Consent and Second Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named herein and the other parties thereto (incorporated by reference to Exhibit 10.45 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.46	Consent, Waiver and Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.46 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002).
10.47	Consent, Waiver and Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the

	lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002).
10.48	Second Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.48 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.49	Second Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.49 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.50	Consent, Waiver and Third Omnibus Amendment Regarding Second Amended and Restated 364 Day Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.50 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.51	Third Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.51 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.53	Indenture dated as of October 24, 2001 ("2001 Indenture") among L-3 Communications Holdings, Inc., the guarantors named therein and the Bank of New York, as Trustee (incorporated by reference to Exhibit 4.f of L-3 Communications Holdings' Registration Statement on Form S-3, No. 333-75558).
10.55	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the May 2003 Indenture (incorporated by reference to Exhibit 10.55 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.56	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the December 1998 Indenture (incorporated by reference to Exhibit 10.56 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
10.57	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, L-3 Holdings, Inc., The Bank of New York, as trustee, and the guarantors named therein to the 2001 Indenture (incorporated by reference to Exhibit 10.58 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.58	Asset Purchase Agreement dated as of January 11, 2002 among Raytheon Company, Raytheon Australia Pty Ltd. and L-3 Communications Corporation (incorporated by reference to Exhibit 10.59 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.59	Amendment dated as of March 8, 2002 among Raytheon Company, Raytheon Australia Pty Ltd., L-3 Communications Corporation, L-3 Communications Integrated Systems L.P. and L-3 Communications Australia Pty Ltd to the Asset Purchase Agreement dated as of January 11, 2002 (incorporated by reference to Exhibit 10.60 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.62	Indenture dated as of June 28, 2002, ("2002 Indenture") among L-3 Communications Corporation, the guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form S-4, No. 333-99757).
10.63	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the 2002 Indenture (incorporated by reference to Exhibit 10.94 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.64	Transaction Agreement dated as of October 21, 2003 by and among L-3 Communications Corporation, RAAH I, LLC and Vertex Aerospace LLC (incorporated by reference to Exhibit 10.95 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
10.65	Supplemental Indenture dated as of February 25, 2004 among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the December 2003 Indenture (incorporated by reference to Exhibit 10.96 to the Registrant's Annual Report on Form 10-K for the year ending December 31, 2003).
*11	L-3 Communications Holdings, Inc. Computation of Basic Earnings Per Share and Diluted Earnings Per Share.
12	Ratio of Earnings to Fixed Charges (incorporated by reference to Exhibit 12 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
21	Subsidiaries of the Registrant (incorporated by reference to Exhibit 21 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003).
**23	Consent of PricewaterhouseCoopers LLP.
24	Powers of Attorney L-3 Communications Corporation and the Additional Registrants (included on the signature pages hereto).
**25	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939 of The Bank of New York, as Trustee.
**99.1	Letter of Transmittal.
**99.2	Notice of Guaranteed Delivery.

\* The information required in this exhibit is presented on Note 12 to the Consolidated Financial Statements as of December 31, 2003 in accordance with the provisions of SFAS No. 128, *Earnings Per Share*.

\*\* Filed herewith

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UVD34FH^SM]1U9+J8H2T;2B|>GQU< M\_P')AKE(6I(^IDB%J-3"%@8"%BE/@W\$ M\*:RI\_?'1'N.VM]"D:9S1N0;WM"&0|6QRN9(3^4)JO&U']-55SMO>1>N1|SX< MV\_3I?[\*>%8^U185?(D))4&|(JXLf%)/@Q)%C9U\$<9KRN!+I7N2<((|TZO^/ M\_-8U4VS+G^4(4M4NQ3W2<4HZ263'(9+<0=XM",3QD3?/U+0S&BE35B0@("8B"D(.3F&>>\_\*&]6\*8,H\*+[5L<:9HE;C=87A[V] MMS:0S++|CDP;GHW"\*3)B"4PG60,\*IK3+VUU7EFNR1K+=VP|XQ+@M)69U7;X MZ6Z9QMW@^T&O3E(4#=")\_|;+<3U97DM=ZT9BV6-,6\$ G|I)79TV"8YD>7-8 MBC252:E^9M&B;7+G3 MH-\_)^G%-!31HD:(U9OO(>XY#^B+);\$S\$W8Y&\$,1L0@D>1QC-9I<B'WJVD:ING!FO.O)FJVW+VQ;-7?)Y)231'\*)&&OKJ\*^RK;-|]9SVUTJ( M:1'J8Y+^%.#A15UYIGBWR:F\_G%>Q[':SNZPT"]3V\*XX2G&;DS\*-,JG8B<\ M3\$A'YR2D^STO.<E%""7A8XN|X@>T4C\$+:GYHV\_-)T%\*XCV.2.5\$)A&83JM2Y->?|A96EPF%57+!E38 M8W.[^X6F^<34557^\$3)"!GX:T-1\$1.DI\_!JOIU5J7F1NTB|\$\*./<-?U+<) ML<\*(T8[2=4LK+\$OJGV0L^34/M)+OR65,.9W:D7""E9KBQQQQQC""&,<M<<<8QQQQQC\*"/E"M)KK)T@16(S!#5+A1-G1Z9.>209,,!#1\*D6P:0F8+#C( M\_9)7%ZC;BJ-QCTDI4]YQF0EEC%B^/G3+\$@46M\*""S"N)NUS/D.G<:>HC\*&A1C M&2G|BD#>H;)-ZLXS|(P:929[\"@Q.?@I06()A018X;8JEM[1VE2KD8LZ&4 M(B.3MHI") [QBVGJH\*0P1%3KM4;|JOF7^>4Y""7-/&G^L<))3=)VVJN),\* MM::?3--?J5X7.5K&%L\*61/A">]?1CSM<[M\$7\*B^@CW=6 MX8?B=R%Q)(STF\$RDZ? OG^X2\_3SNIPY;5Z\*#,X\$SJ+408T@+NE<(P8HQ#8 MO2JB^KVNM3MJUW7;55%1U/G/[F?8+XY\_@7LG]^>V; M!?!W>UIZB+K'HK8/7\_8.(5? 9<@;YI&:!,HRTEC-#YT0VIF|R2RP\*\*)J5B-AD MK6B90D/I2[+;55A72P3ZVUJY!]>E'%A2XXWM;(C2(T@+C M1)0#Q9!A/HFN? IRZR));CI=|@RY\_K^F9N9|BO<"^M^+PFNWG+TO,<75'S7ISTOUFE4?L59+XN MUSN2P8^AP@\*\$A,+=6UZ1QAFD\*8(VM\_>G1P9&5'Z|>X-;R)EY2QQ'Y^ID88 MR\_\*5?[\*JAOQ0Y\_<\_|00B\_A,F?YV,\_R?9[\_`!<H,J,IY]>EDPVI\*PCRR4 MSN=O25ACC\*C!G.3U2C.1FJ51WCV:|I;\$H%>F(NBC)-:I4BQY5F%ITQ@\\0#; MML\_|[#9-4U[7JVL?8'97SYL(3B3;D@+7J\$(!B&@7E=,\*%@VK)7HQ|/@;Q\$> MV\_\\B+XP-Y/T'Q\_\\\*KR%YZWWD"JX|JC;MH^E|7.CQ-2T'VOV#^#9VES+F2CV MD>J;KE?:GED;3\*1)9";9FEUT-0NRK|FBI5P42S8\_8A8ER4UML? CM,1U.;O( M@+7-YD'VM\$S0WV\_!@7AZ\*#X^\\-N3D2=|4XQIAK975"QT^AS M5QM':Y3.2DE'"\_ "Z?/P|^+Y7(LA,Q@X\*500%Q9B%&1'(H^WLZ'8A92^2/))=XBZS-LHU)J/R,>)Q-8UJ#^HZJ% C%3Y(QK,H M'=\*/I'')9E6\\<<<<8QQQQQC".1A#XJ0@X^\\[G.,>?N^Y|\_Y\$"QSC' MWYQCC&9XYC' @YQYP+&H/G/OQCSCSG[L>?>.,9RXYQP M(.,,)#G./X\$SC/C|\_EX|8|^=^\\\_#;O^\\W^\_C&?Q),W.KM^WIL8GY1% MGI>V+4K5(TK>VNQ|^XGD#^C=2VMX(4M;CE\$HR6>-")O\$F5@+<08(KUX,#K0; MCW?WLZD.3JYIAP&|ZE2C^8M&K;#\*GCV#>#QGVTTUA:4U?)86J\*ID'EIII3K& M2S!^A)UOI%@.SWZ?YSZ? 5CU8^@././Y/CSCG'?EQ[L\_ "O&<>\_P^\\,^ M<<<<^\_/\_C|/((|L%\$2[CM9'N;>DE"[^&55S# :O:HOK)C-(T4D?;47\_;;W#.- M'.1<[<%U5W#UZ:7L'\$?%?,6MV#A? N>M^D:|6VIF?%)D|O|["Z,2UHY?|I#]4 M=JB>ZEE5\$H|^E'H7F=^W8R4,91LTK(LTL8BS"S\*BC(#"Q@%D(@&%B.P,L81 M8R\$01A"(<9QCG&,XSSA\_A^>Q;\_C>KL?74L7Q^L\_-'V\*=:QZWVBN&Z630E+6' MYF"P8)RF=7PB2N(Q8S9Y)0G|W9%2P?OSG.K>KSKGTGJV;|+ MV? 3&N%+UM6!"\\S"R\$%QE0=&T2MY;F)J'3#X4[R4X9SR|MR,L#2WJE.#5( M!Y^\$H)A@;NX^WQ"\*C.1)RB|OL]Q;1I\$;VW15\$E@YJNZ3?;B\*O^I,V+\\[O M!-UN^?IY;69-5CR?A5>T^5;CW15|\$^%5^V:A\*RL^ MRON:LB#63AKTMP11V.%PQ;+G\$0575+!/I;@]FFJ'L2<14E5)USHI.,21-) M(7P1`RP;LEA|KC:JZYNK:F=!(V<[HCB|O%0:2-H4,SMET;@)#\$Z(P19Q\\5@C M488I^&(IA044:LP)4H>I(I)50JW^9.V-#78-5UBP\*W:V@%L5D^I)+6|E0N, MSR`R-&E6MZ-|ADM9D;Y&7=(A=\$C>XHDKDS+4:HE(N0HE9|9H2E\*0@X`RP|^\\ MA^>?.'/CSY^X|>M^|DIUSCVLI)KKB=\*DWU1WNZTL.U49/1!J2.%SRJPJC: MUGS&-(UB\*P91L>]CJP^0GGOR-S-IL7B+2M:U|@W@VO')%XST%7##-B))=, M#O[A@('|A!%\*(20E775E+4&.YDB;73)((QQ9^"..!@S\\!S|8|V<9|^<^ M/R>? 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DELAWARE  
The First State

PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "VERTEX AEROSPACE LLC", CHANGING ITS NAME FROM "VERTEX AEROSPACE LLC" TO "L-3 COMMUNICATIONS AEROTECH LLC", FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF DECEMBER, A.D. 2003, AT 5:29 O'CLOCK P.M.

/s/ Harriet Smith Windsor  
-----  
Harriet Smith Windsor, Secretary of  
State

3375318 8100

AUTHENTICATION: 2831657

030806786

DATE: 12-22-03

State of Delaware  
Secretary of State  
Division of Corporations  
DELIVERED 07:42 PM 12/15/2003  
FILED 05:29 PM 12/15/2003  
SRV 030806786 - 3375318 FILE

CERTIFICATE OF AMENDMENT  
  
OF THE  
  
CERTIFICATE OF FORMATION  
  
OF  
  
VERTEX AEROSPACE LLC

The undersigned, desiring to amend the certificate of formation of a Delaware limited liability company under the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Vertex Aerospace LLC.

2. Article "First" of said certificate of formation, which Article sets forth the name of the Company, is hereby amended to change the name of the Company from its present name to "L-3 Communications AeroTech LLC", said amended Article "First" to read in its entirety as follows:

"The name of the limited liability company is: L-3 Communications AeroTech LLC."

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment of Vertex Aerospace LLC this 9th day of December, 2003.

/s/ Christopher C. Cambria  
-----  
Christopher C. Cambria  
Vice President and Secretary

## LIMITED LIABILITY COMPANY AGREEMENT

OF

RAYTHEON AEROSPACE LLC

This Limited Liability Company Agreement (this "Agreement") of Raytheon Aerospace LLC (the "Company"), made as of this 26th day of June, 2001, is entered into by Raytheon Aircraft Holdings, Inc. ("RA", and prior to the consummation of the transactions contemplated by Section 3.1(b), the "Member"), and after the consummation of the transactions contemplated by Section 3.1(b), RAAH I, LLC ("RAAH", and after the consummation of the transactions contemplated by Section 3.1(b), the "Member") pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C. ss. 18-101, et seq.), as amended from time to time (the "Act"), and the terms of this Agreement which shall be deemed to be the Company's limited liability company agreement.

## R E C I T A L S :

WHEREAS, Wing Corp. (the "Corporation") was formed as a Delaware corporation on March 30, 2001;

WHEREAS, by unanimous written consent, the board of directors of the Corporation adopted a resolution adopting and approving the conversion of the Corporation to a Delaware limited liability company and the adoption of this Agreement, and recommending the adoption of such conversion and this Agreement to the sole stockholder of the Corporation, pursuant to Section 266 of the General Corporation Law of the State of Delaware (the "GCL");

WHEREAS, by written consent, the sole stockholder of the Corporation adopted and approved the conversion of the Corporation to a limited liability company and the adoption of this Agreement pursuant to Section 266 of the GCL;

WHEREAS, on the date hereof, the Corporation was converted to a limited liability company pursuant to Section 18-214 of the Act and Section 266 of the GCL by causing the filing with the Secretary of State of the State of Delaware of a Certificate of Conversion to Limited Liability Company (the "Certificate of Conversion") and a Certificate of Formation of the Company (the "Certificate") (together, the "Conversion");

WHEREAS, pursuant to this Agreement and the Conversion, the sole stockholder of the Corporation, RA, is admitted as a member of the Company (the "Original Member") owning all of the limited liability company interests in the Company; and

WHEREAS, the Original Member desires to retain certain receivables and other assets of the Company and convey, sell, assign, and deliver all of its right, title and interest in and to its Membership Interests (as hereinafter defined) to RAAH and admit RAAH as the sole member of the Company, on the terms and subject to the conditions of the Combination Agreement and this Agreement;

WHEREAS, RAAH desires to acquire the Membership Interest of RA in the Company and be admitted as a member of the Company, on the terms and subject to the conditions of the Combination Agreement (as hereinafter defined) and this Agreement; and

WHEREAS, RAAH, as the Member, desires to continue the Company as a limited liability company without dissolution under the Act after giving effect to the transactions contemplated by Section 3.1(b).

NOW, THEREFORE, in consideration of the mutual promises and agreements set forth herein, the adequacy and sufficiency of which are hereby acknowledged, and intending to be legally bound, the parties hereby agree as follows:

## ARTICLE I

## FORMATION AND TERM

1.1 Name. In accordance with, and subject to the provision of the Combination Agreement, and the Raytheon Trademark License Agreement, the name of the Company shall be "Raytheon Aerospace LLC," and the Company may conduct business under that name or any other name hereafter approved by the Manager, and the Member, the Manager and any officers of the Company are to be considered authorized persons within the meaning of the Act who may, each acting alone, execute, deliver, and file any amendment and/or restatement of the Certificate as necessary to change the name of the Company consistent with the provisions of this Agreement and the Raytheon Trademark License Agreement.

1.2 Purpose. The Company is formed for the object and purpose of, and the nature of the business to be conducted and promoted by the Company is, engaging in any lawful act or activity for which limited liability companies may be formed under the Act and engaging in any and all activities necessary or incidental to the foregoing, provided however that such activities shall be performed in accordance with and limited by the terms and conditions set forth in the Combination Agreement dated as of April 5, 2001, by and among, Raytheon Aerospace Company, Raytheon Aircraft Holdings, Inc., RAAH, Wing Corp., and RA Aerospace Holding LLC (as amended by Amendment Number One dated as of June \_\_, 2001, the "Combination Agreement") and (upon RAAH's admission as the Member) the

Limited Liability Company Agreement of RAAH, as amended from time to time (the "RAAH LLC Agreement").

1.3 Registered Office. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange

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Street, Wilmington, Delaware 19801. At any time, the Manager (as defined herein) may designate another registered office.

1.4 Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager may designate another registered agent.

1.5 Term. The term of the Company commenced on the date that the original certificate of incorporation of the Corporation was filed in the office of the Secretary of State of the State of Delaware (the "Secretary of State") and shall continue until the Company is dissolved in accordance with the provisions of this Agreement and the Act.

1.6 Qualification in Other Jurisdictions. The Manager shall cause the Company to be qualified, formed or registered if necessary under assumed or fictitious name statutes or similar laws in any jurisdiction in which the Company transacts business. The Manager is hereby authorized to execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business.

## ARTICLE II

### POWERS AND MANAGERS

2.1 The Company. Subject to and limited by Section 1.2, the Company and the Manager, on behalf of the Company, shall have the power and authority to take any and all actions that are necessary, appropriate, proper, advisable, incidental or convenient to or for the furtherance of the purposes described herein, including without limitation, the execution, deliverance and performance of the Combination Agreement.

2.2 The Manager. In accordance with Section 18-402 of the Act, the business and affairs of the Company shall be vested in a Manager, which shall be the Member (when acting in such capacity, the "Manager"). The Manager shall have the complete right, power and discretion to operate and control the affairs of the Company, including the power and authority to bind the Company and otherwise to act for and on behalf of the Company (all subject to compliance with the Combination Agreement and the RAAH LLC Agreement, upon RAAH's admission as the member).

2.3 Certificates. Each of the Manager, the Member, and each officer is hereby designated as an authorized person, within the meaning of the Act, to, acting alone, execute, deliver and file all certificates required or permitted by the Act to be filed in the office of the Secretary of State.

#### 2.4 Officers.

(a) Designation and Appointment. The Manager may, from time to time, employ and retain persons as may be necessary or appropriate for the

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conduct of the Company's business (subject to the supervision and control of the Manager), including employees, agents and other persons (any of whom may be a member of the Company) who may be designated as "Officers" of the Company, with titles including but not limited to a "chairman," "chief executive officer," "president," vice president, "treasurer," "secretary," "general counsel," "director" and "chief financial officer," as and to the extent authorized by the Manager. Any number of offices may be held by the same person. In the Manager's discretion, the Manager may choose not to fill any office for any period as it may deem advisable. Officers need not be residents of the State of Delaware or members of the company. Any Officers so designated shall have such authority and perform such duties as the Manager may, from time to time, delegate to them. The Manager may assign titles to particular Officers. Each Officer shall hold office until his successor shall be duly designated and shall have qualified as an Officer or until his death or until he shall resign or shall have been removed in the manner hereinafter provided. The salaries or other compensation, if any, of the Officers of the Company shall be fixed from time to time by the Manager.

(b) Resignation and Removal. Any Officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time be specified, at the time of its receipt by the Manager. The acceptance by the Manager of a resignation of any Officer shall not be necessary to make such resignation effective, unless otherwise specified in such resignation. Any Officer may be removed as such, either with or without cause, at any time by the Manager. Designation of any person as an Officer by the Manager pursuant to the provisions of Section 2.4(a) shall not in and of itself vest in such person any contractual or employment rights with

respect to the Company.

(c) Duties of Officers Generally. The Officers, in the performance of their duties as such, shall (i) owe to the Company and the Member duties of loyalty and due care of the type owed by the officers of a corporation to such corporation and its stockholders under the laws of the State of Delaware, and (ii) keep the Manager reasonably apprised of material developments in the business of the Company.

(d) Chairman. Subject to the powers of the Manager, the Chairman of the Company shall have such powers, perform such tasks and have such responsibilities as are possessed, performed and held by persons employed in similar capacities in companies similar to the Company, and have such additional powers and perform such other duties as may be prescribed by the Manager.

(e) Chief Executive Officer. Subject to the powers of the Manager, the chief executive officer of the Company shall be in general and active charge of the entire business and affairs of the Company, and shall be its chief policy making Officer, and have such additional powers and perform such other duties as may be prescribed by the Chairman of the Company or the Manager.

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(f) President. The president of the Company shall, subject to the powers of the Manager and the chief executive officer of the Company, have general and active management of the business of the Company, and shall see that all orders and resolutions of the Manager are effectuated. The president of the Company shall have such other powers and perform such other duties as may be prescribed by the chief executive officer of the Company or by the Manager.

(g) Chief Financial Officer. The chief financial officer of the Company shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the Company, including accounts of the Company's assets, liabilities, receipts, disbursements, gains, losses, capital and Units. The chief financial officer of the Company shall have custody of the funds and securities of the Company, keep full and accurate accounts of receipts and disbursements in books belonging to the Company, and deposit all moneys and other valuable effects in the name and to the credit of the Company in such depositories as may be designated by the Manager. The chief financial officer of the Company shall have such other powers and perform such other duties as may from time to time be prescribed by the chief executive officer of the Company or the Manager.

(h) General Counsel. The general counsel of the Company shall have general charge of the legal affairs of the Company, and shall cause to be kept adequate records of all suits or actions, of every nature, to which the Company may be a party, or in which it has an interest, with sufficient data to show the nature of the case and the proceedings therein. The general counsel of the Company shall prepare, or cause to be prepared, legal opinions on any subject necessary for the affairs of the Company, and shall have such other powers and perform such other duties as may from time to time be prescribed by the chief executive officer of the Company or the Manager.

(i) Vice President(s). The vice president(s) of the Company shall perform such duties and have such other powers as the chief executive officer of the Company or the Manager may from time to time prescribe. A vice president may be designated as an Executive Vice President, a Senior Vice President, an Assistant Vice President, or a vice president with a functional title.

(j) Secretary.

(A) The secretary of the Company shall keep all documents as may be required under the Act, The secretary shall perform such other duties and have such other authority as may be prescribed elsewhere in this Agreement or from time to time by the chief executive officer of the Company or the Manager. The secretary of the Company shall have the general duties, powers and responsibilities of a secretary of a corporation organized under the laws of the State of Delaware.

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(B) If the Manager chooses to appoint an assistant secretary or assistant secretaries, the assistant secretaries, in the order of seniority, shall in the Company secretary's absence, disability or inability to act, perform the duties and exercise the powers of the secretary of the Company, and shall perform such other duties as the chief executive officer of the Company or the Manager may from time to time prescribe.

(k) Treasurer. The treasurer of the Company shall receive, keep, and disburse all moneys belonging to or coming to the Company. The treasurer of the Company shall prepare, or cause to be prepared,



detailed reports and records of all expenses, losses, gains, assets, and liabilities of the Company as directed by the chief financial officer of the Company and shall perform such other duties in connection with the administration of the financial affairs of the Company as may from time to time be prescribed by the chief financial officer or the chief executive officer of the Company or by the Manager.

### ARTICLE III

#### FORMATION OF THE COMPANY, UNITS, CAPITAL ACCOUNTS AND ALLOCATIONS OF PROFITS AND LOSSES

3.1 Formation of the Company; Conversion of the Corporation. (a) Effective as of the time of the Conversion, (i) the Certificate of Incorporation of the Corporation, dated as of March 30, 2001, as amended, and the By-Laws of the Corporation, as amended, are replaced and superseded in their entirety by this Agreement in respect of all periods beginning on or after the Conversion, (ii) the sole stockholder of the Corporation, RA, is hereby automatically admitted as the sole member of the Company owning all of the Membership Interests in the Company, (iii) the Member is continuing the business of the Corporation without dissolution in the form of a Delaware limited liability company governed by this Agreement, and (iv) in accordance with Section 18-214(g) of the Act, the Company shall constitute a continuation of the existence of the Corporation in the form of a Delaware limited liability company and, for all purposes of the laws of the State of Delaware, shall be deemed to be the same entity as the Corporation. The Company may in its discretion issue certificates to the Members representing the Membership Interest held by each Member. Robert S. Sinquefield, Daniel A. Grafton and Paul Bailey, are each hereby designated as an "authorized person" within the meaning of the Act, and an authorized person has executed, delivered and filed the Certificate and the Certificate of Conversion with the Secretary of State of the State of Delaware. Upon the filing of the Certificate and the Certificate of Conversion with the Secretary of State of the State of Delaware, each of their powers as an "authorized person" ceased, and the Member, the Manager and any Officer, acting alone, thereupon became a designated "authorized person" to execute, deliver and file any amendments and/or restatements of the Certificate and any other certificates (and any amendments and/or restatements thereof) permitted or required to be filed with the Secretary of State of the State of Delaware, and shall continue as the designated "authorized person" within the meaning of the Act.

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(b) Following the transactions set forth in Section 3.1 (a) hereof, and on the terms and subject to the conditions of the Combination Agreement, the Original Member shall convey, sell, assign, and deliver all of its right, title and interest in and to its Membership Interests to RAAH and immediately upon the signature by RAAH of a counterpart to the signature page hereof, RAAH shall be deemed admitted as the sole member of the Company owning all of the Membership Interests in the Company, and simultaneously therewith the Original Member shall cease to be a member of the Company or have any Membership Interests in the Company without any further action or amendment to this agreement, and RAAH shall continue the Company without dissolution.

(c) Upon the admission of RAAH as a Member of the Company pursuant to Section 3.1(b), the Manager shall issue a certificate to RAAH in the form attached hereto as Exhibit A representing the Membership Interests held by RAAH.

3.2 Contributions. The Member shall be deemed to have contributed to the Company an amount equal to the fair market value of the assets of the Corporation less the fair market value of the liabilities of the Corporation. The Member shall not make any other initial contribution to the Company. The Member may, but is not required to, make any additional capital contributions to the Company.

3.3 Allocations Generally. The Company's profit and loss shall be allocated to the Member.

3.4 Distributions. Except as provided in Article V and this Section 3.4, distributions shall, subject to the Act and other applicable law, be made to the Member at the times and in the aggregate amounts determined by the Manager.

### ARTICLE IV

#### ADMINISTRATIVE PROVISIONS

4.1 Accounting Method. The accounting for Company purposes shall be in accordance with accounting principles determined by the Manager.

4.2 No Salaries to Member or Manager. No salary shall be paid to the Member or Manager for services to the Company.

4.3 Entity Classification. For U.S. federal income tax purposes, the Company shall be disregarded as an entity separate from its owner within the meaning of Treasury Regulations 301.7701-3 and shall not make an election to be classified as a corporation.

## ARTICLE V

### DISSOLUTION AND TERMINATION

5.1 Dissolution. The Company shall dissolve, and its affairs shall be wound up only upon the first to occur of the following: (i) the written consent of the Member or (ii) the entry of a decree of judicial dissolution under Section 18-802 of the Act or (iii) at any time there are no members of the Company unless the Company is continued in accordance with the Act. The Member shall continue to be allocated profit and loss, in the manner set forth in Section 3.3 during the liquidation. The proceeds from liquidation of Company assets shall be applied as follows:

- (1) satisfaction (whether by payment or the making of reasonable provision for payment) of debts and liabilities of the Company other than to the Member;
- (2) to payment of amounts owed to the Member for amounts borrowed from and not repaid to the Member; and
- (3) to the Member.

5.2 Gains or Losses in Winding-Up. Any gain or loss on disposition of Company properties in the process of liquidation shall be credited or charged to the Member in the manner set forth in Section 3.3. Any property distributed in kind in the liquidation of the Company shall be valued and treated as though the property were sold and the cash proceeds were distributed. The difference between the value of the property distributed in kind and its book value shall be treated as a gain or loss on sale of the property and shall be credited or charged to the Member in the manner set forth in Section 3.3.

5.3 Termination. The Company shall terminate when all of the assets of the Company, after payment of or due provision for all debts, liabilities and obligations of the Company, shall have been distributed to the Member in the manner provided for in this Article V, and the certificate of formation of the Company in effect as of the date thereof shall have been canceled in the manner required by the Act.

## ARTICLE VI

### ADMISSION OF A MEMBER

6.1 Admission of a Member. The Member has been admitted as a member of the Company pursuant to this Agreement. No other person may be admitted as a member of the Company (other than as set forth in Section 3.1(b) and Section 9.3) unless the Member consents.

## ARTICLE VII

### GOVERNING LAW

7.1 Governing Law. This Agreement shall be governed by the laws of the State of Delaware.

## ARTICLE VIII

### LIABILITY, EXCULPATION AND INDEMNIFICATION

8.1 Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and no Covered Person (as defined herein) shall be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a Covered Person.

8.2. Exculpation. No Covered Person shall be liable to the Company or any other Covered Person for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement. A Covered Person shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any person as to matters the Covered Person reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits, losses or net cash flow or any other facts pertinent to the existence and amount of assets from which distributions to Members might properly be paid.

8.3 Indemnification. To the fullest extent permitted by applicable law, a Covered Person shall be entitled to indemnification from the Company for any loss, damage or claim incurred by such Covered Person by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement; provided, however, that any indemnity under this Section 8.3 shall be provided out of and to the extent of Company assets only, and no Covered Person shall have any personal liability on account thereof.

8.4 Expenses. To the fullest extent permitted by applicable law, expenses (including legal fees) incurred by a Covered Person in defending any claim, demand, action, suit or proceeding shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit or proceeding upon receipt by the Company of an undertaking by or on behalf

of the Covered Person to repay such amount if it shall be determined that the Covered Person is not entitled to be indemnified as authorized in Section 8.3.

8.5 Covered Person. For purposes of this Article VIII, "Covered Person" shall mean the Manager, a Member, any affiliate of the Manager or a Member, any officers, directors, shareholders, partners, members, employees, representatives or agents of the Manager or a Member, or their respective affiliates, or any employee, officer or agent of the Company or its affiliates.

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## ARTICLE IX

### SECURITIES LAWS AND SPECIAL LIMITATIONS ON TRANSFER

9.1 Matters Relating to Securities Laws. The Member acknowledges, represents and warrants: (i) that the Member has such knowledge and experience in financial and business matters that the Member is capable of evaluating the merits and risks of the investment involved of a Membership Interest and has so evaluated same; (ii) that the Member is aware that this investment is speculative and represents a substantial risk of loss; (iii) that the Member is able to bear the economic risk of such investment, even if this results in a complete loss of this investment; (iv) that, in connection with the Member's acquisition of a Membership Interest, the Member has been fully informed as to the circumstances under which the Member is required to take and hold such Membership Interest pursuant to the Securities Act of 1933, as amended, and the applicable state securities laws ("Blue Sky Laws"); and (v) that the Member understands that his Membership Interest is not registered under the Securities Act of 1933, as amended, or any Blue Sky Law and may not be transferred, as amended, unless such Membership Interest is subsequently registered under the Securities Act of 1933, as amended, and any applicable Blue Sky Laws or exemptions from such registration requirement are then available.

9.2 No Obligation to Register Interests. The Member understands that the Company and the Manager are under no obligation to register such Membership Interest under the Securities Act of 1933, as amended, or any Blue Sky Laws or to comply with any applicable exemption under the Securities Act of 1933, as amended, or any Blue Sky Laws.

9.3 Special Transfer Limitation. Notwithstanding any provision in this Agreement (other than Section 3.1(b)) a Membership Interest may not be transferred prior to the dissolution and winding up of the Company, provided that the foregoing shall not prohibit a pledge or collateral assignment of a Membership Interest to financing institutions and any subsequent transfer resulting therefrom.

## ARTICLE X

### MISCELLANEOUS

10.1 Notices. All notices or other communications given or made under this Agreement shall be in writing. Notices or other communications shall be mailed by regular mail, postage prepaid, to the Member at the address listed on the signature page, or at such other address as he or she may specify to the Company in a written notice pursuant to this Section 10.1.

10.2 Entire Agreement. This document constitutes the entire Agreement and understanding by the Member and supercedes all prior agreements and undertakings, if any, with respect hereto.

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10.3 Amendment. This Agreement may be amended only upon the written consent of the Member.

10.4 Captions. The titles and captions contained herein are for convenience only and shall not be deemed part of this Agreement.

10.5 Numbers and Gender. Where the context so indicates, the masculine shall include the feminine and neuter, the singular shall include the plural and the plural shall include the singular, and person shall include corporation, firm or any other entity. Without limiting the foregoing, if at any time there shall be only one Manager acting hereunder, references to the Managers shall be deemed to be references to the sole Manager then acting.

10.6 Counterparts. For the purpose of facilitating proving this Agreement, and for other purposes, this Agreement may be executed simultaneously in any number of counterparts. Each counterpart shall be deemed to be an original, and all such counterparts shall constitute one and the same instrument.

10.7 Definition. "Membership Interest" means, with respect to a Member, such Member's entire interest (including its limited liability company interest) in the Company, and the property, assets, business and capital thereof, including (i) the share of the profits, losses and distributions of the Company allocable to such Member under the provisions of this Agreement and (ii) such Member's right to vote or consent hereunder, any right to information provided hereunder or under the Act and any and all other rights provided hereunder or under the Act.

10.8 Other. Each limited liability company interest in the Company

shall constitute a "security" within the meaning of (i) Article 8 of the Uniform Commercial Code (including Section 8-102(a)(15) thereof) as in effect from time to time in the States of Delaware and New York and (ii) the Uniform Commercial Code of any other applicable jurisdiction that now or hereafter substantially includes the 1994 revisions to Article 8 thereof as adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and approved by the American Bar Association on February 14, 1995.

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IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, have duly executed this Limited Liability Company Agreement for Raytheon Aerospace LLC as of the \_\_\_\_ day of June, 2001.

RAAH I, LLC

By: /s/ Thomas J. Campbell

-----  
Name: Thomas J. Campbell  
Title: Secretary

Address:

555 Industrial Drive South  
Madison, Mississippi 39110  
Attention: Secretary

With a copy to:

Raytheon Company  
141 Spring Street  
Lexington, Massachusetts 02421-9107  
Attention: Secretary

With a copy to:

Veritas Capital Management, LLC  
660 Madison Avenue  
14th Floor  
New York, New York 10021-8405  
Attention: Thomas Campbell

[Signature Page to Raytheon Aerospace LLC Limited Liability Company Agreement  
- -Closing]

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[TEXT OF CERTIFICATE]

ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE

RAYTHEON AEROSPACE LLC

MEMBERSHIP CERTIFICATE

This certifies that SPECIMEN is a member of the above named Limited Liability Company and is entitled to the full benefits and privileges of such membership, subject to the duties and obligations, as more fully set forth in the Limited Liability Company Operating Agreement.

IN WITNESS WHEREOF the Limited Liability Company has caused this Certificate to be executed by its duly authorized members this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, and its Limited Liability Company seal to be hereunto affixed.

Each limited liability company interest in the Company shall constitute a "security" within the meaning of (i) Article 8 of the Uniform Commercial Code (including Section 8-102(a)(15) thereof) as in effect from time to time in the States of Delaware and New York and (ii) the Uniform Commercial Code of any other applicable jurisdiction that now or hereafter substantially includes the 1994 revisions to Article 8 thereof as adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and approved by the American Bar Association on February 14, 1995.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE WERE ORIGINALLY

ISSUED ON JUNE \_\_, 2001 AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND THE ISSUER (THE "COMPANY") HAS NOT BEEN REGISTERED UNDER THE U.S. INVESTMENT COMPANY ACT OF 1940, AS AMENDED (THE "INVESTMENT COMPANY ACT"). THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE SOLD OR TRANSFERRED (X) IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR IN THE ABSENCE OF AN EXEMPTION FROM REGISTRATION THEREUNDER, OR (Y) IF SUCH SALE OR TRANSFER CANNOT BE EFFECTED WITHOUT THE LOSS BY THE COMPANY OF ANY APPLICABLE INVESTMENT COMPANY ACT EXEMPTION. THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE ALSO SUBJECT TO ADDITIONAL RESTRICTIONS ON TRANSFER SPECIFIED IN THE LIMITED LIABILITY COMPANY AGREEMENT, DATED AS OF JUNE \_\_, 2001, AS AMENDED OR MODIFIED FROM TIME TO TIME. THE COMPANY RESERVES THE RIGHT TO REFUSE THE TRANSFER OF SUCH SECURITIES UNTIL SUCH CONDITIONS HAVE BEEN FULFILLED WITH RESPECT TO SUCH TRANSFER. A COPY OF SUCH CONDITIONS SHALL BE FURNISHED BY THE COMPANY TO THE HOLDER HEREOF UPON WRITTEN REQUEST AND WITHOUT CHARGE.

[TEXT OF CERTIFICATE]

ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE

RAYTHEON AEROSPACE LLC

MEMBERSHIP CERTIFICATE

This certifies that RAAH I, LLC is a member of the above named Limited Liability Company and is entitled to the full benefits and privileges of such membership, subject to the duties and obligations, as more fully set forth in the Limited Liability Company Operating Agreement.

IN WITNESS WHEREOF the Limited Liability Company has caused this Certificate to be executed by its duly authorized members this \_\_\_\_\_ day of June, 2001, and its Limited Liability Company seal to be hereunto affixed.

Each limited liability company interest in the Company shall constitute a "security" within the meaning of (i) Article 8 of the Uniform Commercial Code (including Section 8-102(a)(15) thereof) as in effect from time to time in the States of Delaware and New York and (ii) the Uniform Commercial Code of any other applicable jurisdiction that now or hereafter substantially includes the 1994 revisions to Article 8 thereof as adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and approved by the American Bar Association on February 14, 1995.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE WERE ORIGINALLY ISSUED ON JUNE \_\_, 2001 AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND THE ISSUER (THE "COMPANY") HAS NOT BEEN REGISTERED UNDER THE U.S. INVESTMENT COMPANY ACT OF 1940, AS AMENDED (THE "INVESTMENT COMPANY ACT"). THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE SOLD OR TRANSFERRED (X) IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR IN THE ABSENCE OF AN EXEMPTION FROM REGISTRATION THEREUNDER, OR (Y) IF SUCH SALE OR TRANSFER CANNOT BE EFFECTED WITHOUT THE LOSS BY THE COMPANY OF ANY APPLICABLE INVESTMENT COMPANY ACT EXEMPTION. THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE ALSO SUBJECT TO ADDITIONAL RESTRICTIONS ON TRANSFER SPECIFIED IN THE LIMITED LIABILITY COMPANY AGREEMENT, DATED AS OF JUNE \_\_, 2001, AS AMENDED OR MODIFIED FROM TIME TO TIME. THE COMPANY RESERVES THE RIGHT TO REFUSE THE TRANSFER OF SUCH SECURITIES UNTIL SUCH CONDITIONS HAVE BEEN FULFILLED WITH RESPECT TO SUCH TRANSFER. A COPY OF SUCH CONDITIONS SHALL BE FURNISHED BY THE COMPANY TO THE HOLDER HEREOF UPON WRITTEN REQUEST AND WITHOUT CHARGE.

DELAWARE

PAGE 1

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The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF FORMATION, FILED THE EIGHTEENTH DAY OF NOVEMBER, A.D. 2002, AT 1:30 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "FLIGHT INTERNATIONAL AVIATION LLC" TO "L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC", FILED THE FIFTEENTH DAY OF DECEMBER, A.D. 2003, AT 5:34 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY.

/s/ Harriet Smith Windsor

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Harriet Smith Windsor,  
Secretary of State

3589103 8100H  
030817876

AUTHENTICATION: 2823388  
DATE: 12-18-03

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 01:30 PM 11/18/2002  
020708842 - 3589103

#### CERTIFICATE OF FORMATION

of

FLIGHT INTERNATIONAL AVIATION LLC

(Pursuant to Section 18-201 of the Limited  
Liability Company Act of the State of Delaware)

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The undersigned, desiring to form a limited liability company pursuant to the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is: Flight International Aviation LLC (the "Company").

2. The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801. The name of the registered agent of the Company for service of process at such address is The Corporation Trust Company.

THE UNDERSIGNED, being duly authorized, has executed this certificate as of November 15, 2002.

/s/ Christian H. Mittweg

-----  
Christian H. Mittweg  
Authorized Person

#### CERTIFICATE OF AMENDMENT

OF THE

CERTIFICATE OF FORMATION

OF

FLIGHT INTERNATIONAL AVIATION LLC

The undersigned, desiring to amend the certificate of formation of a Delaware limited liability company under the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Flight International Aviation LLC.

2. The date of filing the Company's original certificate of formation by the Secretary of State of the State of Delaware is November 18, 2002.

3. Article 1 of said certificate of formation, which Article sets forth the name of the Company, is hereby amended to change the name of the Company

from its present name to "L-3 Communications Flight International Aviation LLC", said amended Article 1 to read in its entirety as follows:

"The name of the limited liability company is: L-3 Communications Flight International Aviation LLC."

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment of Flight International Aviation LLC this 9th day of December, 2003.

/s/ Christopher C. Cambria

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Christopher C. Cambria  
Vice President and Secretary

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 07:41 PM 12/15/2003  
FILED 05:34 PM 12/15/2003  
SRV 030806813 - 3589103 FILE

LIMITED LIABILITY COMPANY AGREEMENT

OF

FLIGHT INTERNATIONAL AVIATION LLC

This Limited Liability Company Agreement (this "Agreement") of FLIGHT INTERNATIONAL AVIATION LLC, made as of this 18th day of November, 2002, is entered into by RAYTHEON AEROSPACE LLC (the "Member").

The Member hereby forms a limited liability company pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C.ss.18-101, et seq.), as amended from time to time (the "Act"), and hereby agrees as follows:

ARTICLE I

FORMATION AND TERM

1.1. Name. The name of the limited liability company formed hereby is FLIGHT INTERNATIONAL AVIATION LLC (the "Company").

1.2. Purpose. The Company is formed for the object and purpose of, and the nature of the business to be conducted and promoted by the Company is, engaging in any lawful act or activity for which limited liability companies may be formed under the Act and engaging in any and all activities necessary or incidental to the foregoing, including the continuation of the business conducted by The Flight International Group, Inc. and certain of its affiliated companies (collectively, "FIG"), to the extent acquired, upon closing of the transactions contemplated under the terms of the Asset Purchase Agreement, dated as of May 9, 2002, as amended, by and among the Company, as successor to VTF Corporation, and FIG.

1.3. Registered Office. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager (as defined herein) may designate another registered office.

1.4. Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager may designate another registered agent.

1.5. Term. The term of the Company will commence on the date that the original certificate of formation of the Company is filed in the office of the Secretary of State of the State of Delaware (the "Secretary of State") and shall continue until the Company is dissolved in accordance with the provisions of this Agreement and the Act.

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1.6. Qualification in Other Jurisdictions. The Manager shall cause the Company to be qualified, formed or registered if necessary under assumed or fictitious name statutes or similar laws in any jurisdiction in which the Company transacts business. The Manager or any officer of the Company, as authorized person, within the meaning of the Act, shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business.

ARTICLE II

POWERS AND MANAGERS

2.1. The Company. The Company and the Manager, on behalf of the Company, shall have the power and authority to take any and all actions that are necessary, appropriate, proper, advisable, incidental or convenient to or for the furtherance of the purposes described herein.

2.2. The Manager. In accordance with Section 18-402 of the Act, the business and affairs of the Company shall be vested in a Manager, which shall be the Member (when acting in such capacity, the "Manager"). The Manager shall have the complete right, power and discretion to operate and control the affairs of the Company, including the power and authority to bind the Company and otherwise to act for and on behalf of the Company.

2.3. Certificates. Each of the Manager, the Member and each officer is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file all certificates required or permitted by the Act to be filed in the office of the Secretary of State. Christian H. Mittweg is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the original certificate of formation of the Company in the office of the Secretary of State.

2.4. Officers.

(1) Designation and Appointment. The Manager may, from time to time, employ and retain persons as may be necessary or appropriate for the conduct of the Company's business (subject to the supervision and control of the Manager), including employees, agents and other persons who may be designated as



"Officers" of the Company, with titles including but not limited to "chairman," "chief executive officer," "president," vice president," "treasurer," "secretary," and "chief financial officer," as and to the extent authorized by the Manager. Any number of offices may be held by the same person. In the Manager's discretion, the Manager may choose not to fill any office for any period as it may deem advisable. Officers need not be residents of the State of Delaware or members of the Company. Any Officers so designated shall have such authority and perform such duties as the Manager may, from time to time, delegate to them. The Manager may assign titles to particular Officers. Each Officer shall hold office until his successor shall be duly designated and shall have qualified as an Officer or until his death or until he shall resign or shall have been removed in the manner hereinafter provided. The salaries or other compensation, if any, of the Officers of the Company shall be fixed from time to time by the Manager.

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(2) Resignation and Removal. Any Officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time be specified, at the time of its receipt by the Manager. The acceptance by the Manager of a resignation of any Officer shall not be necessary to make such resignation effective, unless otherwise specified in such resignation. Any Officer may be removed as such, either with or without cause, at any time by the Manager. Designation of any person as an Officer by the Manager pursuant to the provisions of Section 2.4(a) shall not in and of itself vest in such Person any contractual or employment rights with respect to the Company.

(3) Duties of Officers Generally. The Officers, in the performance of their duties as such, shall (i) owe to the Company and the Member duties of loyalty and due care of the type owed by the officers of a corporation to such corporation and its stockholders under the laws of the State of Delaware, (ii) keep the Manager reasonably apprised of material developments in the business of the Company, and (iii) present to the Manager, at least annually, a review of the Company's performance, an operating budget for the Company, and a capital budget for the Company.

(4) Limited Authority of Officers. Notwithstanding any other provision set forth in this Agreement, the Officers shall have no power and authority to enter into contracts on behalf of the Company involving financial obligations or otherwise commit the Company to spend amounts in excess of \$250,000 without the prior approval and authorization by the Manager.

(5) Chairman. Subject to the powers of the Manager, the Chairman of the Company shall have the powers, perform such tasks and have such responsibilities as are possessed, performed and held by persons employed in the same capacity in companies similar to the Company, and have such additional powers and perform such other duties as may be prescribed by the Manager.

(6) Chief Executive Officer. Subject to the powers of the Manager, the chief executive officer of the Company shall be in general and active charge of the entire business and affairs of the Company, and shall be its chief policy making Officer, and have such additional powers and perform such other duties as may be prescribed by the Chairman of the Company or the Manager.

(7) President. The president of the Company shall, subject to the powers of the Manager and the chief executive officer of the Company, have general and active management of the business of the Company, and shall see that all orders and resolutions of the Manager are effectuated. The president of the Company shall have such other powers and perform such other duties as may be prescribed by the chief executive officer of the Company or by the Manager.

(8) Chief Financial Officer. The chief financial officer of the Company shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the Company, including accounts of the Company's assets, liabilities, receipts, disbursements, gains, losses, capital and the Units. The chief financial officer of the Company shall have custody of the funds and securities of the

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Company, keep full and accurate accounts of receipts and disbursements in books belonging to the Company, and deposit all moneys and other valuable effects in the name and to the credit of the Company in such depositories as may be designated by the Manager. The chief financial officer of the Company shall have such other powers and perform such other duties as may from time to time be prescribed by the chief executive officer of the Company or the Manager.

(9) Vice President(s). The vice president(s) of the Company shall perform such duties and have such other powers as the chief executive officer of the Company or the Manager may from time to time prescribe. A vice president may be designated as an Executive Vice President, a Senior Vice President, an Assistant Vice President, or a vice president with a functional title.

(10) Secretary.

(i) The secretary of the Company shall attend all meetings of the Manager and the Member, record all the proceedings of the meetings and perform similar duties for the committees of the Manager when required.

(ii) The secretary of the Company shall keep all documents as may be required under the Act. The secretary shall perform such other duties and have such other authority as may be prescribed elsewhere in this Agreement or from time to time by the chief executive officer of the Company or the Manager. The secretary of the Company shall have the general duties, powers and responsibilities of a secretary of a Corporation.

(iii) If the Manager chooses to appoint an assistant secretary or assistant secretaries, the assistant secretaries, in the order of seniority, shall in the Company secretary's absence, disability or inability to act, perform the duties and exercise the powers of the secretary of the Company, and shall perform such other duties as the chief executive officer of the Company or the Manager may from time to time prescribe.

(11) Treasurer. The treasurer of the Company shall receive, keep, and disburse all moneys belonging to or coming to the Company. The treasurer of the Company shall prepare, or cause to be prepared, detailed reports and records of all expenses, losses, gains, assets, and liabilities of the Company as directed by the chief financial officer of the Company and shall perform such other duties in connection with the administration of the financial affairs of the Company as may from time to time be prescribed by the chief financial officer or the chief executive officer of the Company or by the Manager.

### ARTICLE III

#### CAPITAL CONTRIBUTIONS, UNITS, CAPITAL ACCOUNTS AND ALLOCATIONS OF PROFITS AND LOSSES

3.1. Capital Contributions. The Member has contributed \$100 to the capital of the Company. In consideration for the capital contribution, the Company has issued to the Member a membership certificate, in the form attached hereto as Exhibit A, for 1 (one) Unit representing the Member's entire Membership Interest (as defined below).

5

3.2. Additional Contributions. The Member is not required to make any additional capital contribution to the Company.

3.3. Allocations Generally. The Company's profit and loss shall be allocated to the Member

3.4. Distributions. Except as provided in Article V, distribution shall be made to the Member at the times and in the aggregate amounts determined by the Manager.

3.5. Capital Accounts. A capital account (a "Capital Account") shall be maintained for the Member in accordance with the capital accounting rules of Section 704(b) of the Code and the Treasury Regulations promulgated thereunder. The Member shall have an initial Capital Account balance equal to the Member's initial capital contribution to the Company.

### ARTICLE IV

#### ADMINISTRATIVE PROVISIONS

4.1. Accounting Method. The accounting for the Company purposes shall be in accordance with accounting principles determined by the Manager.

4.2. No Salaries to Member or Manager. No salary shall be paid to the Member or Manager for services to the Company.

4.3. Entity Classification. For U.S. federal income tax purposes, the Company shall be disregarded as an entity separate from its owner within the meaning of Treasury Regulations 301.7701-3 and shall not make an election to be classified as a corporation.

### ARTICLE V

#### DISSOLUTION AND TERMINATION

5.1. Dissolution. The Company shall dissolve, and its affairs shall be wound up only upon the first to occur of the following: (i) the written consent of the Member or (ii) the entry of a decree of judicial dissolution under Section 18-802 of the Act or (iii) at any time there is no member of the Company unless the Company is continued in accordance with the Act. The Member shall continue to be allocated profit and loss, in the manner set forth in Section 3.3 during the liquidation. The proceeds from liquidation of Company assets shall be applied as follows:

(1) satisfaction (whether by payment or the making of reasonable provision for payment) of debts of the Company other than to the Member;

(2) to payment of amounts owed to the Member for amounts borrowed from and not repaid to the Member; and

(3) to the Member.

5.2. Gains or Losses in Winding-Up. Any gain or loss on disposition of Company properties in the process of liquidation shall be credited or charged to the Member in the manner set forth in Section 3.3. Any property distributed in kind in the liquidation of the Company shall be valued and treated as though the property were sold and the cash proceeds were distributed. The difference between the value of the property distributed in kind and its book value shall be treated as a gain or loss on sale of the property and shall be credited or charged to the Member in the manner set forth in Section 3.3.

5.3. Termination. The Company shall terminate when all of the assets of the Company, after payment of or due provision for all debts, liabilities and obligations of the Company shall have been distributed to the Member in the manner provided for in this Article V, and the certificate of formation of the Company in effect as of the date thereof shall have been canceled in the manner required by the Act.

## ARTICLE VI

### ADMISSION OF A MEMBER

6.1. Admission of a Member. The Member has been admitted as a member of the Company pursuant to this Agreement. No person may be admitted as a Member of the Company (other than as set forth in Section 9.3) unless the Member consents.

## ARTICLE VII

### GOVERNING LAW

7.1. Governing Law. This Agreement shall be governed by the laws of the State of Delaware.

## ARTICLE VIII

### LIABILITY, EXCULPATION AND INDEMNIFICATION

8.1. Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and no Covered Person (as defined herein) shall be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a Covered Person.

8.2. Exculpation. No Covered Person shall be liable to the Company or any other Covered Person for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement. A Covered Person shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or

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statements presented to the Company by any person as to matters the Covered Person reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits, losses or net cash flow or any other facts pertinent to the existence and amount of assets from which distributions to Members might properly be paid.

8.3. Indemnification. To the fullest extent permitted by applicable law, a Covered Person shall be entitled to indemnification from the Company for any loss, damage or claim incurred by such Covered Person by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement; provided, however, that any indemnity under this Section 8.3 shall be provided out of and to the extent of Company assets only, and no Covered Person shall have any personal liability on account thereof.

8.4. Expenses. To the fullest extent permitted by applicable law, expenses (including legal fees) incurred by a Covered Person in defending any claim, demand, action, suit or proceeding shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit or proceeding upon receipt by the Company of an undertaking by or on behalf of the Covered Person to repay such amount if it shall be determined that the Covered Person is not entitled to be indemnified as authorized in Section 8.3.

8.5. Covered Person. For purposes of this Article VIII, "Covered Person" shall mean the Manager, a Member, any affiliate of the Manager or a Member, any officers, directors, shareholders, partners, members, employees, representatives or agents of the Manager or a Member, or their respective affiliates, or any employee or agent of the Company or its affiliates.

## ARTICLE IX

### SECURITIES LAWS AND SPECIAL LIMITATIONS ON TRANSFER

9.1. Matters Relating to Securities Laws. The Member acknowledges: (i) that the Member has such knowledge and experience in financial and business matters that the Member is capable of evaluating the merits and risks of the investment involved of a Membership Interest and has so evaluated same; (ii)

that the Member is aware that this investment is speculative and represents a substantial risk of loss; (iii) that the Member is able to bear the economic risk of such investment, even if this results in a complete loss of this investment; (iv) that, in connection with the Member's acquisition of a Membership Interest, the Member has been fully informed as to the circumstances under which the Member is required to take and hold such Membership Interest pursuant to the Securities Act of 1933, as amended, and the applicable state securities laws ("Blue Sky Laws"); and (v) that the Member understands that his Membership Interest is not registered under the Securities Act of 1933, as amended, or any Blue Sky Law and may not be transferred, as amended, unless such Membership Interest is subsequently registered under the Securities Act of 1933, as amended, and any applicable Blue Sky Laws or exemptions from such registration requirement are then available.

9.2. No Obligations to Register Interests. The Member understands that the Company and the Manager are under no obligation to register such Membership Interest under

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the Securities Act of 1933, as amended, or any Blue Sky Laws or to comply with any applicable exemption under the Securities Act of 1933, as amended, or any Blue Sky Laws.

9.3. Special Transfer Limitation. Notwithstanding any other provision in this Agreement, a Membership Interest may not be transferred unless (i) such transfer is exempt from registration under the Securities Act of 1933, as amended, and any Blue Sky Law, which, in the opinion of the counsel to the Company, is then applicable, and, if the Manager so requests, an opinion (the cost of which shall be paid by the transferor) satisfactory to the Manager to such effect has been rendered by counsel satisfactory to the Manager, or (ii) a registration statement is effective under the Securities Act of 1933, as amended, and any Blue Sky law which in the opinion of counsel to the Company is the applicable to such transfer.

#### ARTICLE X

##### MISCELLANEOUS

10.1. Notices. All notices or other communications given or made under this Agreement shall be in writing. Notices or other communications shall be mailed by regular mail, postage prepaid, to the Member at the address listed on the signature page, or at such other address as he or she may specify to the Company in a written notice pursuant to this Section 10.1.

10.2. Entire Agreement. This document constitutes the entire Agreement and understanding by the Member with respect to the Company and supercedes all prior agreements and undertakings, if any, with respect hereto.

10.3. Amendment. This Agreement may be amended only upon the written document signed by the Member.

10.4. Captions. The titles and captions contained herein are for convenience only and shall not be deemed part of this Agreement.

10.5. Numbers and Gender. Where the context so indicates, the masculine shall include the feminine and neuter, the singular shall include the plural and the plural shall include the singular, and person shall include corporation, firm or any other entity. Without limiting the forgoing, if at any time there shall be only one Manager acting hereunder, references to the Managers shall be deemed to be references to the sole Manager then acting.

10.6. Counterparts. For the purpose of facilitating proving this Agreement, and for other purposes, this Agreement maybe executed simultaneously in any number of counterparts. Each counterpart shall be deemed to be an original, and all such counterparts shall constitute one and the same instrument.

10.7. Definition. "Membership Interest" means, with respect to the Member, (i) the Member's entire interest in the Company, and the property, assets, business and capital thereof, and (ii) the share of the profits, losses and distributions of the Company allocable to the Member under the provisions of the Agreement.

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IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, has duly executed this Limited Liability Company Agreement of Flight International Aviation LLC as of the date first written above.

RAYTHEON AEROSPACE LLC

By: /s/ Robert B. McKeon  
Robert B. McKeon  
Authorized Signatory

Address:

c/o Raytheon Aerospace LLC  
555 Industrial Drive South  
Madison, Mississippi 39110

with copy to:

The Veritas Capital Fund, L.P.  
660 Madison Avenue  
New York, New York 10021  
Attn.: Robert B. McKeon

[Signature Page to Flight International Aviation LLC Limited Liability Company  
Agreement]

DELAWARE

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "L-3 COMMUNICATIONS FLIGHT CAPITAL LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF FORMATION, FILED THE EIGHTEENTH DAY OF NOVEMBER, A.D. 2002, AT 1:30 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "FLIGHT CAPITAL LLC" TO "L-3 COMMUNICATIONS FLIGHT CAPITAL LLC", FILED THE FIFTEENTH DAY OF DECEMBER, A.D. 2003, AT 5:30 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY.

/s/ Harriet Smith Windsor  
-----  
Harriet Smith Windsor, Secretary  
of State

AUTHENTICATION: 2823395

3568976 8100H

DATE: 12-18-03

030817892

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 01:30 PM 11/18/2002  
020708854 - 3568976

CERTIFICATE OF FORMATION  
of  
FLIGHT CAPITAL LLC

(Pursuant to Section 18-201 of the Limited  
Liability Company Act of the State of Delaware)

The undersigned, desiring to form a limited liability company pursuant to the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

The name of the limited liability company is: Flight Capital LLC (the "Company").

The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801. The name of the registered agent of the Company for service of process at such address is The Corporation Trust Company.

THE UNDERSIGNED, being duly authorized, has executed this certificate as of November 15, 2002.

/s/Christian H. Mittweg  
-----  
Christian H. Mittweg  
Authorized Person

CERTIFICATE OF AMENDMENT  
OF THE

CERTIFICATE OF FORMATION

OF

FLIGHT CAPITAL LLC

The undersigned, desiring to amend the certificate of formation of a Delaware limited liability company under the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Flight Capital U.C.

2. The date of filing the Company's original certificate of formation by the Secretary of State of the State of Delaware is November 18, 2002.

3. Article 1 of said certificate of formation, which Article sets forth the name of the Company, is hereby amended to change the name of the Company from its present name to "L-3 Communications Flight Capital LLC", said amended Article 1 to read in its entirety as follows:

"The name of the limited liability company is: L-3 Communications Flight Capital LLC."

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment of Flight Capital LLC this 9th day of December, 2003.

/s/ Christopher C. Cambria

-----  
Christopher C. Cambria  
Vice President and Secretary

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 07:42 PM 12/15/2003  
FILED 05:30 PM 12/15/2003  
SRV 030806791 - 3568976 FILE

LIMITED LIABILITY COMPANY AGREEMENT

OF

FLIGHT CAPITAL LLC

This Limited Liability Company Agreement (this "Agreement") of FLIGHT CAPITAL LLC, made as of this 18th day of November, 2002, is entered into by RAYTHEON AEROSPACE LLC (the "Member").

The Member hereby forms a limited liability company pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C.ss.18-101, et seq.), as amended from time to time (the "Act"), and hereby agrees as follows:

ARTICLE I

FORMATION AND TERM

1.1 Name. The name of the limited liability company formed hereby is FLIGHT CAPITAL LLC (the "Company").

1.2 Purpose. The Company is formed for the object and purpose of, and the nature of the business to be conducted and promoted by the Company is, engaging in any lawful act or activity for which limited liability companies may be formed under the Act and engaging in any and all activities necessary or incidental to the foregoing, including the continuation of the business conducted by Maritime Sales & Leasing, Inc. ("Maritime"), to the extent acquired by the Company, upon closing of the transactions contemplated under the terms of the Asset Purchase Agreement, dated as of May 9, 2002, as amended, by and between the Company, as successor to VTF Corporation, and Maritime.

1.3 Registered Office. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager (as defined herein) may designate another registered office.

1.4 Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager may designate another registered agent.

1.5 Term. The term of the Company will commence on the date that the original certificate of formation of the Company is filed in the office of the Secretary of State of the State of Delaware (the "Secretary of State") and shall continue until the Company is dissolved in accordance with the provisions of this Agreement and the Act.

1.6 Qualification in Other Jurisdictions. The Manager shall cause the Company to be qualified, formed or registered if necessary under assumed or fictitious name statutes or similar laws in any jurisdiction in which the Company transacts business. The Manager or any officer of the Company, as authorized person, within the meaning of the Act, shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business.

ARTICLE II

POWERS AND MANAGERS

2.1 The Company. The Company and the Manager, on behalf of the Company, shall have the power and authority to take any and all actions that are necessary, appropriate, proper, advisable, incidental or convenient to or for the furtherance of the purposes described herein.

2.2 The Manager. In accordance with Section 18-402 of the Act, the business and affairs of the Company shall be vested in a Manager, which shall be the Member (when acting in such capacity, the "Manager"). The Manager shall have the complete right, power and discretion to operate and control the affairs of the Company, including the power and authority to bind the Company and otherwise to act for and on behalf of the Company.

2.3 Certificates. Each of the Manager, the Member and each officer is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file all certificates required or permitted by the Act to be filed in the office of the Secretary of State. Christian H. Mittweg is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the original certificate of formation of the Company in the office of the Secretary of State.

2.4 Officers.

(1) Designation and Appointment. The Manager may, from time to time, employ and retain persons as may be necessary or appropriate for the conduct of the Company's business (subject to the supervision and control of the Manager), including employees, agents and other persons who may be designated as "Officers" of the Company, with titles including but not limited to "chairman," "chief executive officer," "president," vice president," "treasurer," "secretary," and "chief financial officer," as and to the extent authorized by



the Manager. Any number of offices may be held by the same person. In the Manager's discretion, the Manager may choose not to fill any office for any period as it may deem advisable. Officers need not be residents of the State of Delaware or members of the Company. Any Officers so designated shall have such authority and perform such duties as the Manager may, from time to time, delegate to them. The Manager may assign titles to particular Officers. Each Officer shall hold office until his successor shall be duly designated and shall have qualified as an Officer or until his death or until he shall resign or shall have been removed in the manner hereinafter provided. The salaries or other compensation, if any, of the Officers of the Company shall be fixed from time to time by the Manager.

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(2) Resignation and Removal. Any Officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time be specified, at the time of its receipt by the Manager. The acceptance by the Manager of a resignation of any Officer shall not be necessary to make such resignation effective, unless otherwise specified in such resignation. Any Officer may be removed as such, either with or without cause, at any time by the Manager. Designation of any person as an Officer by the Manager pursuant to the provisions of Section 2.4(a) shall not in and of itself vest in such person any contractual or employment rights with respect to the Company.

(3) Duties of Officers Generally. The Officers, in the performance of their duties as such, shall (i) owe to the Company and the Member duties of loyalty and due care of the type owed by the officers of a corporation to such corporation and its stockholders under the laws of the State of Delaware, (ii) keep the Manager reasonably apprised of material developments in the business of the Company, and (iii) present to the Manager, at least annually, a review of the Company's performance, an operating budget for the Company, and a capital budget for the Company.

(4) Limited Authority of Officers. Notwithstanding any other provision set forth in this Agreement, the Officers shall have no power and authority to enter into contracts on behalf of the Company involving financial obligations or otherwise commit the Company to spend amounts in excess of \$ 250,000 without the prior approval and authorization by the Manager.

(5) Chairman. Subject to the powers of the Manager, the Chairman of the Company shall have the powers, perform such tasks and have such responsibilities as are possessed, performed and held by persons employed in the same capacity in companies similar to the Company, and have such additional powers and perform such other duties as may be prescribed by the Manager.

(6) Chief Executive Officer. Subject to the powers of the Manager, the chief executive officer of the Company shall be in general and active charge of the entire business and affairs of the Company, and shall be its chief policy making Officer, and have such additional powers and perform such other duties as may be prescribed by the Chairman of the Company or the Manager.

(7) President. The president of the Company shall, subject to the powers of the Manager and the chief executive officer of the Company, have general and active management of the business of the Company, and shall see that all orders and resolutions of the Manager are effectuated. The president of the Company shall have such other powers and perform such other duties as may be prescribed by the chief executive officer of the Company or by the Manager.

(8) Chief Financial Officer. The chief financial officer of the Company shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the Company, including accounts of the Company's assets, liabilities, receipts, disbursements, gains, losses, capital and the Units. The chief financial officer of the Company shall have custody of the funds

-3-

and securities of the Company, keep full and accurate accounts of receipts and disbursements in books belonging to the Company, and deposit all moneys and other valuable effects in the name and to the credit of the Company in such depositories as may be designated by the Manager. The chief financial officer of the Company shall have such other powers and perform such other duties as may from time to time be prescribed by the chief executive officer of the Company or the Manager.

(9) Vice President(s). The vice president(s) of the Company shall perform such duties and have such other powers as the chief executive officer of the Company or the Manager may from time to time prescribe. A vice president may be designated as an Executive Vice President, a Senior Vice President, an Assistant Vice President, or a vice president with a functional title.

(10) Secretary.

(i) The secretary of the Company shall attend all meetings of the Manager and the Member, record all the proceedings of the meetings and perform similar duties for the committees of the Manager when required,

(ii) The secretary of the Company shall keep all documents as may be required under the Act. The secretary shall perform such other duties and have such other authority as may be prescribed elsewhere in this Agreement or

from time to time by the chief executive officer of the Company or the Manager. The secretary of the Company shall have the general duties, powers and responsibilities of a secretary of a Corporation.

(iii) If the Manager chooses to appoint an assistant secretary or assistant secretaries, the assistant secretaries, in the order of seniority, shall in the Company secretary's absence, disability or inability to act, perform the duties and exercise the powers of the secretary of the Company, and shall perform such other duties as the chief executive officer of the Company or the Manager may from time to time prescribe.

(11) Treasurer. The treasurer of the Company shall receive, keep, and disburse all moneys belonging to or coming to the Company. The treasurer of the Company shall prepare, or cause to be prepared, detailed reports and records of all expenses, losses, gains, assets, and liabilities of the Company as directed by the chief financial officer of the Company and shall perform such other duties in connection with the administration of the financial affairs of the Company as may from time to time be prescribed by the chief financial officer or the chief executive officer of the Company or by the Manager.

### ARTICLE III

#### CAPITAL CONTRIBUTIONS, UNITS, CAPITAL ACCOUNTS AND ALLOCATIONS OF PROFITS AND LOSSES

3.1 Capital Contributions. The Member has contributed \$100 to the capital of the Company. In consideration for the capital contribution, the Company has issued to the Member a membership certificate, in the form attached hereto as Exhibit A, for 1 (one) Unit representing the Member's entire Membership Interest (as defined below).

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4.1 Accounting Method. The accounting for the Company purposes shall be in accordance with accounting principles determined by the Manager.

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#### DISSOLUTION AND TERMINATION

5.1 Dissolution. The Company shall dissolve, and its affairs shall be wound up only upon the first to occur of the following: (i) the written consent of the Member or (ii) the entry of a decree of judicial dissolution under Section 18-802 of the Act or (iii) at any time there is no member of the Company unless the Company is continued in accordance with the Act. The Member shall continue to be allocated profit and loss, in the manner set forth in Section 3.3 during the liquidation. The proceeds from liquidation of Company assets shall be applied as follows:

(1) satisfaction (whether by payment or the making of reasonable provision for payment) of debts of the Company other than to the Member;

(2) to payment of amounts owed to the Member for amounts borrowed from and not repaid to the Member; and

(3) to the Member.

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5.2 Gains or Losses in Winding-Up. Any gain or loss on disposition of Company properties in the process of liquidation shall be credited or charged to the Member in the manner set forth in Section 3.3. Any property distributed in

kind in the liquidation of the Company shall be valued and treated as though the property were sold and the cash proceeds were distributed. The difference between the value of the property distributed in kind and its book value shall be treated as a gain or loss on sale of the property and shall be credited or charged to the Member in the manner set forth in Section 3.3.

5.3 Termination. The Company shall terminate when all of the assets of the Company, after payment of or due provision for all debts, liabilities and obligations of the Company shall have been distributed to the Member in the manner provided for in this Article V, and the certificate of formation of the Company in effect as of the date thereof shall have been canceled in the manner required by the Act.

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7.1 Governing Law. This Agreement shall be governed by the laws of the State of Delaware.

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8.1 Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and no Covered Person (as defined herein) shall be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a Covered Person.

8.2 Exculpation. No Covered Person shall be liable to the Company or any other Covered Person for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement. A Covered Person shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any person as to matters the Covered Person reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company, including information, opinions, reports or

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statements as to the value and amount of the assets, liabilities, profits, losses or net cash flow or any other facts pertinent to the existence and amount of assets from which distributions to Members might properly be paid.

8.3 Indemnification. To the fullest extent permitted by applicable law, a Covered Person shall be entitled to indemnification from the Company for any loss, damage or claim incurred by such Covered Person by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement; provided, however, that any indemnity under this Section 8.3 shall be provided out of and to the extent of Company assets only, and no Covered Person shall have any personal liability on account thereof.

8.4 Expenses. To the fullest extent permitted by applicable law, expenses (including legal fees) incurred by a Covered Person in defending any claim, demand, action, suit or proceeding shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit or proceeding upon receipt by the Company of an undertaking by or on behalf of the Covered Person to repay such amount if it shall be determined that the Covered Person is not entitled to be indemnified as authorized in Section 8.3.

8.5 Covered Person. For purposes of this Article VIII, "Covered Person" shall mean the Manager, a Member, any affiliate of the Manager or a Member, any officers, directors, shareholders, partners, members, employees, representatives or agents of the Manager or a Member, or their respective affiliates, or any employee or agent of the Company or its affiliates.

#### ARTICLE IX

##### SECURITIES LAWS AND SPECIAL LIMITATIONS ON TRANSFER

9.1 Matters Relating to Securities Laws. The Member acknowledges: (i) that the Member has such knowledge and experience in financial and business matters that the Member is capable of evaluating the merits and risks of the investment involved of a Membership Interest and has so evaluated same; (ii) that the Member is aware that this investment is speculative and represents a substantial risk of loss; (iii) that the Member is able to bear the economic risk of such investment, even if this results in a complete loss of this investment; (iv) that, in connection with the Member's acquisition of a Membership Interest, the Member has been fully informed as to the circumstances

under which the Member is required to take and hold such Membership Interest pursuant to the Securities Act of 1933, as amended, and the applicable state securities laws ("Blue Sky Laws"); and (v) that the Member understands that his Membership Interest is not registered under the Securities Act of 1933, as amended, or any Blue Sky Law and may not be transferred, as amended, unless such Membership Interest is subsequently registered under the Securities Act of 1933, as amended, and any applicable Blue Sky Laws or exemptions from such registration requirement are then available.

9.2 No Obligation to Register Interests. The Member understands that the Company and the Manager are under no obligation to register such Membership Interest under

-7-

the Securities Act of 1933, as amended, or any Blue Sky Laws or to comply with any applicable exemption under the Securities Act of 1933, as amended, or any Blue Sky Laws.

9.3 Special Transfer Limitation. Notwithstanding any other provision in this Agreement, a Membership Interest may not be transferred unless (i) such transfer is exempt from registration under the Securities Act of 1933, as amended, and any Blue Sky Law, which, in the opinion of the counsel to the Company, is then applicable, and, if the Manager so requests, an opinion (the cost of which shall be paid by the transferor) satisfactory to the Manager to such effect has been rendered by counsel satisfactory to the Manager, or (ii) a registration statement is effective under the Securities Act of 1933, as amended, and any Blue Sky law which in the opinion of counsel to the Company is the applicable to such transfer.

#### ARTICLE X

##### MISCELLANEOUS

10.1 Notices. All notices or other communications given or made under this Agreement shall be in writing. Notices or other communications shall be mailed by regular mail, postage prepaid, to the Member at the address listed on the signature page, or at such other address as he or she may specify to the Company in a written notice pursuant to this Section 10.1.

10.2 Entire Agreement. This document constitutes the entire Agreement and understanding by the Member with respect to the Company and supercedes all prior agreements and undertakings, if any, with respect hereto.

10.3 Amendment. This Agreement may be amended only upon the written document signed by the Member.

10.4 Cautions. The titles and captions contained herein are for convenience only and shall not be deemed part of this Agreement.

10.5 Numbers and Gender. Where the context so indicates, the masculine shall include the feminine and neuter, the singular shall include the plural and the plural shall include the singular, and person shall include corporation, firm or any other entity. Without limiting the foregoing, if at any time there shall be only one Manager acting hereunder, references to the Managers shall be deemed to be references to the sole Manager then acting.

10.6 Counterparts. For the purpose of facilitating proving this Agreement, and for other purposes, this Agreement may be executed simultaneously in any number of counterparts. Each counterpart shall be deemed to be an original, and all such counterparts shall constitute one and the same instrument.

10.7 Definition. "Membership Interest" means, with respect to the Member, (i) the Member's entire interest in the Company, and the property, assets, business and capital thereof, and (ii) the share of the profits, losses and distributions of the Company allocable to the Member under the provisions of the Agreement.

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IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, has duly executed this Limited Liability Company Agreement of Flight Capital LLC as of the date first written above.

RAYTHEON AEROSPACE LLC

By: /s/ Robert B. McKeon

-----  
Robert B. McKeon  
Authorized Signatory

Address:

c/o Raytheon Aerospace LLC  
555 Industrial Drive South  
Madison, Mississippi 39110

with copy to:

The Veritas Capital Fund, L.P.  
660 Madison Avenue  
New York, New York 10021  
Attn.: Robert B. McKeon

[Signature Page to Flight Capital LLC Limited Liability Company Agreement]

DELAWARE

THE FIRST STATE

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "L-3 COMMUNICATIONS VECTOR INTERNATIONAL LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF FORMATION, FILED THE FIFTEENTH DAY OF JANUARY, A.D. 2003, AT 9:30 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "VECTOR INTERNATIONAL AVIATION LLC" TO "L-3 COMMUNICATIONS VECTOR INTERNATIONAL LLC", FILED THE FIFTEENTH DAY OF DECEMBER, A.D. 2003, AT 5:28 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY.

/s/ Harriet Smith Windsor  
-----  
Harriet Smith Windsor, Secretary of  
State

3614588 8100H

AUTHENTICATION: 2823401

030817895

DATE: 12-18-03

CERTIFICATE OF FORMATION

OF

VECTOR INTERNATIONAL AVIATION LLC

1. The name of the limited liability company is Vector International Aviation LLC.

2. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of Vector International Aviation LLC this 14th day of January, 2003.

/s/ Jonathan L. Miles  
-----  
Jonathan L. Miles-Organizer

CERTIFICATE OF AMENDMENT

OF THE

CERTIFICATE OF FORMATION

OF

VECTOR INTERNATIONAL AVIATION LLC

The undersigned, desiring to amend the certificate of formation of a Delaware limited liability company under the provisions of the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Vector International Aviation LLC.

2. The date of filing the Company's original certificate of formation by the Secretary of State of the State of Delaware is January 15, 2003.

3. Article 1 of said certificate of formation, which Article sets forth the name of the Company, is hereby amended to change the name of the Company from its present name to "L-3 Communications Vector International LLC", said amended Article 1 to read in its entirety as follows:

"The name of the limited liability company is: L-3 Communications Vector International LLC."

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment of Vector international Aviation LLC this 9th day of December, 2003.

/s/ Christopher C. Cambia

-----

Christopher C. Cambia  
Vice President and Secretary

LIMITED LIABILITY COMPANY AGREEMENT

OF

VECTOR INTERNATIONAL AVIATION LLC

This Limited Liability Company Agreement (this "Agreement") of VECTOR INTERNATIONAL AVIATION LLC, made as of this 16th day of January, 2003, is entered into by RAYTHEON AEROSPACE LLC (the "Member").

The Member hereby forms a limited liability company pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C.ss.18-101, et seq.), as amended from time to time (the "Act"), and hereby agrees as follows:

ARTICLE I

FORMATION AND TERM

1.1 Name. The name of the limited liability company formed hereby is VECTOR INTERNATIONAL AVIATION LLC (the "Company").

1.2 Purpose. The Company is formed for the object and purpose of and the nature of the business to be conducted and promoted by the Company is, engaging in any lawful act or activity for which limited liability companies may be formed under the Act and engaging in any and all activities necessary or incidental to the foregoing, including providing aircraft maintenance services to non-US customers.

1.3 Registered Office. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager (as defined herein) may designate another registered office.

1.4 Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801. At any time, the Manager may designate another registered agent.

1.5 Term. The terms of the Company will commence on the date that the original certificate of formation of the Company is filed in the office of the Secretary of State of the State of Delaware (the "Secretary of State") and shall continue until the Company is dissolved in accordance with the provisions of this Agreement and the Act.

1.6 Qualification in Other Jurisdictions. The Manager shall cause the Company to be qualified, formed or registered if necessary under assumed or fictitious name statutes or similar laws in any jurisdiction in which the Company transacts business. The Manager or any officer of the Company, as authorized person, within the meaning of the Act,

shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business.

ARTICLE II

POWERS AND MANAGERS

2.1 The Company. The Company and the Manager, on behalf of the Company, shall have the power and authority to take any and all actions that are necessary, appropriate, proper, advisable, incidental or convenient to or for the furtherance of the purposes described herein.

2.2 The Manager. In accordance with Section 18-402 of the Act, the business and affairs of the Company shall be vested in a Manager, which shall be the Member (when acting in such capacity, the "Manager"). The Manager shall have the complete right, power and discretion to operate and control the affairs of the Company, including the power and authority to bind the Company and otherwise to act for and on behalf of the Company.

2.3 Certificates. Each of the Manager, the Member and each officer is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file all certificates required or permitted by the Act to be filed in the office of the Secretary of State. Christian H. Mittweg is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the original certificate of formation of the Company in the office of the Secretary of State.

2.4 Officers.

(1) Designation and Appointment. The Manager may, from time to time, employ and retain persons as may be necessary or appropriate for the conduct of the Company's business (subject to the supervision and control of the Manager), including employees, agents and other persons who may be designated as "Officers" of the Company, with titles including but not limited to "chairman," "chief executive officer," "president," "vice president," "treasurer," "secretary," and "chief financial officer," as and to the extent authorized by the Manager. Any number of offices may be held by the same person. In the Manager's discretion, the Manager may choose not to fill any office for any



period as it may deem advisable. Officers need not be residents of the State of Delaware or members of the Company. Any Officers so designated shall have such authority and perform such duties as the Manager may, from time to time, delegate to them. The Manager may assign titles to particular Officers. Each Officer shall hold office until his successor shall be duly designated and shall have qualified as an Officer or until his death or until he shall resign or shall have been removed in the manner hereinafter provided. The salaries or other compensation, if any, of the Officers of the Company shall be fixed from time to time by the Manager.

(2) Resignation and Removal. Any Officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time be specified, at the time of its receipt by the Manager. The acceptance by

-2-

the Manager of a resignation of any Officer shall not be necessary to make such resignation effective, unless otherwise specified in such resignation. Any Officer may be removed as such, either with or without cause, at any time by the Manager. Designation of any person as an Officer by the Manager pursuant to the provisions of Section 2.4(a) shall not in and of itself vest in such Person any contractual or employment rights with respect to the Company.

(3) Duties of Officers Generally. The Officers, in the performance of their duties as such, shall (i) owe to the Company and the Member duties of loyalty and due care of the type owed by the officers of a corporation to such corporation and its stockholders under the laws of the State of Delaware, (ii) keep the Manager reasonably apprised of material developments in the business of the Company, and (iii) present to the Manager, at least annually, a review of the Company's performance, an operating budget for the Company, and a capital budget for the Company.

(4) Limited Authority of Officers. Notwithstanding any other provision set forth in this Agreement, the Officers shall have no power and authority to enter into contracts on behalf of the Company involving financial obligations or otherwise commit the Company to spend amounts in excess of \$250,000 without the prior approval and authorization by the Manager.

(5) Chairman. Subject to the powers of the Manager, the Chairman of the Company shall have the powers, perform such tasks and have such responsibilities as are possessed, performed and held by persons employed in the same capacity in companies similar to the Company, and have such additional powers and perform such other duties as may be prescribed by the Manager.

(6) Chief Executive Officer. Subject to the powers of the Manager, the chief executive officer of the Company shall be in general and active charge of the entire business and affairs of the Company, and shall be its chief policy making Officer, and have such additional powers and perform such other duties as may be prescribed by the Chairman of the Company or the Manager.

(7) President. The president of the Company shall, subject to the powers of the Manager and the chief executive officer of the Company, have general and active management of the business of the Company, and shall see that all orders and resolutions of the Manager are effectuated. The president of the Company shall have such other powers and perform such other duties as may be prescribed by the chief executive officer of the Company or by the Manager.

(8) Chief Financial Officer. The chief financial officer of the Company shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the Company, including accounts of the Company's assets, liabilities, receipts, disbursements, gains, losses, capital and the Units. The chief financial officer of the Company shall have custody of the funds and securities of the Company, keep full and accurate accounts of receipts and disbursements in books belonging to the Company, and deposit all moneys and other valuable effects in the name and to the credit of the Company in such depositories as may be designated by the Manager. The

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chief financial officer of the Company shall have such other powers and perform such other duties as may from time to time be prescribed by the chief executive officer of the Company or the Manager.

(9) Vice President(s). The vice president(s) of the Company shall perform such duties and have such other powers as the chief executive officer of the Company or the Manager may from time to time prescribe. A vice president may be designated as an Executive Vice President, a Senior Vice President, an Assistant Vice President, or a vice president with a functional title.

(10) Secretary.

(i) The secretary of the Company shall attend all meetings of the manager and the Member, record all the proceedings of the meetings and perform similar duties for the committees of the Manager when required.

(ii) The secretary of the Company shall keep all documents as may be required under the Act. The secretary shall perform such other duties and have such other authority as may be prescribed elsewhere in this Agreement or from time to time by the chief executive officer of the Company or the Manager. The secretary of the Company shall have the general duties, powers and

responsibilities of a secretary of a Corporation.

(iii) If the Manager chooses to appoint an assistant secretary or assistant secretaries, the assistant secretaries, in the order of seniority, shall in the Company secretary's absence, disability or inability to act, perform the duties and exercise the powers of the secretary of the Company, and shall perform such other duties as the chief executive officer of the Company or the Manager may from time to time prescribe.

(11) Treasurer. The treasurer of the Company shall receive, keep, and disburse all moneys belonging to or coming to the Company. The treasurer of the Company shall prepare, or cause to be prepared, detailed reports and records of all expenses, losses, gains, assets, and liabilities of the Company as directed by the chief financial officer of the Company and shall perform such other duties in connection with the administration of the financial affairs of the Company as may from time to time be prescribed by the chief financial officer or the chief executive officer of the Company or by the Manager.

### ARTICLE III

#### CAPITAL CONTRIBUTIONS, UNITS, CAPITAL ACCOUNTS AND ALLOCATIONS OF PROFITS AND LOSSES

3.1 Capital Contributions. The Member has contributed \$100 to the capital of the Company. In consideration for the capital contribution, the Company has issued to the Member a membership certificate, in the form attached hereto as Exhibit A, for 1(one) Unit representing the Member's entire Membership Interest (as defined below).

3.2 Additional Contributions. The Member is not required to make any additional capital contribution to the Company.

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3.3 Allocations Generally. The Company's profit and loss shall be allocated to the Member.

3.4 Distributions. Except as provided in Article V, distribution shall be made to the Member at the times and in the aggregate amounts determined by the Manager.

3.5 Capital Accounts. A capital account (a "Capital Account") shall be maintained for the Member in accordance with the capital accounting rules of Section 704(b) of the Code and the Treasury Regulations promulgated thereunder. The Member shall have an initial Capital Account balance equal to the Member's initial capital contribution to the Company.

### ARTICLE IV

#### ADMINISTRATIVE PROVISIONS

4.1 Accounting Method. The accounting for the Company purposes shall be in accordance with accounting principles determined by the Manager.

4.2 No Salaries to Member or Manager. No salary shall be paid to the Member or Manager for services to the Company.

4.3 Entity Classification. For U.S. federal income tax purposes, the Company shall be disregarded as an entity separate from its owner within the meaning of Treasury Regulations 301.7701-3 and shall not make an election to be classified as a corporation.

### ARTICLE V

#### DISSOLUTION AND TERMINATION

5.1 Dissolution. The Company shall dissolve, and its affairs shall be wound up only upon the first to occur of the following: (i) the written consent of the Member or (ii) the entry of a decree of judicial dissolution under Section 18-802 of the Act or (iii) at any time there is no member of the Company unless the Company is continued in accordance with the Act. The Member shall continue to be allocated profit and loss, in the manner set forth in Section 3.3 during the liquidation. The proceeds from liquidation of Company assets shall be applied as follows:

(1) satisfaction (whether by payment or the making of reasonable provision for payment) of debts of the Company other than to the Member;

(2) to payment of amounts owed to the Member for amounts borrowed from and not repaid to the Member; and

(3) to the Member.

5.2 Gains or Losses in Winding-Up. Any gain or loss on disposition of Company properties in the process of liquidation shall be credited or charged to the Member in

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the manner set forth in Section 3.3. Any property distributed in kind in the

liquidation of the Company shall be valued and treated as though the property were sold and the cash proceeds were distributed. The difference between the value of the property distributed in kind and its book value shall be treated as a gain or loss on sale of the property and shall be credited or charged to the Member in the manner set forth in Section 3.3.

5.3 Termination. The Company shall terminate when all of the assets of the Company, after payment of or due provision for all debts, liabilities and obligations of the Company shall have been distributed to the Member in the manner provided for in this Article V, and the certificate of formation of the Company in effect as of the date thereof shall have been canceled in the manner required by the Act.

#### ARTICLE VI

##### ADMISSION OF A MEMBER

6.1 Admission of a Member. The Member has been admitted as a member of the Company pursuant to this Agreement. No person may be admitted as a Member of the Company (other than as set forth in Section 9.3) unless the Member consents.

#### ARTICLE VII

##### GOVERNING LAW

7.1 Governing Law. This Agreement shall be governed by the laws of the State of Delaware.

#### ARTICLE VIII

##### LIABILITY, EXCULPATION AND INDEMNIFICATION

8.1 Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and no Covered Person (as defined herein) shall be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a Covered Person.

8.2 Exculpation. No Covered Person shall be liable to the Company or any other Covered Person for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement. A Covered Person shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any person as to matters the Covered Person reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits, losses or net cash flow or

any other facts pertinent to the existence and amount of assets from which distributions to Members might properly be paid.

8.3 Indemnification. To the fullest extent permitted by applicable law, a Covered Person shall be entitled to indemnification from the Company for any loss, damage or claim incurred by such Covered Person by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement; provided, however, that any indemnity under this Section 8.3 shall be provided out of and to the extent of Company assets only, and no Covered Person shall have any personal liability on account thereof.

8.4 Expenses. To the fullest extent permitted by applicable law, expenses (including legal fees) incurred by a Covered Person in defending any claim, demand, action, suit or proceeding shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit or proceeding upon receipt by the Company of an undertaking by or on behalf of the Covered Person to repay such amount if it shall be determined that the Covered Person is not entitled to be indemnified as authorized in Section 8.3.

8.5 Covered Person. For purposes of this Article VIII, "Covered Person" shall mean the Manager, a Member, any affiliate of the Manager or a Member, any officers, directors, shareholders, partners, members, employees, representatives or agents of the Manager or a Member, or their respective affiliates, or any employee or agent of the Company or its affiliates.

#### ARTICLE IX

##### SECURITIES LAWS AND SPECIAL LIMITATIONS ON TRANSFER

9.1 Matters Relating to Securities Laws. The Member acknowledges: (i) that the Member has such knowledge and experience in financial and business matters that the Member is capable of evaluating the merits and risks of the investment involved of a Membership Interest and has so evaluated same; (ii) that the Member is aware that this investment is speculative and represents a substantial risk of loss; (iii) that the Member is able to bear the economic risk of such investment, even if this results in a complete loss of this investment; (iv) that, in connection with the Member's acquisition of a Membership Interest, the Member has been fully informed as to the circumstances under which the Member is required to take and hold such Membership Interest

pursuant to the Securities Act of 1933, as amended, and the applicable state securities laws ("Blue Sky Laws"); and (v) that the Member understands that his Membership Interest is not registered under the Securities Act of 1933, as amended, or any Blue Sky Law and may not be transferred, as amended, unless such Membership Interest is subsequently registered under the Securities Act of 1933, as amended, and any applicable Blue Sky Laws or exemptions from such registration requirement are then available.

9.2 No Obligation to Register Interests. The Member understands that the Company and the Manager are under no obligation to register such Membership Interest under

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the Securities Act of 1933, as amended, or any Blue Sky Laws or to comply with any applicable exemption under the Securities Act of 1933, as amended, or any Blue Sky Laws.

9.3 Special Transfer Limitation. Notwithstanding any other provision in this Agreement, a Membership Interest may not be transferred unless (i) such transfer is exempt from registration under the Securities Act of 1933, as amended, and any Blue Sky Law, which, in the opinion of the counsel to the Company, is then applicable, and, if the Manager so requests, an opinion (the cost of which shall be paid by the transferor) satisfactory to the Manager to such effect has been rendered by counsel satisfactory to the Manager, or (ii) a registration statement is effective under the Securities Act of 1933, as amended, and any Blue Sky law which in the opinion of counsel to the Company is the applicable to such transfer.

#### ARTICLE X

##### MISCELLANEOUS

10.1 Notices. All notices or other communications given or made under this Agreement shall be in writing. Notices or other communications shall be mailed by regular mail, postage prepaid, to the Member at the address listed on the signature page, or at such other address as he or she may specify to the Company in a written notice pursuant to this Section 10.1.

10.2 Entire Agreement. This document constitutes the entire Agreement and understanding by the Member with respect to the Company and supercedes all prior agreements and undertakings, if any, with respect hereto.

10.3 Amendment. This Agreement may be amended only upon the written document signed by the Member.

10.4 Cautions. The titles and captions contained herein are for convenience only and shall not be deemed part of this Agreement.

10.5 Numbers and Gender. Where the context so indicates, the masculine shall include the feminine and neuter, the singular shall include the plural and the plural shall include the singular, and person shall include corporation, firm or any other entity. Without limiting the forgoing, if at any time there shall be only one Manager acting hereunder, references to the Managers shall be deemed to be references to the sole Manager then acting.

10.6 Counterparts. For the purpose of facilitating proving this Agreement, and for other purposes, this Agreement may be executed simultaneously in any number of counterparts. Each counterpart shall be deemed to be an original, and all such counterparts shall constitute one and the same instrument.

10.7 Definition. "Membership Interest" means, with respect to the Member, (i) the Member's entire interest in the Company, and the property, assets, business and capital thereof, and (ii) the share of the profits, losses and distributions of the Company allocable to the Member under the provisions of the Agreement.

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10.8 Other. Each limited liability company interest in the Company shall constitute a "security" within the meaning of (i) Article 8 of the Uniform Commercial Code (including Section 8-102(a)(15) thereof) as in effect from time to time in the States of Delaware and New York and (ii) the Uniform Commercial Code of any other applicable jurisdiction that now or hereafter substantially includes the 1994 revisions to Article 8 thereof as adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and approved by the American Bar Association on February 14, 1995.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, has duly executed this Limited Liability Company Agreement of Vector International Aviation LLC as of the date first written above.

RAYTHEON AEROSPACE LLC

By: /s/ Robert B. McKeon

-----  
Robert B. McKeon  
Authorized Signatory

Address:

c/o Raytheon Aerospace LLC  
555 Industrial Drive South  
Madison, Mississippi 39110

with copy to:

The Veritas Capital Fund, L.P.  
660 Madison Avenue  
New York, New York 10021  
Attn.: Robert B. McKeon

[Signature Page to Vector International Aviation LLC Limited Liability Company Agreement]

STATE OF DELAWARE     )  
                               ) ss,  
 NEW CASTLE COUNTY    )

I, Leo J. Dugan, Jr., Recorder of Deeds for New Castle County, Delaware, do hereby certify that Certified Copy of Certificate of Incorporation of "KLEIN ASSOCIATES INC." was received for record in this office on November 3, 1969 and the same appears of record in the Recorder's Office for said County.

Witness my hand and Official Seal, this third day of November, A.D, 1969.

-----  
 Recorder.

# CERTIFICATE OF INCORPORATION

OF

KLEIN ASSOCIATES INC.

1. The name of the corporation is

KLEIN ASSOCIATES INC.

2. The address of its registered office in the State of Delaware is No. 100 West Tenth Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

3. The nature of the business or purposes to be conducted or promoted is:

To conduct undersea search and survey; to develop, manufacture, sell and lease, magnetic, optical, electrical and mechanical equipment; to engage in research and consulting; to purchase and sell electronic and related equipment; to design, construct, manufacture, sell and lease marine, submarine and other vehicles; to maintain testing and standards facilities; to manufacture and sell machine and/or mechanical parts, and electrical and electronic components; and to design, manufacture, sell and lease recording apparatus and related parts and supplies.

To engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

To manufacture, purchase or otherwise acquire, invest in, own, mortgage, pledge, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with goods, wares and merchandise and personal property of every class and description.

To acquire, and pay for in cash, stock or bonds of this corporation or otherwise, the good will, rights, assets and property, and to undertake or assume the whole or any part of the obligations or liabilities of any person, firm, association or corporation.

To acquire, hold, use, sell, assign, lease, grant licenses in respect of, mortgage or otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes copyrights, trademarks and trade names, relating to or useful in connection with any business of this corporation.

To acquire by purchase, subscription or otherwise, and to receive, hold, own, guarantee, sell, assign, exchange, transfer, mortgage, pledge or otherwise dispose of or deal in and with any of the shares of the capital stock, or any voting trust certificates in respect of the shares of capital stock, scrip, warrants, rights, bonds, debentures, notes, trust receipts, and other securities, obligations, choses in action and evidences of indebtedness or interest issued or created by any corporations, joint stock companies, syndicates, associations, firms, trusts or persons, public or private, or by the government of the United States of America, or by any foreign government, or by any state, territory, province, municipality or other political subdivision or by any governmental agency, and as owner thereof to possess and exercise all the rights, powers and

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privileges of ownership, including the right to execute consents and vote thereon, and to do any and all acts and things necessary or advisable for the preservation, protection, improvement and enhancement in value thereof.

To borrow or raise moneys for any of the purposes of the corporation and, from time to time without limit as to amount, to draw, make, accept, endorse, execute and issue promissory notes, drafts, bills of exchange, warrants, bonds, debentures and other negotiable or non-negotiable instruments and evidences of indebtedness, and to secure the payment of any thereof and of the interest thereon by mortgage upon or pledge, conveyance or assignment in trust of the whole or any part of the property of the corporation, whether at the time owned or thereafter acquired, and to sell, pledge or otherwise dispose of such bonds or other obligations of the corporation for its corporate

purposes.

To purchase, receive, take by grant, gift, devise, bequest or otherwise, lease, or otherwise acquire, own, hold, improve, employ, use and otherwise deal in and with real or personal property, or any interest therein, wherever situated, and to sell, convey, lease, exchange, transfer or otherwise dispose of, or mortgage or pledge, all or any of the corporation's property and assets, or any interest therein, wherever situated.

In general, to possess and exercise all the powers and privileges granted by the General Corporation Law of Delaware or by any other law of Delaware or by this Certificate of Incorporation together with any powers incidental thereto, so far as such powers and privileges are necessary or convenient to the conduct, promotion or attainment of the business or purposes of the corporation.

The business and purposes specified in the foregoing clauses shall, except where otherwise expressed, be in nowise limited or restricted by reference to, or inference from, the terms of any other clause in this certificate of incorporation, but the business and purposes specified in each of the foregoing clauses of this article shall be regarded as independent business and purposes.

4. The total number of shares of stock which the corporation shall have authority to issue is one hundred fifty thousand (150,000) and the par value of each of such shares is One Cent (\$0.01) amounting in the aggregate to Fifteen Hundred Dollars (\$1,500.00).

5A. The name and mailing address of each incorporator is as follows:

NAME - - - -	MAILING ADDRESS - - - - -
B. J. Consono	100 West Tenth Street Wilmington, Delaware
F. J. Obara, Jr.	100 West Tenth Street Wilmington, Delaware
J. L. Rivera	100 West Tenth Street Wilmington, Delaware

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5B. The name and mailing address of each person, who is to serve as a director until the first annual meeting of the stockholders or until a successor is elected and qualified, is as follows:

NAME - - - -	MAILING ADDRESS - - - - -
Martin Klein	Route 111, R.F.D. #2 Salem, New Hampshire
Muriel Jacobs	334 Collins Avenue Mount Vernon, New York
Joseph A. Louis	334 Collins Avenue Mount Vernon, New York

6. The corporation is to have perpetual existence.

7. In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized:

To authorize and cause to be executed mortgages and liens upon the real and personal property of the corporation.

To set apart out of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and to abolish any such reserve in the manner in which it was created.

By a majority of the whole board, to designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. The by-laws may provide that in the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors, or in the by-laws of the corporation, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the certificate of incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, or amending the by-laws of the corporation; and, unless the resolution or by-laws, expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock.

When and as authorized by the stockholders in accordance with statute, to sell, lease or exchange all or substantially all of the property and assets of the corporation, including its good

will and its corporate franchises, upon such terms and conditions and for such consideration, which may consist in whole or in part of money or property including shares of stock in, and/or other securities of, any other corporation or corporations, as its board of directors shall deem expedient and for the best interests of the corporation.

8. In the absence of fraud, no contract or other transaction between this corporation and any other corporation or any partnership or association shall be affected or invalidated by the fact that any director or officer of this corporation is pecuniarily or otherwise interested in or is a director, member or officer of such other corporation or of such firm, association or partnership or is a party to or is pecuniarily or otherwise interested in such contract or other transaction or in any way connected with any person or persons, firm, association, partnership, or corporation pecuniarily or otherwise interested therein; any director may be counted in determining the existence of a quorum at any meeting of the board of directors of this corporation for the purpose of authorizing any such contract or transaction with like force and effect as if he were not so interested, or were not a director, member or officer of such other corporation, firm, association or partnership.

9. Meetings of stockholders may be held within or without the State of Delaware, as the by-laws may provide. The books of the corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the board of directors or in the by-laws of the corporation. Elections of directors need not be by written ballot unless the by-laws of the corporation shall so provide.

10. The corporation shall indemnify its officers and directors to the extent permitted by the General Corporation Law of Delaware.

11. The corporation reserves the right to amend, alter, change or repeal any provision contained in this certificate of incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

WE, THE UNDERSIGNED, being each of the incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is our act and deed and the facts herein stated are true, and accordingly have hereunto set our hands this 31st day of October, 1969.

B. J. Consono

-----

F. J. Obara, Jr.

-----

J. L. Rivera

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STATE OF DELAWARE )  
 ) ss:  
COUNTY OF NEW CASTLE )

BE IT REMEMBERED that on this 31st day of October A.D. 1969, personally came before me, a Notary Public for the State of Delaware, B. J. Consono, F. J. Obara, Jr. and J. L. Rivera, all of the parties to the foregoing certificate of incorporation, known to me personally to be such, and severally acknowledge the said certificate to be the act and deed of the signers respectively and that the facts stated therein are true.

GIVEN under my hand and seal of office the day and year foresaid.

A. Dana Atwell  
-----  
Notary Public

A. DANA ATWELL  
NOTARY PUBLIC  
APPOINTED OCT. 27, 1969  
STATE OF DELAWARE  
TERM TWO YEARS

STATE OF DELAWARE  
OFFICE OF THE SECRETARY OF STATE

I, Eugene Bunting, Secretary of the State of the State of Delaware, do hereby certify that the above and foregoing is a true and correct copy of Certificate of Incorporation of the "KLEIN ASSOCIATES INC.", as received and filed in this office the third day of November, A.D. 1969, at 2 o'clock P.M.

IN TESTIMONY WHEREOF, I have hereunder set my hand and official seal at Dover this third day of November in the year of our Lord one thousand nine hundred and sixty-nine.

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Secretary of State  
-----  
Ass't Secretary of State

DELAWARE  
The First State

PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "KLEIN ASSOCIATES INC.", CHANGING ITS NAME FROM "KLEIN ASSOCIATES INC." TO "L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.", FILED IN THIS OFFICE ON THE THIRTY-FIRST DAY OF OCTOBER, A.D. 2003, AT 11:50 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

-----  
Harriet Smith Windsor, Secretary of State

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 12:00 PM 10/31/2003  
FILED 11:50 AM 10/31/2003  
SRV 030700424 - 0732415 FILE

CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF INCORPORATION  
OF  
KLEIN ASSOCIATES INC.

(Pursuant to Sections 242 and 228 of the  
General Corporation Law of the State of Delaware)

-----  
Christopher C. Cambria hereby certifies that:

1. He is the Vice President and Secretary of Klein Associates Inc., a Delaware corporation (the "Corporation").

2. Article I of the Certificate of Incorporation of the Corporation is hereby amended to read in full as follows:

"1. The name of the corporation (hereinafter called the "Corporation") is L-3 Communications Klein Associates, Inc."

3. The foregoing amendment of the Certificate of Incorporation of the Corporation has been duly approved by the Board of Directors of the Corporation.

4. The foregoing amendment of the Certificate of Incorporation of the Corporation has been duly approved by the required vote of shareholders entitled to vote on such matter, pursuant to and in accordance with Sections 242 and 228 of the General Corporation Law of the State of Delaware. The total number of shares entitled to vote on the foregoing matter is 820,900 shares of Common Stock. The number of outstanding shares voting in favor of the foregoing amendment was 820,900 (100%), which equaled or exceeded the vote required. The percentage vote required to approve the foregoing amendment of the Certificate of Incorporation of the Corporation was a majority of the outstanding shares of Common Stock.

I further declare under penalty of perjury under the laws of the State of Delaware that the matters set forth in this Certificate of Amendment are true and correct of my own knowledge.

Dated: October 30, 2003

-----  
Christopher C. Cambria, Vice President and Secretary

## KLEIN ASSOCIATES INC.

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B Y-L A W S

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## ARTICLE I

## OFFICES

Section 1. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

Section 2. The corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the corporation may require.

## ARTICLE II

## MEETINGS OF STOCKHOLDERS

Section 1. All meetings of the stockholders for the election of directors shall be held in the City of Salem, State of New Hampshire, at such place as may be fixed from time to time by the board of directors, or at such other place either within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the notice of the meeting. Meetings of stockholders for any other purpose may be held at such time and place, within or without the State of Delaware, as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof.

Section 2. Annual meetings of stockholders, commencing with the year 1970, shall be held on the last Friday of September if not a legal holiday, and if a legal holiday, then on the next secular day following, at 10:00 A.M., or at such other date and time as shall be designated from time to time by the board of directors and stated in the notice of the meeting, at which they shall elect by a plurality vote a board of directors, and transact such other business as may properly be brought before the meeting.

Section 3. Written notice of the annual meeting stating the place, date and hour of the meeting shall be given to each stockholder entitled to vote at such meeting not less than ten nor more than fifty days before the date of the meeting.

Section 4. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder.

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Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

Section 5. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the certificate of incorporation, may be called by the president and shall be called by the president or secretary at the request in writing of a majority of the board of directors, or at the request in writing of stockholders owning a majority in amount of the entire capital stock of the corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting.

Section 6. Written notice of a special meeting stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called, shall be given not less than ten nor more than fifty days before the date of the meeting, to each stockholder entitled to vote at such meeting.

Section 7. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

Section 8. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned

meeting at which a quorum shall be present or represented any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 9. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the certificate of incorporation, a different vote is required in which case such express provision shall govern and control the decision of such question.

Section 10. Unless otherwise provided in the certificate of incorporation each stockholder shall at every meeting of the stockholders be entitled to one vote in person or by proxy for each share of the capital stock having voting power held by such stockholder, but no proxy shall be voted on after three years from its date, unless the proxy provides for a longer period.

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Section 11. Unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

### ARTICLE III

#### DIRECTORS

Section 1. The number of directors which shall constitute the whole board shall be not less than three nor more than five. The first board shall consist of three directors. Thereafter, within the limits above specified, the number of directors shall be determined by resolution of the board of directors or by the stockholders at the annual meeting. The directors shall be elected at the annual meeting of the stockholders, except as provided in Section 2 of this Article, and each director elected shall hold office until his successor is elected and qualified. Directors need not be stockholders.

Section 2. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

Section 3. The business of the corporation shall be managed by its board of directors which may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these by-laws directed or required to be exercised or done by the stockholders.

#### MEETINGS OF THE BOARD OF DIRECTORS

Section 4. The board of directors of the corporation may hold meetings, both regular and special, either within or without the State of Delaware.

Section 5. The first meeting of each newly elected board of directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting

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and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, provided a quorum shall be present. In the event of the failure of the stockholders to fix the time or place of such first meeting of the newly elected board of directors, or in the event such meeting is not held at the time and place so fixed by the stockholders, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the board of directors, or as shall be specified in a written waiver signed by all of the directors.

Section 6. Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be

determined by the board.

Section 7. Special meetings or the board may be called by the president on three days' notice to each director, either personally or by mail or by telegram; special meetings shall be called by the president or secretary in like manner and on like notice on the written request of two directors.

Section 8. At all meetings of the board a majority of the directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum shall not be present at any meeting of the board of directors the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 9. Unless otherwise restricted by the certificate of incorporation or these by-laws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee.

#### COMMITTEES OF DIRECTORS

Section 10. The board of directors may, by resolution passed by a majority of the whole board, designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Any such committee, to the extent provided in the resolution of the board of directors, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the certificate of incorporation, adopting, an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, or amending the by-laws of the corporation; and, unless the resolution or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend or to

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authorize the issuance of stock. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the board of directors.

Section 11. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

#### COMPENSATION OF DIRECTORS

Section 12. Unless otherwise restricted by the certificate of incorporation, the board of directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the board of directors and may be paid a fixed sum for attendance at each meeting of the board of directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

#### ARTICLE IV

##### NOTICES

Section 1. Whenever, under the provisions of the statutes or of the certificate of incorporation or of these by-laws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by telegram.

Section 2. Whenever any notice is required to be given under the provisions of the statutes or of the certificate of incorporation or of these by-laws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

#### ARTICLE V

##### OFFICERS

Section 1. The officers of the corporation shall be chosen by the board of directors and shall be a president, a secretary and a treasurer. The board of directors may also choose one or more vice-presidents, assistant secretaries and assistant treasurers. Any number of offices may be held by the same person, unless the certificate of incorporation or these by-laws otherwise provide.

Section 2. The board of directors at its first meeting after each

annual meeting of stockholders shall choose a president, a secretary and a treasurer.

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Section 3. The board of directors may appoint such other officers and agents as shall deem necessary who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the board.

Section 4. The salaries of all officers and agents of the corporation shall be fixed by the board of directors.

Section 5. The officers of the corporation shall hold office until their successors are chosen and qualify. Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the board of directors. Any vacancy occurring in any office of the corporation shall be filled by the board of directors.

#### THE PRESIDENT

Section 6. The president shall be the chief executive officer of the corporation, shall preside at all meetings of the stockholders and the board of directors, shall have general and active management of the business of the corporation and shall see that all orders and resolutions of the board of directors are carried into effect.

Section 7. He shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the board of directors to some other officer or agent of the corporation.

#### THE VICE-PRESIDENTS

Section 8. In the absence of the president or in the event of his inability or refusal to act, the vice-president if any, (or in the event there be more than one vice-president, the vice-presidents in the order designated, or in the absence of any designation, then in the order of their election) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The vice-presidents shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

#### THE SECRETARY AND ASSISTANT SECRETARIES

Section 9. The secretary shall attend all meetings of the board of directors and all meetings of the stockholders and record all the proceedings of the meetings of the corporation and of the board of directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. He shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors, and shall perform such other duties as may be prescribed by the board of directors or president, under whose supervision he shall be. He shall have custody of the corporate seal of the corporation and he, or an assistant secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his signature or by the signature of such assistant secretary. The board of directors may give general authority to any other officer to affix the seal of the corporation and to attest the affixing by his signature.

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Section 10. The assistant secretary, or if there be more than one, the assistant secretaries in the order determined by the board of directors (or if there be no such determination, then in the order of their election), shall, in the absence of the secretary or in the event of his inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

#### THE TREASURER AND ASSISTANT TREASURERS

Section 11. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the board of directors.

Section 12. He shall disburse the funds of the corporation as may be ordered by the board of directors, taking proper vouchers for such disbursements, and shall render to the president and the board of directors, at its regular meetings, or when the board of directors so requires, an account of all his transactions as treasurer and of the financial condition of the corporation.

Section 13. If required by the board of directors, he shall give the corporation a bond (which shall be renewed every six years) in such sum and with such surety or sureties as shall be satisfactory to the board of directors for the faithful performance of the duties of his office and for the restoration to the corporation, in case of his death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the corporation.

Section 14. The assistant treasurer, or if there shall be more than one, the assistant treasurers in the order determined by the board of directors (or if there be no such determination, then in the order of their election), shall, in the absence of the treasurer or in the event of his inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

## ARTICLE VI

### CERTIFICATES OF STOCK

Section 1. Every holder of stock in the corporation shall be entitled to have a certificate, signed by, or in the name of the corporation by, the chairman or vice-chairman of the board of directors or the president or a vice-president and the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation, certifying the number of shares owned by him in the corporation.

Section 2. Where a certificate is countersigned (1) by a transfer agent other than the corporation or its employee, or, (2) by a registrar other than the corporation or its employee, any other signature on the certificate may be facsimile. In case any officer, transfer agent or

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registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

### LOST CERTIFICATES

Section 3. The board of directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the board of directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

### TRANSFERS OF STOCK

Section 4. Upon surrender to the corporation or the transfer agent or the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

### FIXING RECORD DATE

Section 5. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not be more than sixty nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

### REGISTERED STOCKHOLDERS

Section 6. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

## ARTICLE VII

## GENERAL PROVISIONS

## DIVIDENDS

Section 1. Dividends upon the capital stock of the corporation, subject to the provisions of the certificate of incorporation, if any, may be declared by the board of directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

Section 2. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

## ANNUAL STATEMENT

Section 3. The board of directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

## CHECKS

Section 4. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the board of directors may from time to time designate.

## FISCAL YEAR

Section 5. The fiscal year of the corporation shall be fixed by resolution of the board of directors.

## SEAL

Section 6. The corporate seal shall have inscribed thereon the name of the corporation, the year of its organization and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

## STOCK TRANSFER RESTRICTION

Section 7. Shares of stock of this corporation are to be issued and held by each and every stockholder upon and subject to the following terms and conditions.

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No stockholder shall pledge, sell, assign, or otherwise dispose of any share or shares of stock of this corporation to any person, firm, corporation or association, nor shall the executor, administrator, trustee, assignee or other legal representative of a deceased stockholder pledge, sell, assign, transfer or otherwise dispose of any share or shares of the stock of this corporation to any person, firm, corporation or association nor to any next of kin or legatee or legatees of a deceased stockholder, without first offering said share or shares of stock for sale to the corporation at a price representing the true book value thereof at the time of said offer and the corporation shall have the right to purchase the same by the payment of such purchase price at any time within thirty(30) days after receipt of written notice of said offer.

In case any dispute arises as to the amount to be paid for such stock, than such amount shall be ascertained by three appraisers - one appointed by the stockholders offering the stock for sale, one by the corporation and one by the two so appointed; the decision of any two of such appraisers is to be final and binding. Compliance with the above condition in regard to the sale, assignment and transfer of the shares of stock of the corporation shall be a condition precedent to the transfer of such shares of stock on the books of the company.

## ARTICLE VIII

## AMENDMENTS

Section 1. These by-laws may be altered, amended or repealed or new by-laws may be adopted by the stockholders or by the board of directors, when such power is conferred upon the board of directors by the certificate of incorporation, at any regular meeting of the stockholders or of the board of directors or at any special meeting of the stockholders or of the board of directors if notice of such alteration, amendment, repeal or adoption of new by-laws be contained in the notice of such special meeting.





DELAWARE

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "BOMBARDIER SERVICES AMERICA CORPORATION", CHANGING ITS NAME FROM "BOMBARDIER SERVICES AMERICA CORPORATION" TO "L-3 COMMUNICATIONS MAS (US) CORPORATION", FILED IN THIS OFFICE ON THE THIRD DAY OF NOVEMBER, A.D. 2003, AT 12:41 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

/s/ Harriet Smith Windsor  
Harriet Smith Windsor, Secretary of  
State

2960292 8100

AUTHENTICATION: 2725912

030703549

DATE: 1-03-03

CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF INCORPORATION  
OF  
BOMBARDIER SERVICES AMERICA CORPORATION

(Pursuant to Sections 242 and 228 of the General Corporation Law of the State of Delaware)

Christopher C. Cambria hereby certifies that:

1. He is the Vice President and Secretary of Bombardier Services America Corporation, a Delaware corporation (the "Corporation").

2. The First Article of the Certificate of Incorporation of the Corporation is hereby amended to read in full as follows:

"FIRST: The name of the corporation (hereinafter, called the "Corporation") is L-3 Communications MAS (US) Corporation."

3. The foregoing amendment of the Certificate of Incorporation of the Corporation has been duly approved by the Board of Directors of the Corporation.

4. The foregoing amendment of the Certificate of Incorporation of the Corporation has been duly approved by the required vote of shareholders entitled to vote on such matter, pursuant to and in accordance with Sections 242 and 228 of the General Corporation Law of the State of Delaware. The total number of shares entitled to vote on the foregoing matter is 1,000 shares of Common Stock. The number of outstanding shares voting in favor of the foregoing amendment was 1,000 (100%), which equaled or exceeded the vote required. The percentage vote required to approve the foregoing amendment of the Certificate of Incorporation of the Corporation was a majority of the outstanding shares of Common Stock.

I further declare under penalty of perjury under the laws of the State of Delaware that the matters set forth in this Certificate of Amendment are true and correct of my own knowledge.

Dated: October 31, 2003

/s/ Christopher C. Cambria  
-----  
Christopher C. Cambria, Vice President and Secretary

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 12:55 PM 11/03/2003  
FILED 12:41 PM 11/03/2003  
SRV 030703549 - 2960292 FILE

## BY-LAWS

Exhibit 3.96

## BOMBARDIER SERVICES AMERICA CORPORATION

## BY-LAWS

## ARTICLE I - STOCKHOLDERS

1. Annual and Special Meetings. The annual meeting of stockholders for the election of directors and for the transaction of any other business which may properly come before the meeting shall be held each year on a business day and at a time designated by the Board of Directors. Special meetings of stockholders may be called by resolution of the Board of Directors or by the Chairman of the Board or the President and shall be called at any time by the Chairman of the Board or the President or the Secretary at the request in writing of stockholders owning a majority in amount of the entire capital stock of the Corporation issued and outstanding and who would be entitled to vote at such meeting. Such request shall state the purpose or purposes of the proposed meeting.

2. Place of Meetings. The annual and special meetings of stockholders shall be held at the principal place of business of the Corporation, or at such other place as shall be determined from time to time by the Board of Directors, within or without the State of Delaware, except as otherwise specifically required by statute. The place at which any meeting is to be held shall be specified in the notice calling such meeting.

3. Notice of Meetings. Except as otherwise expressly provided by statute, notice of the place, date, hour and purpose or purposes of the annual and any special meeting of stockholders shall be in writing and signed by the Chairman of the Board or the President or any Vice President, or the Secretary or other person lawfully calling said meeting; a copy thereof shall be served, either personally or by mail, at least ten and no more than sixty days before the meeting, upon each stockholder of record entitled to vote at such meeting and to any stockholder who, by reason of any action proposed at such meeting, would be entitled to have his stock appraised if such action were taken. If mailed, such notice shall be directed to a stockholder at his address as it appears on the records of the corporation. Notice by mail shall be deemed to be given when deposited, with postage thereon prepaid, in the United States mails. If a meeting is adjourned to another time, not more than thirty days thereafter, and/or to another place, and if an announcement of the adjourned time and/or place is made at the meeting, it shall not be necessary to give notice of the adjourned meeting unless, after adjournment, a new record date is fixed for the adjourned meeting.

4. Stockholder List. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the city or other municipality or community where the meeting is to be held, which place shall be specified in the notice of the meeting, or if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place where the meeting is to be held and during the whole time of the meeting, and may be inspected by any stockholder who is present.

5. Quorum; Adjustment. Except as otherwise provided by statute, a quorum for the transaction of business at any meeting of stockholders shall consist of the holders of record of a majority of the issued and-outstanding shares of capital stock of the Corporation entitled to vote at the meeting, in person or by proxy. In the absence of a quorum at any meeting or any adjournment thereof, the holders of record of a majority of the shares present in person or by proxy and entitled to vote at such meeting may

adjourn such meeting from time to time, without notice other than announcement at the meeting, until the requisite number of shares shall be present or represented. At any such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally called.

6. Conduct of Meetings. Meetings of stockholders shall be presided over by the Chairman of the Board, by the President, by a Vice-President, or, if none of the foregoing is present, by a chairman chosen by the stockholders entitled to vote who are present in person or by proxy at the meeting. The Secretary of the Corporation shall act as secretary of every meeting, but if the Secretary is not present, the presiding officer of the meeting shall appoint any person present to act as secretary of the meeting.

7. Voting; Proxy Representation. Unless otherwise provided in the certificate of incorporation, every holder of record of Common Stock shall be entitled at every meeting of the Corporation to one vote, in person or by proxy, for each share of Common Stock outstanding in his name on the books of the Corporation. Every proxy must be executed in writing by the stockholder or by

his duly authorized attorney. No proxy shall be valid after the expiration of eleven months from the date of its execution unless the person executing it shall have specified therein its duration for a longer period. Unless otherwise provided by statute or by the certificate of incorporation or these by-laws, all questions shall be decided by a majority of a quorum.

8. Stockholder Action Without Meetings. Whenever the vote of stockholders at a meeting thereof is required or permitted to be taken for or in connection with any corporate action, the meeting, notice thereof and vote of stockholders may be dispensed with if holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted shall consent in writing to such corporate action being taken. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders entitled to vote who have not consented in writing.

#### ARTICLE II - FIXING DATE FOR DETERMINATION OF STOCKHOLDERS OF RECORD

In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action.

#### ARTICLE III - BOARD OF DIRECTORS

1. Number. The business and affairs of the Corporation shall be managed by and under the discretion of its Board of Directors. The number of directors constituting the entire Board shall be six unless otherwise determined by the Board of Directors.

2. Election. The members of the Board of Directors shall be elected at the annual meeting of stockholders by a plurality of the votes cast in such election except for the initial Board of Directors, which shall be elected by the Incorporator and which shall hold office until the first annual meeting of stockholders or until their successors are elected and qualified or until their earlier resignation or removal. Subject too the provisions of Sections 13 and 14 of this ARTICLE III, each director so elected shall hold

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office for one year and until his successor is elected and qualified. A director need not be a stockholder, a citizen of the United States or a resident of Delaware. If the members of the Board of Directors are not elected at the annual meeting of stockholders on the day designated in these by-laws, the incumbent directors shall continue to hold office and discharge their respective duties until successors have been elected.

3. Vacancies. All vacancies on the Board of Directors, whether caused by resignation, death, disqualification, removal, an increase in the authorized number of directors between annual meetings of stockholders or otherwise, may be filled by a majority of the directors in office after the vacancy has occurred, or, if not so elected prior to the next annual meeting of the stockholders, by vote of the stockholders at any special meeting. In the event of any vacancy on the Board of Directors, the Corporation shall give prompt notice of such vacancy to the United States Department of Defense Defense Security Service and such vacancy shall be filled promptly to the extent necessary to comply with the Special Security Agreement to be entered into by Bombardier Inc., Bombardier Corporation (Delaware), Bombardier Corporation, Bombardier Services Corporation, Bombardier Services America Corporation and the United States Department of Defense (the "Special Security Agreement"). Vacancies on the Board of Directors shall not exist for a period of more than 90 days unless expressly approved by the United States Department of Defense Defense Security Service.

4. Annual Meetings. The annual meeting of the Board of Directors for the election of officers and the transaction of such other business as may properly come before the meeting, may be held each year without notice immediately after the annual meeting of stockholders at the same place as such meeting of stockholders, or may be called by any newly-elected director on one day's notice to each director, either personally or by telegram, telephone, telecopier, letter, radio or cable.

5. Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and place, within or without the United States, as shall from time to time be determined by resolution of the Board. In case of change in the time, place or date of any such regular meeting, notice of such change shall be given to each director either personally or by telegram, telephone, telecopier, letter, radio or cable at least one day prior to the meeting.

6. Special Meetings. Special meetings of the Board of Directors may be called at any time by the Chairman of the Board or the President or by any director then in office. Notices of special meetings stating the time, place and purpose of the meeting shall be given to each director either personally or by telegram, telephone, telecopier, letter, radio or cable at least one day before such meeting. Special meetings may be held within or without the United States.

7. Board Action Without a Meeting. Any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board or of such committee, as the case may be, consent thereto in writing and such consent is filed with the minutes of proceedings of the Board or committee.

8. Quorum. At all meetings of the Board, the presence of a majority of the directors then in office, at least one of which shall be a director who has no prior relationship with (i) the Corporation or (ii) any entities which the Corporation either controls or is controlled by (an "Outside Director"), shall be necessary to constitute a quorum and shall be sufficient for the transaction of business and any act of a majority of the directors who are present at a meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation or other certificate filed pursuant to law or by these by-laws. Any business may be transacted by the Board at a meeting at which every member of the Board is present, though held without notice.

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9. Committees. The Board of Directors may by resolution or resolutions passed by a majority of the whole Board designate one or more committees, each committee to consist of one or more of the directors, which, to the extent provided in said resolution or resolutions, shall have and may exercise powers of the Board of Directors in the management of the business and affairs of the Corporation and may have power to authorize the seal of the Corporation to be affixed to all papers which may require it. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors. All committees so appointed shall keep regular minutes of the business transacted at their meetings. At all meetings of any committee, the presence of a majority of the committee members of such committee then in office, at least one of which shall be an Outside Director, shall be necessary to constitute a quorum and shall be sufficient for the transaction of business and any act of a majority of any committee members who are present at a meeting at which there is a quorum shall be the act of such committee, except as may be otherwise specifically provided by statute or by the certificate of incorporation or other certificate filed pursuant to law or by these by-laws.

10. Government Security Committee. The Board of Directors shall establish a permanent committee of the Board of Directors to be known as the Government Security Committee, consisting of all Outside Directors and Officer/Directors of the Corporation, to ensure that the Corporation maintains policies and procedures to safeguard classified information and controlled unclassified information in the possession of the Corporation and to ensure that the Corporation complies with the Department of Defense Security Agreement (DD Form 441 or its successor form), the Special Security Agreement, appropriate contract provisions regarding security, United States Government export control laws and the National Industrial Security Program.

11. Organization. At all meetings of the Board of Directors, the Chairman of the Board, or in his absence, the President, or in his absence any Vice-President who is a member of the Board of Directors, or in their absence, a chairman chosen by the directors shall preside. The Secretary of the Corporation shall act as secretary at all meetings of the Board of Directors when present, and, in his absence, the presiding officer may appoint any person to act as secretary.

12. Salaries. The Directors shall receive such compensation for their services as may be prescribed by the Board of Directors and shall be reimbursed by the Corporation for ordinary and reasonable expenses incurred in the performance of their duties.

13. Resignation. Any director may resign at any time upon written notice to the Corporation. Such resignation will take effect upon receipt thereof by the Corporation unless otherwise stated in the resignation.

14. Removal. Any director, except any Outside Director, may be removed, either with or without cause, at any special meeting of stockholders by vote of a majority of the shares of stock outstanding and entitled to vote at an election of directors, provided that notice of such vote shall have been given in the notice calling such meeting. If the notice calling such meeting shall so provide, the vacancy caused by such removal shall be filled at such meeting by the vote of a majority of the shares of stock outstanding, present and entitled to vote for the election of directors. Removal of an Outside Director in accordance with this Section 14 shall not be effective until such Outside Director, the Corporation and the United States Department of Defense Defense Security Service have been notified, the United States Department of Defense Defense Security Service has approved the removal of such Outside Director, and a successor who is qualified to become an Outside Director within the terms of the Special Security Agreement has been approved by the United States Department of Defense Defense Security Service. Notwithstanding the foregoing, however, if immediate removal of any Outside Director is deemed necessary to prevent actual or possible violation of any statute or regulation or actual or

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possible damage to the Corporation, the Outside Director may be removed at once and the United States Department of Defense Defense Security Service shall be notified prior to or concurrently with such removal.

15. Telephone Meetings. Members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or committee, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation shall constitute presence in person at such a meeting.

#### ARTICLE IV - OFFICERS

1. Election,. The officers of the Corporation shall be a President and a Secretary. The Board of Directors may also elect or appoint a Chairman of the Board, a Treasurer, one or more Vice Presidents, one or more Assistant Treasurers, one or more Assistant Secretaries, and such other officers, agents and employees as, in the opinion of the Board, the business of the Corporation requires. Each officer, agent or employee elected or appointed by the Board of Directors shall have such powers and perform such duties as may be prescribed by these by-laws and as may be assigned from time to time by the Board of Directors or the President. Unless otherwise provided in the resolution of election, each officer shall hold office until the next annual election of directors and until his successor shall have been appointed and qualified or until his earlier resignation or removal. Any number of offices may be held by the same person.

2. Chairman of the Board. The Chairman of the Board, if elected or appointed by the Board of Directors, shall be the Chief Executive Officer unless he shall appoint the President to serve as Chief Executive Officer. In addition the Chairman of the Board, if any, shall have the responsibility of guiding the Board of Directors in effectively discharging its responsibilities, including, but not limited to, providing for the execution of the Corporation's objectives; safeguarding and furthering shareholders' interests; and appraising the adequacy of overall results as reported by the President. The Chairman of the Board, if elected or appointed by the Board of Directors, shall see that all orders and resolutions of the Board of Directors are carried into effect and shall from time to time report to the Board of Directors on matters within his knowledge which the interests of the Corporation may require to be brought to the attention of the Board of Directors. The Chairman of the Board, if any, shall preside at all meetings of the Board of Directors and the stockholders at which he is present.

3. President. The President shall be the Chief Operating Officer of the Corporation and the Chief Executive Officer if so appointed by the Chairman of the Board or if the Board of Directors has not elected or appointed a Chairman of the Board. The President shall be responsible for the management of the business, affairs and operations of the Corporation. He may execute and deliver in the name of the Corporation, powers of attorney, contracts, bonds, and other obligations and instruments. The President shall also perform all duties incident to the office of President and such other duties as may from time to time be assigned to him by the Board of Directors.

4. Vice Presidents. The Vice Presidents, if any, in the order designated by the Board of Directors, shall, in the absence or disability of the President, perform the duties and exercise the powers of the President. A Vice President may execute and deliver contracts and other obligations and instruments pertaining to the regular course of his duties, and shall perform such other duties and shall have such other authority as from time to time may be assigned to him by the Board of Directors or the President.

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5. Secretary. The Secretary shall record all the proceedings of all sessions of the Board of Directors and all meetings of stockholders in a book to be kept for that purpose and shall perform like duties for any committee of the Board when required, of which he shall be the custodian. He shall cause notice to be given of all meetings of stockholders and directors. He shall keep in safe custody the seal of the corporation and, when authorized by the Board of Directors, affix it to any instrument. He shall have charge of the stock certificate books of the Corporation and such other books and papers as the Board of Directors may direct. The Secretary may execute and deliver contracts and other obligations and instruments pertaining to the regular course of his duties and shall in general perform all the duties incident to the office of the Secretary and such other duties as may be assigned to him by the Board of Directors or the President.

6. Treasurer. Subject to the direction of the Board of Directors, the Treasurer shall have the custody of all the funds and securities of the Corporation, except as otherwise provided by the Board of Directors or any committee thereof, and shall keep full and accurate accounts of receipts and disbursements. He shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. He shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Chairman of the Board, if any, the President and the Board of Directors at the regular meetings of the Board of Directors, or whenever they may require it, an account of all his transactions as Treasurer and of the financial condition of the Corporation. The Treasurer may execute and deliver contracts and other obligations and instruments pertaining to the regular course of his duties and shall in general perform all duties incident to the office of the Treasurer and such other duties as may be assigned to him by the Board of Directors or the President.

7. Vacancies. Vacancies in any office occurring by death, resignation, disqualification, removal or otherwise, may be filled by the Board of Directors at any regular or special meeting.

8. Resignation. Any officer may resign his office at any time, such resignation to take effect upon receipt thereof by the Corporation, unless otherwise stated in the resignation.

9. Removal. Any officer may be removed at any time, with or without cause, by the affirmative vote of a majority of the entire Board of Directors. The power to remove agents and employees, other than officers or agents elected or appointed by the Board of Directors, may be delegated as the Board of Directors shall determine.

10. Compensation. Compensation for all officers and agents of the Corporation shall be fixed from time to time by or in the manner determined by the Board of Directors.

11. Duties of Officers May be Delegated. In case of the absence of any officer of the Corporation, or for any other reason that the Board of Directors may deem sufficient, the Board of Directors may delegate the powers or duties of such officer to any other officer or to any director for the time being.

12. Powers With Respect to Ownership of Stock. Unless otherwise ordered by the Board of Directors, the President shall have full power and authority on behalf of the Corporation to attend and to vote at any meeting of stockholders of any corporation in which the Corporation may hold stock, and may exercise on behalf of the Corporation any and all of the rights and powers incident to the ownership of such stock at any such meeting, and shall have power and authority to execute and deliver proxies and consents on behalf of the Corporation in connection with the exercise by the Corporation of the rights and powers incident to the ownership of such stock. The Board of Directors, from time to time, may confer like powers upon any other person or persons.

#### ARTICLE V - STOCK

1. Issuance of Stock Certificates. Stock of the Corporation shall be represented by certificates in such form as shall be approved by the Board of Directors. Each such certificate shall be signed by the Chairman of the Board or the President or a Vice President and a Secretary or an Assistant Secretary or the Treasurer or an Assistant Treasurer and sealed with the seal of the Corporation. Such seal may be a facsimile, engraved or printed. In case any officer who has signed such certificate shall have ceased to be such officer before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer at the date of its issue.

2. Lost Stock Certificates. The officers of the Corporation may issue a new certificate of stock in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, if the owner of such certificate or his legal representative shall execute and deliver to the Corporation and/or its transfer agent and register a satisfactory bond sufficient to indemnify the Corporation against any claim that may be made against it on account of the lost, stolen or destroyed certificate and shall execute and deliver to the Corporation an affidavit setting forth the facts regarding such loss, theft or destruction. The foregoing requirements may be waived in whole or in part by the Board of Directors when, in its judgment, it is proper to do so.

3. Transfer of Stock. Upon compliance with provisions restricting the transfer or registration of transfer of shares of stock, if any, transfers or registrations of transfers of shares of stock of the Corporation shall be made only on the stock transfer books of the Corporation by the person named in the certificate or by his attorney lawfully constituted and, except in the case of lost, stolen or destroyed certificates, only upon surrender of the certificate or certificates therefor properly endorsed and the payment of all taxes due thereon.

4. Regulations. The Board of Directors shall have power to make all such regulations as it shall deem expedient concerning the issuance, transfer, conversion and registration of stock certificates, not inconsistent with statutory requirements or the certificate of incorporation or these by-laws.

#### ARTICLE VI - SEAL

The seal of the Corporation shall be circular in form and contain the name of the Corporation, and the words "Corporate Seal, 1998, Delaware." The seal shall be in the charge of the Secretary to be used as directed by the Board of Directors.

#### ARTICLE VII - CHECKS, CONTRACTS, ETC.

All checks, notes, drafts, acceptances, securities, evidences of indebtedness and contracts of the Corporation shall be signed or endorsed by or on behalf of the Corporation by such officers, directors, employees or agents of the Corporation as the By-Laws may specify and as the Board of Directors may from time to time designate. Such authorization may be general or specific.

#### ARTICLE VIII - BOOKS OF ACCOUNT AND STOCK BOOK

The Corporation shall keep books of account of all the business and transactions of the Corporation. A book to be known as the stock register, containing the names, alphabetically arranged, of all persons who are stockholders of the Corporation, showing their places of residence, the number of shares of stock held by them respectively, and the times when they respectively became the owners thereof, and the amount paid thereon, shall be kept by the Corporation or its transfer agent.

#### ARTICLE IX - FISCAL YEAR



The fiscal year of the Corporation shall end on the 31st day of January or otherwise as the Board of Directors may determine.

#### ARTICLE X - OFFICES

The Corporation may have an office or offices in such place or places as may be determined from time to time by the Board of Directors.

#### ARTICLE XI - NOTICES AND WAIVERS

1. Kind of Notice Required. Whenever under the provisions of these by-laws notice is required to be given to any director, officer or stockholder, unless otherwise expressly stated in these by-laws such notice may be given in writing by depositing the same in a post-office or letter box in a postpaid sealed wrapper, addressed to such director, officer or stockholder, at such address as appears on the books of the Corporation, and such notice shall be deemed to have been given at the time when the same was mailed. Notice may also be given in person, by hand delivery or by overnight courier or by telecopier or as otherwise permitted by these by-laws.

2. Waiver Of Notice. Whenever notice is required to be given under any provision of the certificate of incorporation or these by-laws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors, or members of a committee of directors need be specified in any written waiver of notice.

#### ARTICLE XII - INDEMNIFICATION

1. Every person who is or was a director, officer, employee or agent of the Corporation, or of any other corporation, partnership, joint venture, trust or other enterprise (hereinafter collectively referred to as an "other company") which he serves or served as such at the request of the Corporation, shall, subject to the provisions of Section 2 hereof and except as prohibited by law, be indemnified by the Corporation to the fullest extent authorized under Section 145 of the General Corporation Law of the State of Delaware against any and all liabilities and expenses actually and reasonably incurred by such person or on his behalf in connection with any threatened, pending or, completed action, suit or proceeding (whether brought by or in the right of the Corporation or such other company or otherwise), whether civil, criminal, administrative or investigative, or in connection with an appeal relating thereto, in which he was or is a party or is threatened to be made a party by reason of his being or having been a director, officer, employee or agent of the Corporation or of such other company, or by reason of any action taken or not taken in his capacity as such director, officer, employee or agent, whether or not he continues to be such director, officer, employee or agent at the time such liabilities or expenses are incurred, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation or such other company, as the case may be, and, in addition, in any criminal action or proceeding, had no reasonable cause to believe that his conduct was unlawful; provided that no indemnification shall be made in respect of any claim, issue or matter in any action, suit or proceeding by or in the right of the Corporation or such other company, as the case may be, as to which such person shall have been adjudged to be liable to the Corporation or such other company, as the case may be, unless and only to the extent that the Court of Chancery of the State of Delaware or

the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the Court of Chancery or such other court shall deem proper. As used in this Article, the term "expenses" shall include, but shall not be limited to, counsel fees and disbursements and the term "liabilities" shall include, but shall not be limited to, judgments, fines, penalties and amounts paid in settlement. The termination of any action, suit or proceeding, civil or criminal, by judgment, order, settlement (whether with or without court approval) or conviction or upon a plea of guilty or of nolo contendere, or its equivalent, shall not, of itself, create a presumption that a director, officer, employee or agent did not meet the standards of conduct set forth in this Section.

2. Every person referred to in Section 1 hereof who has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Section 1 hereof, or in defense of any claim, issue or matter therein, shall be deemed to have met the standards of conduct set forth therein and shall be entitled to indemnification as of right. Except as provided in the preceding sentence, any indemnification under Section 1 hereof (unless ordered by a court) shall be made by the Corporation unless a determination that the standards of conduct set forth therein have been not met by the person seeking indemnification hereunder, any such determination to be made by (i) the Board of Directors, acting by a majority vote of a quorum consisting of directors who (a) are not parties to such action, suit or proceeding or (b) have been wholly successful in respect of such action, suit or proceeding, (ii) independent legal counsel in a written opinion, or (iii) the stockholders.

3. Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the Corporation, in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of the person to be indemnified to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the Corporation.

4. The rights of indemnification and advancement of expenses provided in this Article shall be in addition to any rights to which any person referred to in Section 1 hereof may otherwise be entitled by law or under any by-law, agreement, vote of stockholders or disinterested directors, or otherwise, and such rights shall inure to the benefit of his heirs, executors and administrators.

5. To the extent permitted by law, the foregoing provisions of this Article shall be applicable to every person (and the heirs, executors and administrators of such person) who is or was a director, officer, employee or agent of any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger involving the Corporation, as well as the resulting or surviving corporation therefrom, and in any such case the references to "the Corporation" in the foregoing provisions of this Article shall include, in addition to the Corporation, any such constituent corporation or any such resulting or surviving corporation, as the case may be.

6. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of any other company, against any liability or expense asserted against or incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify him against such liability or expense under the provisions of this Article or otherwise.

#### ARTICLE XIII - AMENDMENT

The by-laws, regardless of whether made by stockholders or by the Board of Directors, may be amended, added to or repealed, or new by-laws may be made, at any meeting of the stockholders, or

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(except such by-laws or such amendments as shall have been adopted by the stockholders and at the time of such adoption expressly designated as revocable only by the stockholders) at any meeting of the Board of Directors, provided that notice of the proposed change (unless waived as herein provided by a waiver or presence at the meeting) be given in notice of the meeting.

[End of By-Laws]

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#### ANNEX II

#### BOMBARDIER SERVICES AMERICA CORPORATION

##### CERTIFICATE OF THE SECRETARY

In connection with the closing occurring on the date hereof of the transactions contemplated by the Purchase Agreement dated as of June 9, 2003 among Bombardier Inc., L-3 Communications MAS (Canada) Inc. (as successor to the rights of Spar Aerospace Limited) and L-3 Communications Corporation, the undersigned, Secretary of Bombardier Services America Corporation (the "Company"), does hereby certify on behalf of the Company as follows:

1. Laura Reeder is the Secretary of the Company, and in that capacity is familiar with, or has made due inquiry into the records of the Company or to such officer or officers of the Company who are familiar with or have made due inquiry into the records of the Company with respect to, the matters set forth herein.

2. The minute book records of the Company relating to proceedings of the stockholders and Board of Directors of the Company that have been provided to Sidley Austin Brown & Wood LLP to date are complete and exact copies of the original minute book records of the Company with respect to all proceedings of the stockholders and Board of Directors of the Company to the date hereof, such exact copies of the original minute book records contain true, correct and accurate records and fairly summarize all actions taken at such proceedings by the stockholders and Board of Directors of the Company; and, except as recorded in such minute book records, no proceedings or actions of the stockholders or Board of Directors of the Company have been held or taken.

3. The Company is engaged in the business of providing technical services primarily for military aircraft in the areas of aircraft systems engineering, aero-structure modification, maintenance, repair and overhaul, logistics management, program management and technical publications.

4. The Company received (a) \$100 as payment in full for ten shares of common stock, par value \$0.01 per share, of the Company issued by the Company to

Bombardier Services Corporation ("BSC") and (b) certain assets with an aggregate net book value of \$2,094,715, which such assets are described on Exhibit 1 to a subscription agreement between the Company and BSC, as payment in full for an additional ninety shares of common stock, par value \$0.01 per share, of the Company issued by the Company to BSC. Such shares are registered in the name of BSC in the stock ledger and other books and records of the Company.

5. Attached hereto as Exhibit A is a true, complete and correct copy of the Certificate of Incorporation of the Company as in effect on the date hereof.

6. Attached hereto as Exhibit B is a true, complete and correct copy of the By-laws of the Company as in effect on the date hereof.

The undersigned hereby expressly acknowledges and agrees that this Secretary's Certificate is being relied upon by Sidley Austin Brown & Wood LLP in connection with its issuance of a legal opinion on the date hereof.

IN WITNESS WHEREOF, the undersigned has hereunto signed her name on behalf of the Company this \_\_ day of October, 2003.

BOMBARDIER SERVICES AMERICA CORPORATION

By: /s/ Laura Reeder  
-----  
Name: Laura Reeder  
Title: Secretary

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EXHIBIT A

CERTIFICATE OF INCORPORATION

State of Delaware

PAGE 1

Office of the Secretary of State  
-----

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "BOMBARDIER SERVICES AMERICA CORPORATION", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF NOVEMBER, A.D. 1998, AT 4:30 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

/s/ Edward J. Freel  
-----  
Edward J. Freel, Secretary of  
State

CERTIFICATE OF INCORPORATION

OF

BOMBARDIER SERVICES AMERICA CORPORATION

The undersigned, a natural person, for the purpose of organizing a corporation under the General Corporation Law of the State of Delaware, hereby certifies that:

FIRST: The name of the corporation (hereinafter, the "Corporation") is Bombardier Services America Corporation.

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, 19801. The name of the registered agent of the Corporation at such address is The Corporation Trust Company.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of stock which the Corporation shall have authority to issue is one hundred (100) shares, all of which shall be designated Common Stock, par value one cent (US\$0.01) per share.

FIFTH: The name and the mailing address of the incorporator are as follows:

Name	Mailing Address
-----	-----
Aileen T. Chang	c/o Morgan, Lewis & Bockius LLP 101 Park Avenue New York, NY 10178

SIXTH: The Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of the Corporation, subject to the reserved power of the stockholders to amend and repeal any By-Laws adopted by the Board of Directors.

SEVENTH: Unless and except to the extent required by the By-Laws, the election of directors of the Corporation need not be by written ballot.

EIGHTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for this Corporation under Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourth in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on

all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation. as the case may be, and also on this Corporation.

NINTH: Meetings of stockholders may be held within or without the State of Delaware, as the By-Laws may provide. The books of the Corporation may be kept (subject to any provision contained in the General Corporation Law of the State of Delaware) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the By-Laws.

TENTH: No person who is or was a director of the Corporation shall be personally liable to the Corporation for monetary damages for breach of fiduciary duty as a director unless, and only to the extent that, such director is liable (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware or any amendment thereto or successor provision thereto, or (iv) for any transaction from which the director derived an improper personal benefit. No amendment to, repeal or adoption of any provision of this Certificate of Incorporation inconsistent with this article shall apply to or have any effect on the liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment, repeal, or adoption of an inconsistent provision.

ELEVENTH: Each person who at any time is or shall have been a director, officer, employee or agent of the Corporation and is threatened to be or is made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall be indemnified against expenses (including attorneys' fees), judgments, fines, penalties and amounts paid in settlement actually and reasonably incurred by him in connection with any such action, suit

or proceeding to the fullest extent authorized under Section 145 of the General Corporation Law of the State of Delaware. The foregoing right of indemnification shall in no way be exclusive of any other rights of indemnification to which such director, officer, employee or agent may be entitled under any By-Law, agreement, vote of stockholders or disinterested directors, or otherwise.

TWELFTH: Any and all right, title, interest and claim in or to any dividends declared by the Corporation, whether in cash, stock or otherwise, which are unclaimed by the stockholder entitled thereto for a period of six (6) years after the close of business on the payment date, shall be and be deemed to be extinguished and abandoned, and such unclaimed dividends in the possession of the Corporation, its transfer agents or other agents or depositaries, shall at such time become the absolute property of the Corporation, free and clear of any and all claims of any persons whatsoever.

THIRTEENTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation in the manner now or hereafter prescribed by statute. All rights at any time conferred upon the stockholders of the Corporation by this Certificate of Incorporation are granted subject to the foregoing reservation.

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THE UNDERSIGNED, for the purpose of forming a Corporation under the laws of the State of Delaware, does hereby make, file and record this Certificate, and certify that the facts herein stated are true, and I have accordingly set my hand hereto this 30th day of November, 1998.

/s/ Aileen T. Change

-----  
Aileen T. Change  
Sole Incorporator

3

BOMBARDIER SERVICES AMERICA CORPORATION

UNANIMOUS WRITTEN CONSENT  
OF  
THE SOLE SHAREHOLDER  
TO ACTION IN LIEU OF MEETING

EFFECTIVE DATE: AS OF OCTOBER 31, 2003

The undersigned, L-3 Communications Corporation, a Delaware corporation, being the sole shareholder of Bombardier Services America Corporation, hereby consents to the adoption of the following resolutions and to the taking of the actions contemplated thereby:

RESOLVED, that the amendment of the Certificate of Incorporation of the Corporation to change the name of the Corporation to L-3 Communications MAS (US) Corporation, as contemplated by the resolutions of the Corporation's Board of Directors adopted on the date hereof, be, and it hereby is, approved.

RESOLVED, that each of Oris W. Dunham, Jr., Buddy G. Beck, J.B. Davis, Sylvain Bedard and Anthony Caputo be, and hereby is, elected as a director of the Corporation, to serve or hold office until the next annual meeting of shareholders of the Corporation and until his successor is elected and shall have qualified or until his earlier resignation or removal;

RESOLVED, that the Secretary or Assistant Secretary of the Corporation is hereby authorized to certify and deliver, to any person to whom such certification and delivery may be deemed necessary or appropriate in the opinion of such Secretary or Assistant Secretary, a true copy of the foregoing resolutions; and

RESOLVED, that a copy of this written consent be filed with the minutes of proceedings of the Corporation.

IN WITNESS WHEREOF, the undersigned, being the sole shareholder of the Corporation, has executed this written consent as of the date and year first above written.

By: /s/ Christopher C. Cambria

-----  
Name: Christopher C. Cambria  
Title: Secretary

October 6, 2003

Mr. Serge Le Guellec  
Vice president, MAS  
Bombardier Inc. -- Defense Services  
Mirabel, Quebec, Canada  
Via Email

Dear Mr. Le Guellec

This letter is to inform you that I am tendering my resignation as Manager, US Operations, and Director, President and Chief Executive Officer of Bombardier Services America Corporation effective November 28, 2003.

I am very appreciative of Bombardier's support, especially as provided to me by the senior management team of Bombardier Inc. -- Defense Services and Bombardier Services America Corporation. On my behalf, please express my sincere appreciation to Mr. Sylvain Bedard for his support and leadership.

Sincerely,

Terry Summerson

CC:  
General JB. Davis, USAF Retired  
Chairman of the Board  
Bombardier Services America Corporation  
Via Email

CERTIFICATE

STATE OF OREGON  
OFFICE OF THE SECRETARY OF STATE  
Corporation Division

I, BILL BRADBURY, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:

L-3 COMMUNICATIONS AEROMET, INC.  
was  
incorporated  
under the Oregon  
Business Corporation Act  
on  
May 2, 1986  
and is active on the records of the Corporation Division as  
of the date of this certificate.

[STATE OF OREGON 1859 SEAL]

In Testimony Whereof, I have hereunto  
set my hand and affixed hereto the Seal  
of the State of Oregon.

BILL BRADBURY, Secretary of State

By: /s/ Marilyn R. Smith

-----  
Marilyn R. Smith  
December 15, 2003

CERTIFICATE

STATE OF OREGON  
OFFICE OF THE SECRETARY OF STATE  
Corporation Division

I, BILL BRADBURY, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:

That the attached Document File for:

L-3 COMMUNICATIONS AEROMET, INC.

is a true copy of the original documents  
that have been filed with this office.

[STATE OF OREGON 1859 SEAL]

In Testimony Whereof, I have hereunto  
set my hand and affixed hereto the Seal  
of the State of Oregon.

BILL BRADBURY, Secretary of State

By: /s/ Marilyn R. Smith

-----  
Marilyn R. Smith  
December 15, 2003

ARTICLES OF INCORPORATION

OF

WESTERN AIRCRAFT INVESTORS, INC.

The undersigned natural person of the age of eighteen (18) years or more, acting as an Incorporator under the Oregon Business Corporation Act, adopts the following Articles of Incorporation:

ARTICLE I

The name of this corporation is WESTERN AIRCRAFT INVESTORS, INC.

ARTICLE II

The purposes for which the corporation is organized are to engage in any lawful activities for which corporations may be organized under ORS Chapter 57.

ARTICLE III

1. The aggregate number of shares which the corporation Shall have authority to issue is five hundred (500) shares with no par value.

2. Shareholders shall have a pre-emptive right to acquire only unissued shares, or securities convertible into or carrying a right to subscribe to or acquire such shares, to the extent provided by statute.

3. Each Shareholder shall have one vote for each voting share held of record on all matters submitted for Shareholder approval. No shareholder shall be entitled to cumulate his votes for election of Directors.

4. At any meeting of the Shareholders, the holders of a majority of all the outstanding voting shares of the capital stock of this corporation, present in person or represented by proxy, shall constitute a quorum of the Shareholders for all purposes.

ARTICLE IV

The address of the initial registered office of the corporation is 2300 First Interstate Bank Tower, 1300 S.W. Fifth Avenue, Portland, Oregon and the name of its initial registered agent at such address is William R. Miller, Jr.

ARTICLE V

1. The number of Directors of the corporation shall be fixed by the By-Laws of this corporation. The number of Directors constituting the initial Board of Directors of the corporation is two (2). The names and addresses of the persons who are to serve as Directors

until the first annual meeting of Shareholders or until their successors are elected and qualified are:

Name	Address
----	-----
D. Ray Booker	1020 North Juniper Jenks, Oklahoma 74037
Earlene Booker	1020 North Juniper Jenks, Oklahoma 74037

2. Vacancies in the Board of Directors by reason of death, resignation, an increase in the number of Directors, or other cause, prior to the expiration of the natural term, shall be filled by the affirmative vote of a majority of the remaining Directors even though less than a quorum. All other requirements for filling such vacancies shall be established by the By-Laws of this corporation.

3. All or any number of the Directors may be removed, with or without cause, at a meeting expressly called for that purpose by a vote of the holders of a majority of the shares then entitled to vote at an election of Directors.

ARTICLE VI

Contracts or transactions of the corporation with an interested Director or Officer shall be valid provided that the interest of -the Director or Officer is disclosed, but such interest shall not require him to bear any loss accruing to the corporation which might arise therefrom. The presence of such interested Director shall count toward a quorum and he may vote in favor of the transaction.

ARTICLE VII

The name and address of the incorporator is:

Name	Address
----	-----
William R. Miller, Jr.	2300 First Interstate Bank Tower 1300 S.W. Fifth Avenue Portland, Oregon 97201



ARTICLE VIII

Address where Division may mail notices:

Name	Address
-----	-----
William R. Miller, Jr.	2300 First Interstate Bank Tower 1300 S.W. Fifth Avenue Portland, Oregon 97201

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ARTICLE IX

Person to contact about this filing:

Name	Telephone Number
-----	-----
William R. Miller, Jr.	(503) 241-2300

I, the undersigned Incorporator, declare under penalties of perjury that I have examined the foregoing and to the best of my knowledge and belief, it is true, correct and complete.

Dated this 2nd day of May, 1986.

/s/ William R. Miller, Jr.  
-----  
William R. Miller, Jr., Incorporator

3

STATE OF OREGON  
CORPORATION DIVISION  
158 12TH ST. NE  
SALEM, OR 97310

DAVIS WRIGHT TREMAINE  
ATTN: BARBARA HAND  
2300 FIRST INTERSTATE TOWER  
PORTLAND OR 97201

NOVEMBER 16, 1993

ACTION:	REINSTATEMENT	
ENTITY TYPE:	DOMESTIC BUSINESS	(831,115)
REGISTRY #:	031744-89	
RE:	WESTERN AIRCRAFT INVESTORS, INC.	

Please complete and return this letter and any enclosed documents so that we can file the requested reinstatement.

Please submit \$155.00 to cover the fees for the requested reinstatement.

The above entity hereby requests to be active on the records of the Corporation Division. The effective date of administrative dissolution is 6-24-88.

The reason(s) for administrative dissolution has been eliminated or did not exist.

By: /s/ D. Ray Booker	Date: Jan. 4, 1994
-----	-----
(Authorized Signature)	

PLEASE RETURN THIS LETTER AND ALL DOCUMENTS WITH YOUR RESPONSE AS SOON AS POSSIBLE. IF WE DO NOT HEAR FROM YOU IN 45 DAYS, YOUR ACTION WILL NOT BE COMPLETED.

(503) 378-4901, 378-4743

ENC: Duplicate Annual Report

CKS  
NONOTH-814200-06-87

Registry Number: Corporation Division  
Business Registry  
158 12th Street NE  
Salem, OR 97310-0210  
(503) 378-4168

031 744-89  
-----

RESTATED ARTICLES OF INCORPORATION  
BUSINESS CORPORATION

1. Name of the corporation prior to amendment: WESTERN AIRCRAFT INVESTORS, INC.
2. New name of the corporation (if changed): WESTERN AIRCRAFT TECHNOLOGIES, INC.
3. A COPY OF THE RESTATED ARTICLES IS ATTACHED.
4. Check the appropriate statement(s):
- [ ] The restated articles contain amendments WHICH DO NOT REQUIRE SHAREHOLDER APPROVAL. These amendments were duly adopted by the board of directors.
- [X] The restated articles contain amendments WHICH REQUIRE SHAREHOLDER APPROVAL. The date of adoption of the restated articles was May 25, 1994, which is the date of adoption of amendments included in the restated articles. The vote of the shareholders was as follows:

Class or series of shares	Number of shares outstanding	Number of votes entitled to be cast	Number of votes cast for	Number of votes cast against
Common	500	500	500	0

5. Other provisions, if applicable:

Execution: /s/ D. Ray Booker                      D. Ray Booker                      Director  
Signature                      Printed name                      Title

Person to contact about this filing: William R. Miller, Jr. (503) 241-2300  
Name                      Daytime phone number

MAKES CHECKS PAYABLE TO THE CORPORATION DIVISION. SUBMIT THE COMPLETED FORM AND FEE TO: CORPORATION DIVISION, BUSINESS REGISTRY, 158 12TH STREET NE, SALEM, OREGON 97310-0210.

RESTATED ARTICLES OF INCORPORATION  
OF  
WESTERN AIRCRAFT TECHNOLOGIES, INC.

The aforesigned Director hereby adopts the following Restated Articles of Incorporation under the Oregon Business Corporation Act (the Act):

ARTICLE I

The name of this corporation is Western Aircraft Technologies, Inc. and its duration shall be perpetual.

ARTICLE II

The purposes for which the corporation is to engage in any other lawful activities for which corporations may be organized under the Act.

ARTICLE III

1. The aggregate number of shares which the corporation shall have authority to issue is Five Hundred (500) common voting shares with no par value.

2. Shareholders shall have pre-emptive rights to acquire shares to the extent provided by the Act.

3. No Shareholder shall be entitled to cumulate his votes for election of Directors.

4. At any meeting of the Shareholders, the holders of a majority of all the outstanding voting shares of the capital stock of this corporation, present in person or represented by proxy, shall constitute a quorum of the Shareholders for all purposes.

5. The corporation shall have the right to purchase its own shares as provided by the Act.

#### ARTICLE IV

1. The number of Directors of the corporation shall be fixed by the Bylaws of this corporation. The number of Directors constituting the present Board of Directors of the corporation is one.

2. \_\_\_\_\_  
the remaining Directors even though less than a quorum. All other requirements for filling such vacancies shall be established by the Bylaws of this corporation.

3. All or any number of the Directors may be removed, with or without cause, at a meeting expressly called for that purpose by a vote of the holders of a majority of the shares then entitled to vote at an election of Directors.

#### ARTICLE V

Contracts or transactions of the corporation with an interested Director or Officer shall be valid as provided by the Act. The presence of such interested Director shall count toward a quorum and he may vote in favor of the transaction.

#### ARTICLE VI

1. The Corporation shall indemnify, to the fullest extent provided in the Act, any Director or Officer who was or is a party or is threatened to be made a party to any proceeding by reason of or arising from the fact that he is or was a Director or Officer of the Corporation. The determination and authorization of indemnification shall be made as provided in the Act.

2. The Corporation shall pay for or reimburse the reasonable expenses incurred by a Director or Officer who is a party to a proceeding in advance of final disposition of the proceeding as provided in the Act.

3. The indemnification referred to in the various sections of this Article shall be deemed to be in addition to and not in lieu of any other rights to which those indemnified may be entitled under any statute, rule of law or equity, agreement, vote of the Shareholders or Board of Directors or otherwise.

#### ARTICLE VII

The liability of the Directors of the Corporation for monetary damages for conduct as a director shall be eliminated to the fullest extent permissible under the Act, except that this provision shall not eliminate or limit the liability of a director for:

a. Any breach of the director's duty of loyalty to the corporation or its stockholders;

b. Acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

c. Any unlawful distribution under ORS 60.367; or

d. Any transaction from which the director derives an improper personal benefit.

ARTICLES OF AMENDMENT BY SHAREHOLDERS  
AND BOARD OF DIRECTORS

OF

WESTERN AIRCRAFT TECHNOLOGIES, INC.

FILING FEE: \$10.00

1. The name of the corporation prior to amendment is Western Aircraft Technologies, Inc.
2. Article I shall be amended to read:  
  
The name of this corporation is Aeromet, Inc.
3. The amendment was adopted on July 25, 1994.
4. Shareholder action was required to adopt the amendment. The shareholder vote was as follows:

Class or Series of Shares	Number of Shares Outstanding	Number of Votes Entitled to be Cast	Number of Votes Cast For	Number of Votes Cast Against
Common	500	500	500	0

/s/ D. Ray Booker

D. Ray Booker, Director

Person to contact about this filing:

William R. Miller, Jr.  
Telephone: (503) 241-2300

PHONE: (503) 965-2200  
FAX: (503) 378-4381

ARTICLES OF AMENDMENT - BUSINESS/PROFESSIONAL/NONPROFIT

SECRETARY OF STATE  
CORPORATION DIVISION  
256 CAPITOL ST., NE, SUITE 151  
SALEM, OR 97310-1327  
FILINGINOREGON.COM

CHECK THE APPROPRIATE BOX BELOW:  
☐ BUSINESS/PROFESSIONAL CORPORATION  
(COMPLETE ONLY 1, 2, 3, 4, 6, 7)  
☐ NONPROFIT CORPORATION  
(COMPLETE ONLY 1, 2, 3, 4, 6, 7)

REGISTRY NUMBER: 031744-89

In keeping with Oregon Statute 192.410-192.595, the information on the application is public record. We must release this information to all parties upon request and it may be posted on our website. For office use only. Please Type or Print Legible in Black Ink.

- 1) NAME OF CORPORATION PRIOR TO AMENDMENT: Aeromet, Inc.
- 2) State the Article Number(s) and set forth the Article(s) as it is amended to read. (Attach a separate sheet if necessary.)

"ARTICLE I: The name of this corporation is L-3 Communications Aeromet, Inc. and its duration shall be perpetual."

- 3) The Amendment was Adopted on: July 24, 2003

(If more than one amendment was adopted, identify the date of adoption of each amendment.)

BUSINESS/PROFESSIONAL CORPORATION ONLY

- 4) Check the Appropriate Statement

[X] Shareholder action was required to adopt the amendment(s). The vote was as follows:

7)	Contact Name (To resolve questions with this filing.) -----	Daytime Phone Number (include area code) -----
	Domenica Karbid	(212) 805-5790

## RESTATED BYLAWS

OF

AEROMET, INC.

These Restated Bylaws are intended to conform to the mandatory requirements of the Oregon Business Corporation Act (the "Act"). Any ambiguity arising between these Bylaws and the discretionary provisions of the Act shall be resolved in favor of the application of the Act.

## ARTICLE I

## Shareholders

## Section 1. - Place.

Shareholders meetings shall be held at the registered office of this Corporation unless a different place shall be designated by the Board of Directors.

## Section 2. - Annual Meeting.

The annual meeting of the Shareholders shall be held during the month of December unless otherwise designated by the Board of Directors. The meeting shall be held for the purpose of electing Directors and for the transaction of such other business as may come before the meeting. If the day fixed for the annual meeting shall be a legal holiday, such meeting shall be held on the next succeeding business day. If the election of Directors shall not be held on the day designated herein, the Board of Directors shall cause the election to be held at a special meeting of the Shareholders on the next convenient day.

## Section 3. - Special Meetings.

Special meetings of the Shareholders may be called by the President, the Board of Directors or the holders of not less than one-tenth of all the shares entitled to vote at the meeting.

## Section 4. - Notice.

Written or printed notice stating the place, hour and day of the meeting and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten (10) days nor more than sixty (60) days before the date of the meeting, either personally or by mail, by or at the direction of the President, the Secretary, or the Officer or persons calling the meeting to each Shareholder of record entitled to vote at such meeting. Such notice and the effective date thereof shall be determined as provided in the Act.

RESTATED BYLAWS - Page 1

## Section 5. - Quorum.

A majority of the shares issued, outstanding and entitled to vote upon the subject matter at the time of the meeting, represented in person or by proxy, shall constitute a quorum for the transaction of business at any meeting of the Shareholders.

## Section 6. - Adjourned Meetings.

If there is no quorum present at any annual or special meeting the Shareholders present may adjourn to such time and place as may be decided upon by the holders of the majority of the shares present, in person or by proxy, and notice of such adjournment shall be given in accordance with Section 4 of this Article, but if a quorum is present, adjournment may be taken from day to day or to such time and place as may be decided and announced by a majority of the Shareholders present, and no notice of such adjournment need be given. At any such adjourned meeting at which a quorum is present, any business may be transacted which could have been transacted at the meeting originally called.

## Section 7. - Voting.

Each Shareholder entitled to vote on the subject matter shall be entitled to one vote for each share of stock standing in the name of the Shareholder on the books of the Corporation at the time of the closing of the Transfer Books for said meeting, whether represented and present in person or by proxy. The affirmative vote of the holders of a majority of the shares of each class represented at the meeting and entitled to vote on the subject matter shall be the act of the Shareholders. The Shareholders present at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough Shareholders to leave less than a quorum.

## Section 8. - Proxies.

At all meetings of Shareholders, a Shareholder may vote in person or by proxy executed in writing by the Shareholder or by his duly authorized attorney in fact. No proxy shall be valid after eleven (11) months from the date of its execution, unless otherwise provided in the proxy and coupled with an interest as provided in the Act.

## Section 9. - Closing of Transfer Books.

The Stock Transfer Books shall be closed for the meetings of the Shareholders and for the payment of dividends during such periods (not to exceed

50 days) as from time to time may be fixed by the Board of Directors. During such periods, no stock shall be transferred.

RESTATED BYLAWS - Page 2

## ARTICLE II

### Directors

#### Section 1. - In General.

The business and affairs of the Corporation shall be managed by a Board of not less than one (1) nor more than three (3) Directors. The members of the first Board of Directors shall hold office until the first annual meeting of the Shareholders and until their successors shall have been elected and qualified. Thereafter, the term of each Director shall begin upon his election by the Shareholders as provided in Article I, Section 7 above, and shall continue until his successor shall have been elected and qualified.

#### Section 2. - Powers.

The corporate powers, business, property and interests of this Corporation shall be exercised, conducted and controlled by the Board of Directors, which shall have all power necessary to conduct, manage and control its affairs, and to make such rules and regulations as it may deem necessary as provided by the Act; to appoint and remove all Officers, agents and employees; to prescribe their duties and fix their compensation; to call special meetings of Shareholders whenever it is deemed necessary by the Board, to incur indebtedness and to give securities, notes and mortgages for same. It shall be the duty of the Board to cause a complete record to be kept of all the minutes, acts, and proceedings of its meetings. The Board shall have the power to declare dividends out of the surplus profits of this Corporation when such profits shall, in the opinion of the Board, warrant the same.

#### Section 3. - Vacancies.

Vacancies in the Board of Directors shall be temporarily filled by the affirmative vote of a majority of the remaining Directors even though less than a quorum of the Board of Directors. Such temporary Director or Directors shall hold office until the first meeting of the Stockholders held thereafter, at which time such vacancy or vacancies shall be permanently filled by election according to the procedure specified in Section 1 of this Article II. During the existence of any vacancy or vacancies, the surviving or remaining Directors, though less than a quorum, shall possess and may exercise all of the powers vested in the Board of Directors.

#### Section 4. - Annual Meeting.

There shall be an annual meeting of the Board of Directors which shall be held immediately after the annual meeting of the Shareholders and at the same place.

#### Section 5. - Special Meeting.

Special meetings may be called from time to time by the President or any one of the Directors. Any business may be transacted at any special meeting.

RESTATED BYLAWS - Page 3

#### Section 6. - Quorum.

A majority of the Directors shall constitute a quorum. The act of a majority of the Directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. If less than a quorum is present at a meeting, a majority of the Directors present may adjourn the meeting from time to time without further notice, other than announcement at the meeting, until a quorum shall be present. Interested Directors may be counted for quorum purposes. In the event of a tie vote, the Chairman of the Board shall have the right to cast a tie-breaking vote.

#### Section 7. - Notice.

Notice of all Directors meetings shall be given in accordance with the Act. No notice need be given of any annual meeting of the Board of Directors. One day prior notice shall be given for all special meetings of the Board, but the purpose of special meetings need not be stated in the notice.

#### Section 8. - Compensation.

By resolution of the Board of Directors, each Director may either be reimbursed for his expenses, if any, for attending each meeting of the Board of Directors or may be paid a fixed fee for attending each meeting of the Board of Directors, or both. No such payment shall preclude any Director from serving the Corporation in any other capacity and receiving compensation therefor.

#### Section 9. - Removal or Resignation of Directors.

Any Director may resign by delivering written notice of the resignation to the Board of Directors or an officer of the Corporation. All or any number of the Directors may be removed, with or without cause, at a meeting expressly called for that purpose by a vote of the holders of the majority of the shares then entitled to vote at an election of Directors.

#### Section 10. - Presumption of Assent.

A Director of the Corporation who is present at a meeting of the Board of Directors at which action on any corporate matter is taken shall be presumed to have assented to the action taken, unless his dissent shall be entered in the minutes of the meeting. Such right to dissent shall not apply to a Director who

voted in favor of such action.

## ARTICLE III

### Officers and Agents - General Provisions

#### Section 1. - Number, Election and Term.

Officers of the Corporation shall be a President and a Secretary. Officers shall be elected by the Board of Directors at its first meeting, and at each regular annual meeting of the Board of Directors thereafter. Each Officer shall hold office until the next succeeding annual meeting of

RESTATED BYLAWS - Page 4

the Directors and until his successor shall be elected and qualified. Any one person may hold more than one office if it is deemed advisable by the Board of Directors.

#### Section 2. - Additional Officers and Agents.

The Board of Directors may appoint and create such other Officers and agents as may be deemed advisable and prescribe their duties.

#### Section 3. - Resignation or Removal.

Any officer or agent of the Corporation may resign from such position by delivering written notice of the resignation to the Board of Directors, but such resignation shall be without prejudice to the contract rights, if any, of the Corporation. Any officer or agent elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interests of the Corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment of an Officer or agent shall not of itself create contract rights.

#### Section 4. - Vacancies.

Vacancies in any office caused by any reason shall be filled by the Board of Directors at any meeting by selecting a suitable and qualified person to act during the unexpired term.

#### Section 5. - Salaries.

The salaries of all the Officers, agents and other employees of this Corporation shall be fixed by the Board of Directors and may be changed from time to time by the Board, and no officer shall be prevented from receiving such salary by reason of the fact that he is also a Director of the Corporation. All Directors, including interested Directors, are specifically authorized to participate in the voting of such compensation irrespective of their interest.

## ARTICLE IV

### Duties of the Officers

#### Section 1. - Chairman of the Board.

The Chairman of the Board, if any, shall be a member of the Board of Directors and shall preside at all meetings of the Shareholders and Directors; perform all duties required by the Bylaws of this Corporation, and as may be assigned from time to time by the Board of Directors; have the right, in the event of a tie vote, to cast a tie-breaking vote; and shall make such reports to the Board of Directors and Shareholders as may be required.

#### Section 2. - President.

The President shall have general charge and control of the affairs of the Corporation subject to the direction of the Board of Directors; sign as President all Certificates of Stock of this Corporation; perform all duties required by the Bylaws of this Corporation, and as may be

RESTATED BYLAWS - Page 5

assigned from time to time by the Board of Directors; and shall make such reports to the Board of Directors and Shareholders as may be required. In addition, if no Chairman of the Board is elected by the Board, the President shall perform all the duties required of such Officer by these Bylaws.

#### Section 3. - Vice President.

The Vice President, if any, shall perform such duties as shall be assigned by the Board of Directors, and in the case of absence, disability or death of the President, the Vice President shall perform and be vested with all the duties and powers of the President, until the President shall have resumed such duties or the President's successor is elected. In the event there is more than one Vice President, the Board of Directors may designate one of the Vice Presidents as a Senior Vice President, who, in the event of the absence, disability or death of the President shall perform such duties as shall be assigned by the Board of Directors.

#### Section 4. - Secretary.

The Secretary shall keep a record of the proceedings at the meetings of the Shareholders and the Board of Directors and shall give notice as required in these Bylaws of all such meetings; have custody of all the books, records and papers of the Corporation, except such as shall be in charge of the Treasurer or some other person authorized to have custody or possession thereof by the Board of Directors; sign all Certificates of Stock of this Corporation; from time to time make such reports to the Officers, Board of Directors and Shareholders as



may be required and shall perform such other duties as the Board of Directors may from time to time delegate. In addition, if no Treasurer is elected by the Board, the Secretary shall perform all the duties required of the Office of Treasurer by the Act and these Bylaws.

#### Section 5. - Treasurer.

The Treasurer shall keep accounts of all monies of the Corporation received or disbursed; from time to time make such reports to the Officers, Board of Directors and Shareholders as may be required, perform such other duties as the Board of Directors may from time to time delegate.

#### Section 6. - Assistant Secretary.

The Assistant Secretary, if any, shall assist the Secretary in all duties of the office of Secretary. In the case of absence, disability or death of the Secretary, the Assistant Secretary shall perform and be vested with all the duties and powers of the Secretary, until the Secretary shall have resumed such duties or the Secretary's successor is elected.

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### ARTICLE V

#### Stock

##### Section 1. - Certificates.

The shares of stock of this Corporation shall be represented by Stock Certificates in a form adopted by the Board of Directors and every person who shall become a Shareholder shall be entitled to a Certificate of Stock. All Certificates shall be consecutively numbered by class.

##### Section 2. - Transfer of Certificates.

All Certificates of stock transferred by endorsement shall be surrendered, cancelled and new certificates issued to the purchaser or assignee.

##### Section 3. - Transfer of Shares.

Shares of stock shall be transferred only on the books of the Corporation by the holder thereof, in person or by his attorney, and no transfers of Certificates of Stock shall be binding upon this Corporation until this Section and Section 2 of this Article are met to the satisfaction of the Secretary of this Corporation.

##### Section 4. - Lost Certificates.

In the case of loss, mutilation or destruction of a Certificate of Stock, a duplicate Certificate may be issued upon such terms as the Board of Directors shall prescribe.

##### Section 5. - Dividends.

The Board of Directors may from time to time declare, and the Corporation may then pay, dividends on its outstanding shares in the manner and upon the terms and conditions provided by the Act and in its Articles of Incorporation.

##### Section 6. - Working Capital.

Before the payment of any dividends or the making of any distributions of the net profits, the Board of Directors may set aside out of the net profits of the Corporation such sum or sums as in their discretion they think proper, as a working capital or as a reserve fund to meet contingencies. The Board of Directors may increase, diminish or vary the capital of such reserve fund in their discretion.

##### Section 7. - Restrictions on Transfer.

No shares of stock of this Corporation or Certificates representing such shares shall be transferred in violation of any law or of any restriction on such transfer (1) set forth in the Articles of Incorporation or amendments thereto, or the Bylaws; or (2) contained in any Buy-Sell Agreement, right of first refusal, or other Agreement restricting such transfer which Agreement has been filed with the Corporation, and, if Certificates have been issued, reference to which

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restriction is made on the Certificates representing such shares. The Corporation shall not be bound by any restriction not so filed and noted. The Corporation may rely in good faith upon the opinion of its counsel as to such legal or contractual violation unless the issue has been finally determined by a court of competent jurisdiction. The Corporation and any party to any such agreement shall have the right to have a restrictive legend imprinted upon any such Certificates and any Certificate issued in replacement or exchange thereof or with respect thereto.

### ARTICLE VI

#### Seal

There shall be no corporate seal.

### ARTICLE VII

## Waiver of Notice

Whenever any notice is required to be given to any Shareholder or Director of this corporation, a waiver signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be equivalent to the giving of such notice.

## ARTICLE VIII

### Action by Shareholders or Directors

#### Without a Meeting

Any action required to be taken at a meeting of the Shareholders or Directors of this Corporation, or any other action which may be taken at a meeting of the Shareholders or Directors, may be taken without a meeting if a consent in writing setting forth the actions so taken shall be signed by all the Shareholders or Directors entitled to vote with respect to the subject matter thereof. Such consent shall have the same effect and force as a unanimous vote of said Shareholders or Directors.

## ARTICLE IX

### Borrowing

Notwithstanding any other provision in these Bylaws, no Officer, Shareholder or agent of this Corporation shall have authority to borrow any funds in behalf of the Corporation or to hypothecate any assets thereof, for corporate purposes or otherwise, except as expressly stated in a resolution by a majority of Directors, duly entered in the Minutes of the Board or upon written consent of holders of at least seventy-five percent (75%) of the stock.

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## ARTICLE X

### Amendments

Any and all of these Bylaws may be altered, amended, repealed or suspended by the affirmative vote of a majority of the Directors at any meeting of the Directors. New Bylaws may be adopted in like manner.

## ARTICLE XI

### Indemnification

#### Section 1. - Directors and Officers.

The Corporation shall indemnify, to the fullest extent provided by law, any Director or Officer who was or is a Party or is threatened to be made a Party to any Proceeding (other than an action by or in the right of the Corporation) by reason of or arising from the fact that he is or was a Director or Officer of the Corporation. The determination and authorization of indemnification shall be made as provided by law.

#### Section 2. - Advance of Expenses.

The Corporation may pay for or reimburse the reasonable expenses incurred by a Director or Officer who is a Party to a Proceeding in advance of final disposition of the Proceeding as provided by law.

#### Section 3. - Insurance.

At the discretion of the Board of Directors, the Corporation may purchase and maintain insurance on behalf of any person who is or was a Director or Officer of the Corporation against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify him against such liability under the provisions of this Article.

#### Section 4. - Purpose and Exclusivity.

The indemnification referred to in the various sections of this Article shall be deemed to be in addition to and not in lieu of any other rights to which those indemnified may be entitled under any statute, rule of law or equity, agreement, vote of the Shareholders or Board of Directors or otherwise.

#### Section 5. - Definitions.

The capitalized terms in this Article shall have the same meanings given them in the Act.

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## IDENTIFICATION

I hereby certify that I am the Secretary of Aeromet, Inc. and that the foregoing Restated Bylaws in ten typewritten pages numbered consecutively from 1 to 10 were and are the Bylaws adopted by the Directors of the Corporation.

/s/ Linda Lu Booker

-----  
Linda Lu Booker, Secretary

RESTATED BYLAWS  
OF  
WESTERN AIRCRAFT INVESTORS, INC.

These Restated Bylaws are intended to conform to the mandatory requirements of the Oregon Business Corporation Act (the "Act"). Any ambiguity arising between these Bylaws and the discretionary provisions of the Act shall be resolved in favor of the application of the Act.

ARTICLE I  
Shareholders

Section 1. - Place.

Shareholders meetings shall be held at the registered office of this Corporation unless a different place shall be designated by the Board of Directors.

Section 2. - Annual Meeting.

The annual meeting of the Shareholders shall be held during the month of December unless otherwise designated by the Board of Directors. The meeting shall be held for the purpose of electing Directors and for the transaction of such other business as may come before the meeting. If the day fixed for the annual meeting shall be a legal holiday, such meeting shall be held on the next succeeding business day. If the election of Directors shall not be held on the day designated herein, the Board of Directors shall cause the election to be held at a special meeting of the Shareholders on the next convenient day.

Section 3. - Special Meetings.

Special meetings of the Shareholders may be called by the President, the Board of Directors or the holders of not less than one-tenth of all the shares entitled to vote at the meeting.

Section 4. - Notice.

Written or printed notice stating the place, hour and day of the meeting and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten (10) days nor more than sixty (60) days before the date of the meeting, either personally or by mail, by or at the direction of the President, the Secretary, or the Officer or persons calling the meeting to each Shareholder of record entitled to vote at such meeting. Such notice and the effective date thereof shall be determined as provided in the Act.

Section 5. - Quorum.

A majority of the shares issued, outstanding and entitled to vote upon the subject matter at the time of the meeting, represented in person or by proxy, shall constitute a quorum for the transaction of business at any meeting of the Shareholders.

#### Section 6. - Adjourned Meetings.

If there is no quorum present at any annual or special meeting the Shareholders present may adjourn to such time and place as may be decided upon by the holders of the majority of the shares present, in person or by proxy, and notice of such adjournment shall be given in accordance with Section 4 of this Article, but if a quorum is present, adjournment may be taken from day to day or to such time and place as may be decided and announced by a majority of the Shareholders present, and no notice of such adjournment need be given. At any such adjourned meeting at which a quorum is present, any business may be transacted which could have been transacted at the meeting originally called.

#### Section 7. - Voting.

Each Shareholder entitled to vote on the subject matter shall be entitled to one vote for each share of stock standing in the name of the Shareholder on the books of the Corporation at the time of the closing of the Transfer Books for said meeting, whether represented and present in person or by proxy. The affirmative vote of the holders of a majority of the shares of each class represented at the meeting and entitled to vote on the subject matter shall be the act of the Shareholders. The Shareholders present at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough Shareholders to leave less than a quorum.

#### Section 8. - Proxies.

At all meetings of Shareholders, a Shareholder may vote in person or by proxy executed in writing by the Shareholder or by his duly authorized attorney in fact. No proxy shall be valid after eleven (11) months from the date of its execution, unless otherwise provided in the proxy and coupled with an interest as provided in the Act.

#### Section 9. - Closing of Transfer Books.

The Stock Transfer Books shall be closed for the meetings of the Shareholders and for the payment of dividends during such periods (not to exceed 50 days) as from time to time may be fixed by the Board of Directors. During such periods, no stock shall be transferred.

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### ARTICLE II

#### Directors

#### Section 1. - In General.

The business and affairs of the Corporation shall be managed by a Board of not less than one (1) nor more than three (3) Directors. The members of the first Board of Directors shall hold office until the first annual meeting of the Shareholders and until their successors shall have been elected and qualified. Thereafter, the term of each Director shall begin upon his election by the Shareholders as provided in Article I, Section 7 above, and shall continue until his successor shall have been elected and qualified.

#### Section 2. - Powers.

The corporate powers, business, property and interests of this Corporation shall be exercised, conducted and controlled by the Board of Directors, which shall have all power necessary to conduct, manage and control its affairs, and to make such rules and regulations as it may deem necessary as provided by the Act; to appoint and remove all Officers, agents and employees; to prescribe their duties and fix their compensation; to call special meetings of Shareholders whenever it is deemed necessary by the Board, to incur indebtedness and to give securities, notes and mortgages for same. It shall be the duty of the Board to cause a complete record to be kept of all the minutes, acts, and proceedings of its meetings. The Board shall have the power to declare dividends out of the surplus profits of this Corporation when such profits shall, in the opinion of the Board, warrant the same.

#### Section 3. - Vacancies.

Vacancies in the Board of Directors shall be temporarily filled by the affirmative vote of a majority of the remaining Directors even though less than a quorum of the Board of Directors. Such temporary Director or Directors shall hold office until the first meeting of the Stockholders held thereafter, at which time such vacancy or vacancies shall be permanently filled by election according to the procedure specified in Section 1 of this Article II. During the existence of any vacancy or vacancies, the surviving or remaining Directors, though less than a quorum, shall possess and may exercise all of the powers vested in the Board of Directors.

#### Section 4. - Annual Meeting.

There shall be an annual meeting of the Board of Directors which shall be held immediately after the annual meeting of the Shareholders and at the same place.

#### Section 5. - Special Meeting.

Special meetings may be called from time to time by the President or any one of the Directors. Any business may be transacted at any special meeting.

Section 6. - Quorum.

A majority of the Directors shall constitute a quorum. The act of a majority of the Directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. If less than a quorum is present at a meeting, a majority of the Directors present may adjourn the meeting from time to time without further notice, other than announcement at the meeting, until a quorum shall be present. Interested Directors may be counted for quorum purposes.

Section 7. - Notice.

Notice of all Directors meetings shall be given in accordance with the Act. No notice need be given of any annual meeting of the Board of Directors. One day prior notice shall be given for all special meetings of the Board, but the purpose of special meetings need not be stated in the notice.

Section 8. - Compensation.

By resolution of the Board of Directors, each Director may either be reimbursed for his expenses, if any, for attending each meeting of the Board of Directors or may be paid a fixed fee for attending each meeting of the Board of Directors, or both. No such payment shall preclude any Director from serving the Corporation in any other capacity and receiving compensation therefor.

Section 9. - Removal or Resignation of Directors.

Any Director may resign by delivering written notice of the resignation to the Board of Directors or an Officer of the Corporation. All or any number of the Directors may be removed, with or without cause, at a meeting expressly called for that purpose by a vote of the holders of the majority of the shares then entitled to vote at an election of Directors.

Section 10. - Section 10. - Presumption of Assent.

A Director of the Corporation who is present at a meeting of the Board of Directors at which action on any corporate matter is taken shall be presumed to have assented to the action taken, unless his dissent shall be entered in the minutes of the meeting. Such right to dissent shall not apply to a Director who voted in favor of such action.

ARTICLE III

Officers and Agents - General Provisions

Section 1. - Number, Election and Term.

Officers of the Corporation shall be a President and a Secretary. Officers shall be elected by the Board of Directors at its first meeting, and at each regular annual meeting of the Board of Directors thereafter. Each Officer shall hold office until the next succeeding annual meeting of

the Directors and until his successor shall be elected and qualified. Any one person may hold more than one office if it is deemed advisable by the Board of Directors.

Section 2. - Additional Officers and Agents.

The Board of Directors may appoint and create such other officers and agents as may be deemed advisable and prescribe their duties.

Section 3. - Resignation or Removal.

Any officer or agent of the Corporation may resign from such position by delivering written notice of the resignation to the Board of Directors, but such resignation shall be without prejudice to the contract rights, if any, of the Corporation. Any officer or agent elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interests of the Corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment of an Officer or agent shall not of itself create contract rights.

Section 4. - Vacancies.

Vacancies in any office caused by any reason shall be filled by the Board of Directors at any meeting by selecting a suitable and qualified person to act during the unexpired term.

Section 5. - Salaries.

The salaries of all the Officers, agents and other employees of this Corporation shall be fixed by the Board of Directors and may be changed from time to time by the Board, and no officer shall be prevented from receiving such salary by reason of the fact that he is also a Director of the Corporation. All Directors, including interested Directors, are specifically authorized to participate in the voting of such compensation irrespective of their interest.

ARTICLE IV

Duties of the Officers

Section 1. - Chairman of the Board.

The Chairman of the Board, if any, shall be a member of the Board of Directors and shall preside at all meetings of the Shareholders and Directors; perform all duties required by the Bylaws of this Corporation, and as may be assigned from time to time by the Board of Directors; and shall make such reports to the Board of Directors and Shareholders as may be required.

Section 2. - President.

The President shall have general charge and control of the affairs of the Corporation subject to the direction of the Board of Directors; sign as President all Certificates of Stock of this Corporation; perform all duties required by the Bylaws of this Corporation, and as may be assigned from time to time by the Board of Directors; and shall make such reports to the Board

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of Directors and Shareholders as may be required. In addition, if no Chairman of the Board is elected by the Board, the President shall perform all the duties required of such Officer by these Bylaws.

Section 3. - Vice President.

The Vice President, if any, shall perform such duties as shall be assigned by the Board of Directors, and in the case of absence, disability or death of the President, the Vice President shall perform and be vested with all the duties and powers of the President, until the President shall have resumed such duties or the President's successor is elected. In the event there is more than one Vice President, the Board of Directors may designate one of the Vice Presidents as a Senior Vice President, who, in the event of the absence, disability or death of the President shall perform such duties as shall be assigned by the Board of Directors.

Section 4. - Secretary.

The Secretary shall keep a record of the proceedings at the meetings of the Shareholders and the Board of Directors and shall give notice as required in these Bylaws of all such meetings; have custody of all the books, records and papers of the Corporation, except such as shall be in charge of the Treasurer or some other person authorized to have custody or possession thereof by the Board of Directors; sign all Certificates of Stock of this Corporation; from time to time make such reports to the Officers, Board of Directors and Shareholders as may be required and shall perform such other duties as the Board of Directors may from time to time delegate. In addition, if no Treasurer is elected by the Board, the Secretary shall perform all the duties required of the Office of Treasurer by the Act and these Bylaws.

Section 5. - Treasurer.

The Treasurer shall keep accounts of all monies of the Corporation received or disbursed; from time to time make such reports to the Officers, Board of Directors and Shareholders as may be required, perform such other duties as the Board of Directors may from time to time delegate.

Section 6. - Assistant Secretary.

The Assistant Secretary, if any, shall assist the Secretary in all duties of the office of Secretary. In the case of absence, disability or death of the Secretary, the Assistant Secretary shall perform and be vested with all the duties and powers of the Secretary, until the Secretary shall have resumed such duties or the Secretary's successor is elected.

ARTICLE V

Stock

Section 1. - Certificates.

The shares of stock of this Corporation shall be represented by Stock Certificates in a form adopted by the Board of Directors and every person who shall become a Shareholder shall be entitled to a Certificate of Stock. All Certificates shall be consecutively numbered by class.

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Section 2. - Transfer of Certificates.

All Certificates of stock transferred by endorsement shall be surrendered, cancelled and new certificates issued to the purchaser or assignee.

Section 3. - Transfer of Shares.

Shares of stock shall be transferred only on the books of the Corporation by the holder thereof, in person or by his attorney, and no transfers of Certificates of Stock shall be binding upon this Corporation until this Section and Section 2 of this Article are met to the satisfaction of the Secretary of this Corporation.

Section 4. - Lost Certificates.

In the case of loss, mutilation or destruction of a Certificate of Stock, a duplicate Certificate may be issued upon such terms as the Board of Directors shall prescribe.

Section 5. - Dividends.

The Board of -Directors may from time to time declare, and the Corporation may then pay, dividends on its outstanding shares in the manner and upon the terms and conditions provided by the Act and in its Articles of Incorporation.

#### Section 6. - Working Capital.

Before the payment of any dividends or the making of any distributions of the net profits, the Board of Directors may set aside out of the net profits of the Corporation such sum or sums as in their discretion they think proper, as a working capital or as a reserve fund to meet contingencies. The Board of Directors may increase, diminish or vary the capital of such reserve fund in their discretion.

#### Section 7. - Restrictions on Transfer.

No shares of stock of this Corporation or Certificates representing such shares shall be transferred in violation of any law or of any restriction on such transfer (1) set forth in the Articles of Incorporation or amendments thereto, or the Bylaws; or (2) contained in any Buy-Sell Agreement, right of first refusal, or other Agreement restricting such transfer which Agreement has been filed with the Corporation, and, if Certificates have been issued, reference to which restriction is made on the Certificates representing such shares. The Corporation shall not be bound by any restriction not so filed and noted. The Corporation may rely in good faith upon the opinion of its counsel as to such legal or contractual violation unless the issue has been finally determined by a court of competent jurisdiction. The Corporation and any party to any such agreement shall have the right to have a restrictive legend imprinted upon any such Certificates and any Certificate issued in replacement or exchange thereof or with respect thereto.

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#### ARTICLE VI

##### Seal

There shall be no corporate seal.

#### ARTICLE VII

##### Waiver of Notice

Whenever any notice is required to be given to any Shareholder or Director of this corporation, a waiver signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be equivalent to the giving of such notice.

#### ARTICLE VIII

##### Action by Shareholders or Directors

##### Without a Meeting

Any action required to be taken at a meeting of the Shareholders or Directors of this Corporation, or any other action which may be taken at a meeting of the Shareholders or Directors, may be taken without a meeting if a consent in writing setting forth the actions so taken shall be signed by all the Shareholders or Directors entitled to vote with respect to the subject matter thereof. Such consent shall have the same effect and force as a unanimous vote of said Shareholders or Directors.

#### ARTICLE IX

##### Borrowing

Notwithstanding any other provision in these Bylaws, no Officer, Shareholder or agent of this Corporation shall have authority to borrow any funds in behalf of the Corporation or to hypothecate any assets thereof, for corporate purposes or otherwise, except as expressly stated in a resolution by a majority of Directors, duly entered in the Minutes of the Board or upon written consent of holders of at least seventy-five percent (75%) of the stock.

#### ARTICLE X

##### Amendments

Any and all of these Bylaws may be altered, amended, repealed or suspended by the affirmative vote of a majority of the Directors at any meeting of the Directors. New Bylaws may be adopted in like manner.

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#### ARTICLE XI

##### Indemnification

#### Section 1. - Directors and Officers.

The Corporation shall indemnify, to the fullest extent provided by law, any Director or Officer who was or is a Party or is threatened to be made a Party to any Proceeding (other than an action by or in the right of the Corporation) by reason of or arising from the fact that he is or was a Director or Officer of the Corporation. The determination and authorization of indemnification shall be made as provided by law.

Section 2. - Advance of Expenses.

The Corporation may pay for or reimburse the reasonable expenses incurred by a Director or Officer who is a Party to a Proceeding in advance of final disposition of the Proceeding as provided by law.

Section 3. - Insurance.

At the discretion of the Board of Directors, the Corporation may purchase and maintain insurance on behalf of any person who is or was a Director or Officer of the Corporation against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify him against such liability under the provisions of this Article.

Section 4. - Purpose and Exclusivity.

The indemnification referred to in the various sections of this Article shall be deemed to be in addition to and not in lieu of any other rights to which those indemnified may be entitled under any statute, rule of law or equity, agreement, vote of the Shareholders or Board of Directors or otherwise.

Section 5. - Definitions.

The capitalized terms in this Article shall have the same meanings given them in the Act.

IDENTIFICATION

I hereby certify that I am the Secretary of Western Aircraft Investors, Inc. and that the foregoing Restated Bylaws in eleven typewritten pages numbered consecutively from 1 to 11 were and are the Bylaws adopted by the Directors of the Corporation.

/s/D. Ray Booker  
-----  
D. Ray Booker, Secretary



DELAWARE

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION", FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF JUNE, A.D. 1999, AT 4:30 O'CLOCK P.M.

/s/ Harriet Smith Windsor

-----  
Harriet Smith Windsor, Secretary of State

3056585 8100

AUTHENTICATION: 1686649

020194914

DATE: 03-25-02

CERTIFICATE OF INCORPORATION

OF

L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION

FIRST: The name of the corporation is L-3 Communications Security Systems Corporation (the "Corporation").

SECOND: The registered office of the Corporation in Delaware is The Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares which the Corporation shall have authority to issue is 5,000 shares of common, stock, par value \$0.01 per share. Each holder of common stock is entitled to one vote for each share of stock standing in its name on the books of the Corporation.

FIFTH: The name and mailing address of the incorporator is David M. Reilly, c/o L-3 Communications Corporation, 35th Floor, 600 Third Avenue, New York, New York 10016.

SIXTH: In furtherance and not in limitation of the powers conferred by the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the bylaws of the Corporation in any manner not inconsistent with law or this Certificate of Incorporation; provided, however, that the stockholders of the Corporation entitled to vote shall retain the power to adopt additional bylaws and may alter or repeal any bylaw of the Corporation whether adopted by them or otherwise.

SEVENTH: The books and records of the Corporation may be kept, subject to any provision of the laws of the State of Delaware, outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors of the Corporation or in the bylaws of the Corporation. Elections of directors need not be by written ballot unless the bylaws of the Corporation so provide.

EIGHTH: No director shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty by such director as a director. Notwithstanding the foregoing, a director shall be liable to the extent provided by applicable law (i) for breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for any matter in respect of which such director shall be liable under Section 174 of Title 8 of the Delaware Code or any amendment or successor provision thereto, or (iv) for any transaction from which such director derived an improper personal benefit. Neither the amendment nor repeal

of this Article, nor the adoption of any provision of the Certificate of Incorporation of the

Corporation inconsistent with this Article shall eliminate or reduce the effect of this Article in respect of any matter occurring, or any cause of action, suit or claim that, but for this Article, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

NINTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation or any amendment hereof in the manner now or hereafter prescribed by law, and all rights of the stockholders are subject to this reservation.

THE UNDERSIGNED, being the sole incorporator hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, makes this Certificate, hereby declaring and certifying that this is his act and deed and the facts herein stated are true, and accordingly, has hereunto set his hand this 15th day of June, 1999.

/s/ David M. Reilly  
-----  
David M. Reilly  
Sole Incorporator

BYLAWS

of

L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION

(Effective Date: January 1, 2002)

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of L-3 Communications Security Systems Corporation (hereinafter, the "Corporation") shall be in the City of Wilmington, State of Delaware.

Section 2. Other Offices. The Corporation also may have offices at such other places both within and outside the State of Delaware as the Board of Directors may from time to time determine.

ARTICLE II

MEETING OF STOCKHOLDERS

Section 1. Place of Meetings. Meetings of the stockholders for the election of directors or for any other purpose shall be held at such time and place, either within or outside the State of Delaware, as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting or in a duly executed waiver of notice thereof.

Section 2. Annual Meetings. The Annual Meeting of Stockholders shall be held on such date and at such time as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting, at which meeting the stockholders shall elect a Board of Directors by a plurality vote, and transact such other business as may properly be brought before the meeting.

Section 3. Special Meetings. Special Meetings of Stockholders, for any purpose or purposes, may be called by the President, Secretary, Treasurer or Vice President, and shall be called by any such officer at the request in writing of a majority of the Board of Directors. Such request shall state the purpose or purposes of the proposed meeting.

Section 4. Notice of Meetings. Written notice of an Annual Meeting or Special Meeting stating the place, date, and hour of the meeting and in the case of a Special Meeting, the purpose

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or purposes for which the meeting is called, shall be given not less than ten nor more than sixty days before the date of the meeting to each stockholder entitled to vote at such meeting.

Section 5. Quorum. Except as otherwise provided by law or by the Certificate of Incorporation, the holders of a majority of the capital stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented.

Section 6. Voting. Any questions brought before any meeting of stockholders shall be decided by a majority vote of the number of shares entitled to vote, present in person or represented by proxy. Such votes may be cast in person or by proxy, but no proxy shall be voted on or after three years from its date, unless such proxy provides for a longer period.

Section 7. Action by Consent. Any action required to be taken at any annual or special meeting of stockholders, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

ARTICLE III

DIRECTORS

Section 1. Number and Election of Directors. The first Board of Directors shall consist of one director. Thereafter the number of directors shall be determined by the Board of Directors or by the stockholders. Except as provided in Section 2 of this Article, directors shall be elected by a plurality of the votes cast at Annual Meetings of Stockholders, and each director so elected shall hold office until the next Annual Meeting and until his successor is duly elected and qualified, or until his earlier resignation or removal.

Section 2. Vacancies. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority vote of all directors, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and qualified, or until their earlier resignation or removal.

Section 3. Committees. The Board of Directors may designate one or more committees, which committees shall, to the extent provided in the resolution of the Board of Directors establishing such a committee, have all authority and may exercise all the powers of the Board of

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Directors in the management of the business and affairs of the Corporation to the extent lawful under the General Corporation Law of the State of Delaware.

Section 4. Duties and Powers. The business of the Corporation shall be managed by or under the direction of the Board of

Directors which may exercise all such powers of the Corporation and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these Bylaws directed or required to be exercised or done by the stockholders.

Section 5. Meetings. The Board of Directors of the Corporation may hold meetings, both regular and special, either within or outside the State of Delaware. Regular meetings of the Board of Directors may be held without notice at such time and at such place as may from time to time be determined by the Board of Directors. Special meetings of the Board of Directors may be called by the president or any one director with one day's notice to each director, either personally or by mail, telephone or facsimile transmission.

Section 6. Quorum; Board Action. Except as may be otherwise specifically provided by law, the Certificate of Incorporation or these Bylaws, at all meetings of the Board of Directors, a majority of the entire Board of Directors shall constitute a quorum for the transaction of business, and the act of a majority of the entire Board of Directors shall be the act of the Board of Directors. If a quorum shall not be present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 7. Actions of Board. Unless otherwise provided by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all the members of the Board of Directors or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board of Directors or committee.

Section 8. Compensation. The Corporation shall reimburse the reasonable expenses incurred by members of the Board of Directors in connection with attendance at meetings of the Board of Directors and of any committee on which such member serves; provided, that the foregoing shall not preclude any director from serving the Corporation in any other capacity and receiving compensation therefor.

Section 9. Removal. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any director or the entire Board of Directors may be removed, without or without cause, by the holders of a majority of shares entitled to vote at an election of directors.

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#### ARTICLE IV

##### OFFICERS

The officers of the Corporation shall consist of a President, a Secretary, a Treasurer, a Vice President and such other additional officers with such titles as the Board of Directors shall determine, all of whom shall be chosen by and shall serve at the pleasure of the Board of Directors. Such officers shall have the usual powers and shall perform all the usual duties incident to their respective offices. All officers shall be subject to the supervision and direction of the Board of Directors. The authority, duties or responsibilities of any officer of the Corporation may be suspended by the President with or without cause. Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors with or without cause.

#### ARTICLE V

##### NOTICES

Section 1. Notices. Whenever written notice is required by law, the Certificate of Incorporation or these Bylaws, to be given to any director, member of a committee or stockholder, such notice may be given by mail, addressed to such director, member of a committee or stockholder, at his address as it appears on the records of the Corporation, with postage thereon prepaid,

and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Written notice may also be given personally or by telegram, telex or cable.

Section 2. Waivers of Notice. Whenever any notice is required by law, the Certificate of Incorporation or these Bylaws, to be given to any director, member of a committee or stockholder, a waiver thereof in writing, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

## ARTICLE VI

### GENERAL PROVISIONS

Section 1. Dividends. Dividends upon the capital stock of the Corporation, subject to the provisions of the Certificate of Incorporation, may be declared by the Board of Directors at any regular or special meeting, and may be paid in cash, in property, or in shares of the capital stock. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, deems proper as a reserve or reserves to meet contingencies, or for

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equalizing dividends, or for repairing or maintaining any property of the Corporation, or for any proper purpose, and the Board of Directors may modify or abolish any such reserve.

Section 2. Fiscal Year. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

Section 3. Corporate Seal. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

## ARTICLE VII

### INDEMNIFICATION

To the fullest extent permitted by the Delaware General Corporation Law, the Corporation shall indemnify any current or former Director or officer of the Corporation and may, at the discretion of the Board of Directors, indemnify any current or former employee or agent of the Corporation against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with any threatened, pending or completed action, suit or proceeding brought by or in the right of the Corporation or otherwise, to which he was or is a party by reason of his current or former position with the Corporation or by reason of the fact that he is or was serving, at the request of the Corporation, as a director, officer, partner, trustee, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Expenses incurred by a person who is or was a Director or officer of the Corporation in appearing at, participating in or defending any such action, suit or proceeding shall be paid by the Corporation at reasonable intervals in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of the Director or officer to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the Corporation as authorized by this Article. If a claim under this Article VII is not paid in full by the Corporation within ninety days after a written claim has been received by the Corporation, the claimant may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be paid also the expense of prosecuting such claim. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending any proceeding in advance of its final disposition where the required undertaking, if any is required, has been tendered to the Corporation) that the claimant has not met the standards of conduct which make it permissible under the Delaware General Corporation Law or other applicable law for the Corporation to identify the claimant for the amount claimed, but the burden of proving such defense shall be on the Corporation. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the Delaware General Corporation Law or other applicable law, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that the

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claimant has not met the applicable standard of conduct, shall be a defense to the action or create a presumption that the claimant has not met the applicable standard of conduct.

## ARTICLE VIII

## AMENDMENTS

Section 1. Amending and Repealing. These Bylaws may be altered, amended or repealed, in whole or in part, or new Bylaws may be adopted by the majority vote of the entire Board of Directors.

Section 2. Entire Board of Directors. As used in this Article VIII and in these Bylaws generally, the term "entire Board of Directors" means the total number of the directors which the Corporation would have if there were no vacancies.

EXECUTION COPY

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A/B EXCHANGE  
REGISTRATION RIGHTS AGREEMENT

Dated as of December 22, 2003

by and among

L-3 COMMUNICATIONS CORPORATION

THE GUARANTORS LISTED ON THE SIGNATURE PAGES HERETO

AND

LEHMAN BROTHERS INC.

BANC OF AMERICA SECURITIES LLC

and

MORGAN STANLEY & CO. INCORPORATED

SG COWEN SECURITIES CORPORATION

WACHOVIA CAPITAL MARKETS, LLC

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A/B EXCHANGE REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "Agreement") is made and entered into as of December 22, 2003 by and among L-3 Communications Corporation, a Delaware corporation (the "Company") the guarantors listed on the signature pages hereto (collectively, the "Existing Guarantors"), and Lehman Brothers Inc., Banc of America Securities LLC, Morgan Stanley & Co. Incorporated, SG Cowen Securities Corporation and Wachovia Capital Markets, LLC, as representatives of the several initial purchasers (the "Initial Purchasers") named in Schedule 1 to the Purchase Agreement (as defined below), each of whom has agreed to purchase the Company's 6-1/8% Senior Subordinated Notes due 2014 (the "Series A Notes") pursuant to the Purchase Agreement (as defined below).

This Agreement is made pursuant to the Purchase Agreement, dated as of December 16, 2003 (the "Purchase Agreement"), by and among the Company, the Existing Guarantors and the Initial Purchasers. In order to induce the Initial Purchasers to purchase the Series A Notes, the Company and the Existing Guarantors have agreed to provide the registration rights set forth in this Agreement. The execution and delivery of this Agreement is a condition to the obligations of the Initial Purchasers set forth in Section 3 of the Purchase Agreement.

The parties hereby agree as follows:

SECTION 1 DEFINITIONS

As used in this Agreement, the following capitalized terms shall have the following meanings:

Act: The Securities Act of 1933, as amended.

Additional Guarantor: Any subsidiary of the Company that executes a Subsidiary Guarantee under the Indenture after the date of this Agreement.

Broker-Dealer: Any broker or dealer registered under the Exchange Act.

Closing Date: The date of this Agreement.

Commission: The Securities and Exchange Commission.

Consummate: A Registered Exchange Offer shall be deemed "Consummated" for purposes of this Agreement upon the occurrence of (i) the filing and effectiveness under the Act of the Exchange Offer Registration Statement relating to the Series B Notes to be issued in the Exchange Offer, (ii) the maintenance of such Registration Statement continuously effective and the keeping of the Exchange Offer open for a period not less than the minimum period

required pursuant to Section 3(b) hereof and (iii) the delivery by the Company to the Registrar under the Indenture of Series B Notes in the same aggregate principal amount as the aggregate principal amount of Series A Notes that were tendered by Holders thereof pursuant to the Exchange Offer.

Damages Payment Date: With respect to the Series A Notes, each Interest Payment Date.

Effectiveness Target Date: As defined in Section 5.

Exchange Act: The Securities Exchange Act of 1934, as amended.

Exchange Offer: The registration by the Company under the Act of the Series B Notes (including the Subsidiary Guarantees) pursuant to a Registration Statement pursuant to which the Company offers the Holders of all outstanding Transfer Restricted Securities the opportunity to exchange all such outstanding Transfer Restricted Securities held by such Holders for Series B Notes and registered Subsidiary Guarantees in an aggregate principal amount equal to the aggregate principal amount of the Transfer Restricted Securities tendered in such exchange offer by such Holders.

Exchange Offer Registration Statement: The Registration Statement relating to the Exchange Offer, including the related Prospectus.

Exempt Resales: The transactions in which the Initial Purchasers propose to sell the Series A Notes to (i) certain "qualified institutional buyers," as such term is defined in Rule 144A under the Act, (ii) to certain institutional "accredited investors," as such term is defined in Rule 501(a)(1), (2), (3) and (7) under the Act ("Accredited Institutions") and (iii) outside the United States to Persons other than U.S. Persons in offshore transactions meeting the requirements of rule 904 of Regulation S under the Act.

Guarantors: The Additional Guarantors and the Existing Guarantors.

Holders: As defined in Section 2 hereof.

Indenture: The Indenture, dated as of the date hereof, among the Company, the Existing Guarantors and The Bank of New York, as trustee (the "Trustee"), pursuant to which the Notes are to be issued, as such Indenture is amended or supplemented from time to time in accordance with the terms thereof.

Initial Purchasers: As defined in the preamble hereto.

Interest Payment Date: As defined in the Notes.

NASD: National Association of Securities Dealers, Inc.

Notes: The Series A Notes and the Series B Notes.

Offering Memorandum: As defined in the Purchase Agreement.

Person: An individual, partnership, corporation, trust, limited liability company or unincorporated organization, or a government or agency or political subdivision thereof.

Prospectus: The prospectus included in a Registration Statement, as amended or supplemented by any prospectus supplement and by all other amendments thereto, including post-effective amendments, and all material incorporated by reference into such Prospectus.

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Record Holder: With respect to any Damages Payment Date relating to Notes, each Person who is a Holder of Notes on the record date with respect to the Interest Payment Date on which such Damages Payment Date shall occur.

Registration Default: As defined in Section 5 hereof.

Registrar: As defined in the Indenture.

Registration Statement: Any registration statement of the Company relating to (a) an offering of Series B Notes pursuant to an Exchange Offer or (b) the registration for resale of Transfer Restricted Securities pursuant to the Shelf Registration Statement, which is filed pursuant to the provisions of this Agreement, in each case including the Prospectus included therein, all amendments and supplements thereto (including post-effective amendments) and all exhibits and material incorporated by reference therein.

Series B Notes: The Company's 6-1/8% Senior Subordinated Notes due 2014 to be issued pursuant to the Indenture in the Exchange Offer.

Shelf Filing Deadline: As defined in Section 4 hereof.

Shelf Registration Statement: As defined in Section 4 hereof.

Subsidiary Guarantee: The Guarantee by a Guarantor of the Company's obligations under the Notes and Indenture.

TIA: The Trust Indenture Act of 1939 (15 U.S.C. Section 77aaa-77bbbb) as in effect on the date of the Indenture.

Transfer Restricted Securities: Each Note (including the Subsidiary Guarantees), until the earliest to occur of (a) the date on which such Note is exchanged by a person other than a Broker-Dealer for a Series B Note in the Exchange Offer, (b) following the exchange by a Broker-Dealer in the Exchange Offer of a Note for a Series B Note, the date on which such Series B Note is sold to a purchaser who receives from such Broker-Dealer on or prior to the date of such sale a copy of the Prospectus contained in the Exchange Offer Registration Statement, (c) the date on which such Note (including the Subsidiary Guarantees) is effectively registered under the Act and disposed of



in accordance with the Shelf Registration Statement or (d) the date on which such Note (including the Subsidiary Guarantees) is distributed to the public pursuant to Rule 144 under the Act.

Underwritten Registration or Underwritten Offering: A registration in which securities of the Company are sold to an underwriter for reoffering to the public.

## SECTION 2 SECURITIES SUBJECT TO THIS AGREEMENT

(a) Transfer Restricted Securities. The securities entitled to the benefits of this Agreement are the Transfer Restricted Securities.

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(b) Holders of Transfer Restricted Securities. A Person is deemed to be a holder of Transfer Restricted Securities (each, a "Holder") whenever such Person owns Transfer Restricted Securities.

## SECTION 3 REGISTERED EXCHANGE OFFER

(a) Unless the Exchange Offer shall not be permissible under applicable law or Commission policy (after the procedures set forth in Section 6(a) below have been complied with), the Company and the Guarantors shall (i) cause to be filed with the Commission as promptly as practicable after the Closing Date, but in no event later than 90 days after the Closing Date, a Registration Statement under the Act relating to the Series B Notes (including the Subsidiary Guarantees) and the Exchange Offer, (ii) use all commercially reasonable efforts to cause such Registration Statement to be declared effective by the Commission as promptly as practicable, but in no event later than 180 days after the Closing Date (which 180-day period shall be extended for a number of days equal to the number of business days, if any, the Commission is officially closed during such period), (iii) in connection with the foregoing, file (A) all pre-effective amendments to such Registration Statement as may be necessary in order to cause such Registration Statement to become effective, (B) if applicable, a post-effective amendment to such Registration Statement pursuant to Rule 430A under the Act and (C) cause all necessary filings in connection with the registration and qualification of the Series B Notes (including the Subsidiary Guarantees) to be made under the Blue Sky laws of such jurisdictions as are necessary to permit consummation of the Exchange Offer and (iv) upon the effectiveness of such Registration Statement, commence the Exchange Offer. The Exchange Offer shall be on the appropriate form permitting registration of the Series B Notes (including the Subsidiary Guarantees) to be offered in exchange for the Transfer Restricted Securities and to permit resales of Notes held by Broker-Dealers as contemplated by Section 3(c) below.

(b) The Company and the Guarantors shall cause the Exchange Offer Registration Statement to be effective continuously and shall keep the Exchange Offer open for a period of not less than the minimum period required under applicable federal and state securities laws to consummate the Exchange Offer; provided, however, that in no event shall such period be less than 20 business days. The Company and the Guarantors shall cause the Exchange Offer to comply with all applicable federal and state securities laws. No securities other than the Notes (including the Subsidiary Guarantees) shall be included in the Exchange Offer Registration Statement. The Company and the Guarantors shall use all commercially reasonable efforts to cause the Exchange Offer to be consummated on the earliest practicable date after the Exchange Offer Registration Statement has become effective, but in no event later than 30 business days thereafter.

(c) The Company and the Guarantors shall indicate in a "Plan of Distribution" section contained in the Prospectus contained in the Exchange Offer Registration Statement that any Broker-Dealer who owns Series A Notes that are Transfer Restricted Securities and that were acquired for its own account as a result of market-making activities or other trading activities (other than Transfer Restricted Securities acquired directly from the Company), may exchange such Series A Notes pursuant to the Exchange Offer; however, such Broker-Dealer may be deemed to be an "underwriter" within the meaning of the Act and must, therefore, deliver a Prospectus meeting the requirements of the Act in connection with any resales of the Series B

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Notes received by such Broker-Dealer in the Exchange Offer, which Prospectus delivery requirement may be satisfied by the delivery by such Broker-Dealer of the Prospectus contained in the Exchange Offer Registration Statement. Such "Plan of Distribution" section shall also contain all other information with respect to such resales by Broker-Dealers that the Commission may require in order to permit such resales pursuant thereto, but such "Plan of Distribution" shall not name any such Broker-Dealer or disclose the amount of Notes held by any such Broker-Dealer except to the extent required by the Commission.

The Company and the Guarantors shall use all commercially reasonable efforts to keep the Exchange Offer Registration Statement continuously effective, supplemented and amended as required by the provisions of Section 6(c) below to the extent necessary to ensure that it is available for resales of Notes acquired by Broker-Dealers for their own accounts as a result of market-making activities or other trading activities, and to ensure that it conforms with the requirements of this Agreement, the Act and the policies, rules and regulations of the Commission as announced from time to time, for a period of 180 days from the date on which the Exchange Offer Registration Statement is declared effective or such shorter period that will terminate when all Notes covered by the Exchange Offer Registration Statement have been exchanged in the Exchange Offer.

The Company and the Guarantors shall provide sufficient copies of the latest version of such Prospectus to Broker-Dealers promptly upon request at any

time during such 180 day period in order to facilitate such resales.

#### SECTION 4 SHELF REGISTRATION

(a) Shelf Registration. If (i) the Company and the Guarantors are not required to file the Exchange Offer Registration Statement or permitted to consummate the Exchange Offer because the Exchange Offer is not permitted by applicable law or Commission policy (after the procedures set forth in Section 6(a) below have been complied with) or (ii) any Holder of Transfer Restricted Securities that is a "qualified institutional buyer," as such term is defined in Rule 144A under the Act or an institutional "accredited investor," as such term is defined in Rule 501(a)(1), (2), (3) and (7) under the Act shall notify the Company prior to the 20th day following the consummation of the Exchange Offer that such Holder alone or together with holders who hold in the aggregate at least \$1.0 million in principal amount of Series A Notes (A) is prohibited by applicable law or Commission policy from participating in the Exchange Offer, or (B) may not resell the Series B Notes acquired by it in the Exchange Offer to the public without delivering a prospectus and that the Prospectus contained in the Exchange Offer Registration Statement is not appropriate or available for such resales by such Holder, or (C) is a Broker-Dealer and holds Series A Notes acquired directly from the Company or an affiliate of the Company, the Company and the Guarantors shall:

(i) cause to be filed with the Commission a shelf Registration Statement pursuant to Rule 415 under the Act, which may be an amendment to the Exchange Offer Registration Statement (in either event, the "Shelf Registration Statement") on or prior to the earliest to occur of (A) the 30th day after the date on which the Company determines that it is not required to file the Exchange Offer Registration Statement, or permitted to consummate the Exchange Offer and (B) the 30th day after the date on which the

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Company receives notice from a Holder of Transfer Restricted Securities as contemplated by clause (ii) of paragraph (a) above (such earliest date being the "Shelf Filing Deadline"), which Shelf Registration Statement shall provide for resales of all Transfer Restricted Securities the Holders of which shall have provided the information required pursuant to Section 4(b) hereof; and

(ii) use all commercially reasonable efforts to cause such Shelf Registration Statement to be declared effective by the Commission on or before the 90th day after the Shelf Filing Deadline.

The Company and the Guarantors shall use all commercially reasonable efforts to keep such Shelf Registration Statement continuously effective, supplemented and amended as required by the provisions of Sections 6(b) and (d) hereof to the extent necessary to ensure that it is available for resales of Notes by the Holders of Transfer Restricted Securities entitled to the benefit of this Section 4(a), and to ensure that it conforms with the requirements of this Agreement, the Act and the policies, rules and regulations of the Commission as announced from time to time, for a period of at least two years following the Closing Date or such shorter period that will terminate when all Notes covered by the Shelf Registration Statement have been sold pursuant to the Shelf Registration Statement or become eligible for resale pursuant to Rule 144 without volume or other restrictions.

(b) Provision by Holders of Certain Information in Connection with the Shelf Registration Statement. No Holder of Transfer Restricted Securities may include any of its Transfer Restricted Securities in any Shelf Registration Statement pursuant to this Agreement unless and until such Holder furnishes to the Company in writing, within 10 business days after receipt of a request therefor, such information as the Company may reasonably request for use in connection with any Shelf Registration Statement or Prospectus or preliminary Prospectus included therein. No Holder of Transfer Restricted Securities shall be entitled to additional interest pursuant to Section 5 hereof unless and until such Holder shall have used its best efforts to provide all such reasonably requested information. Each Holder as to which any Shelf Registration Statement is being effected agrees to furnish promptly to the Company all information required to be disclosed in order to make the information previously furnished to the Company by such Holder not materially misleading.

#### SECTION 5 ADDITIONAL INTEREST

If (i) any of the Registration Statements required by this Agreement is not filed with the Commission on or prior to the date specified for such filing in sections 3(a), 4(a), and 4(c), as applicable, (ii) any of such required Registration Statements has not been declared effective by the Commission on or prior to the date specified for such effectiveness in sections 3(a), 4(a), and 4(c), as applicable, (the "Effectiveness Target Date"), (iii) the Exchange Offer has not been consummated within 30 business days after the Effectiveness Target Date with respect to the Exchange Offer Registration Statement, or (iv) any Registration Statement required by this Agreement is filed and declared effective but shall thereafter cease to be effective or fail to be usable for its intended purpose without being succeeded within five business days by a post-effective amendment to such Registration Statement that cures such failure and that is itself immediately declared effective (each such event referred to in clauses (i) through (iv), a

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"Registration Default"), the Company and the Guarantors jointly and severally agree to pay additional interest to each Holder of Transfer Restricted Securities with respect to the first 90-day period immediately following the occurrence of such Registration Default, in an amount equal to \$.05 per week per \$1,000 principal amount of Transfer Restricted Securities held by such Holder

for each week or portion thereof that the Registration Default continues. The amount of the additional interest shall increase by an additional \$.05 per week per \$1,000 in principal amount of Transfer Restricted Securities with respect to each subsequent 90-day period until all Registration Defaults have been cured, up to a maximum amount of additional interest of \$.50 per week per \$1,000 principal amount of Transfer Restricted Securities. The Company shall in no event be required to pay additional interest for more than one Registration Default at any given time. All accrued additional interest shall be paid to Record Holders by the Company and the Guarantors by wire transfer of immediately available funds or by federal funds check on each Damages Payment Date, as provided in the Indenture. Following the cure of all Registration Defaults relating to any particular Transfer Restricted Securities, the accrual of additional interest with respect to such Transfer Restricted Securities will cease.

All payment obligations of the Company and the Guarantors set forth in the preceding paragraph that are outstanding with respect to any Transfer Restricted Security at the time such security ceases to be a Transfer Restricted Security shall survive until such time as all such payment obligations with respect to such Security shall have been satisfied in full provided, however, that the additional interest shall cease to accrue on the day immediately prior to the date such Transfer Restricted Securities cease to be Transfer Restricted Securities.

#### SECTION 6 REGISTRATION PROCEDURES

(a) Exchange Offer Registration Statement. In connection with the Exchange Offer, the Company and the Guarantors shall comply with all of the provisions of Section 6(c) below, shall use all commercially reasonable efforts to effect such exchange to permit the sale of Transfer Restricted Securities being sold in accordance with the intended method or methods of distribution thereof, and shall comply with all of the following provisions:

(i) If in the reasonable opinion of counsel to the Company and the Guarantors there is a question as to whether the Exchange Offer is permitted by applicable law, the Company and the Guarantors hereby agree to seek a no-action letter or other favorable decision from the Commission allowing the Company and the Guarantors to consummate an Exchange Offer for such Series A Notes. The Company and the Guarantors hereby agree to pursue the issuance of such a decision to the Commission staff level but shall not be required to take commercially unreasonable action to effect a change of Commission policy. The Company and the Guarantors hereby agree however, to (A) participate in telephonic conferences with the Commission, (B) deliver to the Commission staff an analysis prepared by counsel to the Company and the Guarantors setting forth the legal bases, if any, upon which such counsel has concluded that such an Exchange Offer should be permitted and (C) diligently pursue a resolution (which need not be favorable) by the Commission staff of such submission.

(ii) As a condition to its participation in the Exchange Offer pursuant to the terms of this Agreement, each Holder of Transfer Restricted Securities shall furnish, upon the

request of the Company, prior to the consummation thereof, a written representation to the Company and the Guarantors (which may be contained in the letter of transmittal contemplated by the Exchange Offer Registration Statement) to the effect that (A) it is not an affiliate of the Company, (B) it is not engaged in, and does not intend to engage in, and has no arrangement or understanding with any person to participate in, a distribution of the Series B Notes to be issued in the Exchange Offer and (C) it is acquiring the Series B Notes in its ordinary course of business. In addition, all such Holders of Transfer Restricted Securities shall otherwise cooperate in the Company's and the Guarantors' preparations for the Exchange Offer. Each Holder hereby acknowledges and agrees that any Broker-Dealer and any such Holder using the Exchange Offer to participate in a distribution of the securities to be acquired in the Exchange Offer (A) could not under Commission policy as in effect on the date of this Agreement rely on the position of the Commission enunciated in Morgan Stanley and Co., Inc. (available June 5, 1991) and Exxon Capital Holdings Corporation (available May 13, 1988), as interpreted in the Commission's letter to Shearman & Sterling dated July 2, 1993, and similar no-action letters (including any no-action letter obtained pursuant to clause (i) above), and (B) must comply with the registration and prospectus delivery requirements of the Act in connection with a secondary resale transaction and that such a secondary resale transaction should be covered by an effective Registration Statement containing the selling security holder information required by Item 507 or 508, as applicable, of Regulation S-K if the resales are of Series B Notes obtained by such Holder in exchange for Series A Notes acquired by such Holder directly from the Company.

(iii) Prior to effectiveness of the Exchange Offer Registration Statement, the Company and the Guarantors shall provide a supplemental letter to the Commission (A) stating that the Company and the Guarantors are registering the Exchange Offer in reliance on the position of the Commission enunciated in Exxon Capital Holdings Corporation (available May 13, 1988), Morgan Stanley and Co., Inc. (available June 5, 1991) and, if applicable, any no-action letter obtained pursuant to clause (i) above and (B) including a representation that neither the Company nor any Guarantor has entered into any arrangement or understanding with any Person to distribute the Series B Notes to be received in the Exchange Offer and that, to the best of the Company's and each Guarantor's information and belief, each Holder participating in the Exchange Offer is acquiring the Series B Notes in its ordinary course of business and has no arrangement or understanding with any Person to participate in the distribution of the Series B Notes received in the Exchange Offer.

(b) Shelf Registration Statement. In connection with the Shelf Registration Statement, the Company and the Guarantors shall comply with all the provisions of Section 6(c) below and shall use all commercially reasonable efforts to effect such registration to permit the sale of the Transfer Restricted Securities being sold in accordance with the intended method or methods of distribution thereof, and pursuant thereto the Company and the Guarantors will as expeditiously as possible prepare and file with the Commission a Registration Statement relating to the registration on any appropriate form under the Act, which form shall be available for the sale of the Transfer Restricted Securities in accordance with the intended method or methods of distribution thereof.

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(c) General Provisions. In connection with any Registration Statement and any Prospectus required by this Agreement to permit the sale or resale of Transfer Restricted Securities (including, without limitation, any Registration Statement and the related Prospectus required to permit resales of Notes by Broker-Dealers), the Company and the Guarantors shall:

(i) use all commercially reasonable efforts to keep such Registration Statement continuously effective and provide all requisite financial statements (including, if required by the Act or any regulation thereunder, financial statements of any Guarantors) for the period specified in Section 3 or 4 of this Agreement, as applicable; upon the occurrence of any event that would cause any such Registration Statement or the Prospectus contained therein (A) to contain a material misstatement or omission or (B) not to be effective and usable for resale of Transfer Restricted Securities during the period required by this Agreement, the Company and the Guarantors shall file promptly an appropriate amendment to such Registration Statement, in the case of clause (A), correcting any such misstatement or omission, and, in the case of either clause (A) or (B), use all commercially reasonable efforts to cause such amendment to be declared effective and such Registration Statement and the related Prospectus to become usable for their intended purpose(s) as soon as practicable thereafter. Notwithstanding the foregoing, at any time after Consummation of the Exchange Offer, the Company and the Guarantors may allow the Shelf Registration Statement to cease to become effective and usable if (A) the board of directors of the Company determines in good faith that it is in the best interests of the Company not to disclose the existence of or facts surrounding any proposed or pending material corporate transaction involving the Company and the Guarantors, and the Company notifies the Holders within two business days after the Board of Directors makes such determination, or (B) the Prospectus contained in the Shelf Registration Statement contains an untrue statement of the material fact or omits to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided that the two-year period referred to in Section 4(a) hereof during which the Shelf Registration Statement is required to be effective and usable shall be extended by the number of days during which such Registration Statement was not effective or usable pursuant to the foregoing provisions;

(ii) subject to Section 6(c)(i), prepare and file with the Commission such amendments and post-effective amendments to the Registration Statement as may be necessary to keep the Registration Statement effective for the applicable period set forth in Section 3 or 4 hereof, as applicable, or such shorter period as will terminate when all Transfer Restricted Securities covered by such Registration Statement have been sold; cause the Prospectus to be supplemented by any required Prospectus supplement, and as so supplemented to be filed pursuant to Rule 424 under the Act, and to comply fully with the applicable provisions of Rules 424 and 430A under the Act in a timely manner; and comply with the provisions of the Act with respect to the disposition of all securities covered by such Registration Statement during the applicable period in accordance with the intended method or methods of distribution by the sellers thereof set forth in such Registration Statement or supplement to the Prospectus;

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(iii) advise the underwriter(s), if any, and selling Holders of Transfer Restricted Securities and, if requested by such Persons, to confirm such advice in writing, (A) when the Prospectus or any Prospectus supplement or post-effective amendment has been filed, and, with respect to any Registration Statement or any post-effective amendment thereto, when the same has become effective, (B) of any request by the Commission for amendments to the Registration Statement or amendments or supplements to the Prospectus or for additional information relating thereto, (C) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement under the Act or of the suspension by any state securities commission of the qualification of the Transfer Restricted Securities for offering or sale in any jurisdiction, or the initiation of any proceeding for any of the preceding purposes and (D) of the existence of any fact or the happening of any event that makes any statement of a material fact made in the Registration Statement, the Prospectus, any amendment or supplement thereto, or any document incorporated by reference therein untrue, or that requires the making of any additions to or changes in the Registration Statement or the Prospectus in order to make the statements therein not misleading. If at any time the Commission shall issue any stop order suspending the effectiveness of the Registration Statement, or any state securities commission or other regulatory authority shall issue an order suspending the qualification or exemption from qualification of the Transfer Restricted Securities under state securities or Blue Sky laws, the Company and the Guarantors shall use all commercially reasonable efforts to obtain the withdrawal or lifting of such order at the earliest possible time;

(iv) upon written request, furnish to each of the selling Holders of Transfer Restricted Securities and each of the underwriter(s), if any, before filing with the Commission, copies of any Registration Statement or any Prospectus included therein or any amendments or supplements to any such Registration Statement or Prospectus (including all documents incorporated by reference after the initial filing of such Registration Statement), which documents will be subject to the review of such Holders and underwriter(s), if any, for a period of at least five business days, and the Company and the Guarantors will not file any such Registration Statement or Prospectus or any amendment or supplement to any such Registration Statement or Prospectus (including all such documents incorporated by reference) if a selling Holder of Transfer Restricted Securities covered by such Registration Statement or the underwriter(s), if any, shall reasonably object within 5 business days after receipt thereof;

(v) upon written request, promptly prior to the filing of any document that is to be incorporated by reference into a Registration Statement or Prospectus, provide copies of such document to the selling Holders and to the underwriter(s), if any, make the Company's and the Guarantors' representatives available for discussion of such document and other customary due diligence matters, and include such information in such document prior to the filing thereof as such selling Holders or underwriter(s), if any, reasonably may request;

(vi) in the case of a Shelf Registration Statement, make available at reasonable times at the Company's principal place of business for inspection by the selling Holders of Transfer Restricted Securities, any underwriter participating in any disposition

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pursuant to such Registration Statement, and any attorney or accountant retained by such selling Holders or any of the underwriter(s) who shall certify to the Company and the Guarantors that they have a current intention to sell Transfer Restricted Securities pursuant to a Shelf Registration Statement, such financial and other information of the Company and the Guarantors as reasonably requested and cause the Company's and the Guarantors' officers, directors and employees to respond to such inquiries as shall be reasonably necessary, in the reasonable judgment of counsel to such Holders, to conduct a reasonable investigation; provided, however, that each such party shall be required to maintain in confidence and not to disclose to any other person any information or records reasonably designated by the Company in writing as being confidential, until such time as (A) such information becomes a matter of public record (whether by virtue of its inclusion in such Registration Statement or otherwise), or (B) such person shall be required so to disclose such information pursuant to the subpoena or order of any court or other governmental agency or body having jurisdiction over the matter (subject to the requirements of such order, and only after such person shall have given the Company prompt prior written notice of such requirement), or (C) such information is required to be set forth in such Registration Statement or the Prospectus included therein or in an amendment to such Registration Statement or an amendment or supplement to such Prospectus in order that such Registration Statement, Prospectus, amendment or supplement, as the case may be, does not contain an untrue statement of a material fact or omit to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading;

(vii) if requested by any selling Holders of Transfer Restricted Securities or the underwriter(s), if any, promptly incorporate in any Registration Statement or Prospectus, pursuant to a supplement or post-effective amendment if necessary, such information as such selling Holders and underwriter(s), if any, may reasonably request to have included therein, including, without limitation, information relating to the "Plan of Distribution" of the Transfer Restricted Securities information with respect to the principal amount of Transfer Restricted Securities being sold to such underwriter(s), the purchase price being paid therefor and any other terms of the offering of the Transfer Restricted Securities to be sold in such offering; and make all required filings of such Prospectus supplement or post-effective amendment as soon as practicable after the Company is notified of the matters to be incorporated in such Prospectus supplement or post-effective amendment;

(viii) upon request, furnish to each selling Holder of Transfer Restricted Securities and each of the underwriter(s), if any, without charge, at least one copy of the Registration Statement, as first filed with the Commission, and of each amendment thereto, including all documents incorporated by reference therein and all exhibits (including exhibits incorporated therein by reference);

(ix) deliver to each selling Holder of Transfer Restricted Securities and each of the underwriter(s), if any, without charge, as many copies of the Prospectus (including each preliminary prospectus) and any amendment or supplement thereto as such Persons reasonably may request; the Company and the Guarantors hereby consent to the use of the Prospectus and any amendment or supplement thereto by each of the selling Holders and each of the underwriter(s), if any, in connection with the offering and the sale of the

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Transfer Restricted Securities covered by the Prospectus or any amendment or supplement thereto;

(x) enter into such agreements (including an underwriting agreement), and make such representations and warranties, and take all such other

actions in connection therewith in order to expedite or facilitate the disposition of the Transfer Restricted Securities pursuant to any Registration Statement contemplated by this Agreement, all to such extent as may be requested by the Initial Purchaser or, in the case of registration for resale of Transfer Restricted Securities pursuant to the Shelf Registration Statement, by any Holder or Holders of Transfer Restricted Securities who hold at least 25% in aggregate principal amount of such class of Transfer Restricted Securities; provided, that, the Company and the Guarantors shall not be required to enter into any such agreement more than once with respect to all of the Transfer Restricted Securities and, in the case of a Shelf Registration Statement, may delay entering into such agreement if the Board of Directors of the Company determines in good faith that it is in the best interests of the Company and the Guarantors not to disclose the existence of or facts surrounding any proposed or pending material corporate transaction involving the Company and the Guarantors; and whether or not an underwriting agreement is entered into and whether or not the registration is an Underwritten Registration, the Company and the Guarantors shall:

(A) furnish to the Initial Purchasers, the Holders of Transfer Restricted Securities who hold at least 25% in aggregate principal amount of such class of Transfer Restricted Securities (in the case of a Shelf Registration Statement) and each underwriter, if any, in such substance and scope as they may request and as are customarily made in connection with an offering of debt securities pursuant to a Registration Statement (i) upon the effective date of any Registration Statement (and if such Registration Statement contemplates an Underwritten Offering of Transfer Restricted Securities upon the date of the closing under the underwriting agreement related thereto) and (ii) upon the filing of any amendment or supplement to any Registration Statement or any other document that is incorporated in any Registration Statement by reference and includes financial data with respect to a fiscal quarter or year:

(1) a certificate, dated the date of effectiveness of the Shelf Registration Statement signed by (y) the respective Chairman of the Board, the respective President or any Vice President and (z) the respective Chief Financial Officer of the Company and each of the Guarantors confirming, as of the date thereof, the matters set forth in paragraph (i) of Section 7 of the Purchase Agreement and such other matters as such parties may reasonably request;

(2) an opinion, dated the date of effectiveness of the Shelf Registration Statement, as the case may be, of counsel for the Company covering the matters set forth in paragraphs (c), (d) and (e) of Section 7 of the Purchase Agreement and such other matter as such parties may reasonably request, and in any event including a statement to the effect that such counsel has participated in conferences with officers and other representatives of the Company,

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representatives of the independent public accountants for the Company, the Initial Purchasers' representatives and the Initial Purchasers' counsel in connection with the preparation of such Registration Statement and the related Prospectus and have considered the matters required to be stated therein and the statements contained therein, although such counsel has not independently verified the accuracy, completeness or fairness of such statements; and that such counsel advises that, on the basis of the foregoing (relying as to materiality to a large extent upon facts provided to such counsel by officers and other representatives of the Company and without independent check or verification), no facts came to such counsel's attention that caused such counsel to believe that the applicable Registration Statement, at the time such Registration Statement or any post-effective amendment thereto became effective, and, in the case of the Exchange Offer Registration Statement, as of the date of Consummation, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or that the Prospectus contained in such Registration Statement as of its date and, in the case of the opinion dated the date of Consummation of the Exchange Offer, as of the date of Consummation, contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Such counsel may state further that such counsel assumes no responsibility for, and has not independently verified, the accuracy, completeness or fairness of the financial statements, notes and schedules and other financial data included in any Registration Statement contemplated by this Agreement or the related Prospectus; and

(3) a customary comfort letter, dated as of the date of Consummation of the Exchange Offer or the date of effectiveness of the Shelf Registration Statement, as the case may be, from the Company's independent accountants, in the customary form and covering matters of the type customarily covered in comfort letters by underwriters in connection with primary underwritten offerings, and affirming the matters set forth in the comfort letters delivered pursuant to Section 7 of the Purchase Agreement, without exception;

(B) set forth in full or incorporated by reference in the underwriting agreement, if any, the indemnification provisions and procedures of Section 8 hereof with respect to all parties to be indemnified pursuant to said Section; and

(C) deliver such other documents and certificates as may be reasonably requested by such parties to evidence compliance with clause (A) above and with any customary conditions contained in the underwriting agreement or other agreement entered into by the Company

and the Guarantors pursuant to this clause (x), if any.

(xi) prior to any public offering of Transfer Restricted Securities, cooperate with the selling Holders of Transfer Restricted Securities, the underwriter(s), if any, and their respective counsel in connection with the registration and qualification of the Transfer Restricted Securities under the securities or Blue Sky laws of such jurisdictions as the

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selling Holders of Transfer Restricted Securities or underwriter(s) may reasonably request and do any and all other acts or things necessary or advisable to enable the disposition in such jurisdictions of the Transfer Restricted Securities covered by the Shelf Registration Statement filed pursuant to Section 4 hereof; provided, however, that the Company and the Guarantors shall not be required to register or qualify as a foreign corporation where it is not now so qualified or to take any action that would subject it to the service of process in suits or to taxation, other than as to matters and transactions relating to the Registration Statement, in any jurisdiction where it is not now so subject;

(xii) shall issue, upon the request of any Holder of Series A Notes covered by the Shelf Registration Statement, Series B Notes, having an aggregate principal amount equal to the aggregate principal amount of Series A Notes surrendered to the Company by such Holder in exchange therefor or being sold by such Holder; such Series B Notes to be registered in the name of such Holder or in the name of the purchaser(s) of such Notes, as the case may be; in return, the Series A Notes held by such Holder shall be surrendered to the Company for cancellation;

(xiii) cooperate with the selling Holders of Transfer Restricted Securities and the underwriter(s), if any, to facilitate the timely preparation and delivery of certificates representing Transfer Restricted Securities to be sold and not bearing any restrictive legends; and enable such Transfer Restricted Securities to be in such denominations and registered in such names as the Holders or the underwriter(s), if any, may request at least two business days prior to any sale of Transfer Restricted Securities made by such underwriter(s);

(xiv) use all commercially reasonable efforts to cause the Transfer Restricted Securities covered by the Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to enable the seller or sellers thereof or the underwriter(s), if any, to consummate the disposition of such Transfer Restricted Securities, subject to the proviso contained in clause (xi) above;

(xv) subject to clause (d)(i) above, if any fact or event contemplated by clause (d)(iii)(D) above shall exist or have occurred, prepare a supplement or post-effective amendment to the Registration Statement or related Prospectus or any document incorporated therein by reference or file any other required document so that, as thereafter delivered to the purchasers of Transfer Restricted Securities, the Prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading;

(xvi) provide a CUSIP number for all Transfer Restricted Securities not later than the effective date of the Registration Statement and provide the Trustee under the Indenture with printed certificates for the Transfer Restricted Securities which are in a form eligible for deposit with The Depository Trust Company;

(xvii) cooperate and assist in any filings required to be made with the NASD and in the performance of any due diligence investigation by any underwriter (including any

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"qualified independent underwriter") that is required to be retained in accordance with the rules and regulations of the NASD;

(xviii) otherwise use all commercially reasonable efforts to comply with all applicable rules and regulations of the Commission, and make generally available to its security holders, as soon as practicable, a consolidated earnings statement meeting the requirements of Rule 158 (which need not be audited) for the twelve-month period (A) commencing at the end of any fiscal quarter in which Transfer Restricted Securities are sold to underwriters in a firm or best efforts Underwritten Offering or (B) if not sold to underwriters in such an offering, beginning with the first month of the Company's first fiscal quarter commencing after the effective date of the Registration Statement;

(xix) cause the Indenture to be qualified under the TIA not later than the effective date of the first Registration Statement required by this Agreement, and, in connection therewith, cooperate with the Trustee and the Holders of Notes to effect such changes to the Indenture as may be required for such Indenture to be so qualified in accordance with the terms of the TIA; and execute, and use all commercially reasonable efforts to cause the Trustee to execute, all documents that may be required to effect such changes and all other forms and documents required to be filed with the Commission to enable such Indenture to be so qualified in a timely manner;

(xx) provide promptly to each Holder upon request each document filed with the Commission pursuant to the requirements of Section 13 and Section 15 of the Exchange Act; and

(xxi) so long as any Transfer Restricted Securities remain outstanding, cause each Additional Guarantor upon the creation or acquisition by the Company of such Additional Guarantor, to execute a counterpart to this Agreement in the form attached hereto as Annex A and to deliver such counterpart, together with an opinion of counsel as to the enforceability thereof against such entity, to the Initial Purchasers no later than five business days following the execution thereof.

Each Holder agrees by acquisition of a Transfer Restricted Security that, upon receipt of any notice from the Company of the existence of any fact of the kind described in Section 6(c)(iii)(D) hereof, such Holder will forthwith discontinue disposition and will use its reasonable best efforts to cause any underwriter to forthwith discontinue disposition of Transfer Restricted Securities pursuant to the applicable Registration Statement until such Holder's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 6(c)(xv) hereof, or until it is advised in writing (the "Advice") by the Company that the use of the Prospectus may be resumed, and has received copies of any additional or supplemental filings that are incorporated by reference in the Prospectus. If so directed by the Company, each Holder will deliver to the Company (at the Company's expense) all copies, other than permanent file copies then in such Holder's possession, of the Prospectus covering such Transfer Restricted Securities that was current at the time of receipt of such notice. In the event the Company shall give any such notice, the time period regarding the effectiveness of such Registration Statement set forth in Section 3 or 4 hereof, as applicable, shall be extended by the number of days during the period from and including the date of the giving of such notice pursuant to Section 6(c)(iii)(D) hereof to

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and including the date when each selling Holder covered by such Registration Statement shall have received the copies of the supplemented or amended Prospectus contemplated by Section 6(d)(xv) hereof or shall have received the Advice.

The Company and the Guarantors may require each Holder of Transfer Restricted Securities as to which any registration is being effected to furnish to the Company such information regarding such Holder and such Holder's intended method of distribution of the applicable Transfer Restricted Securities as the Company may from time to time reasonably request in writing, but only to the extent that such information is required in order to comply with the Act. Each such Holder agrees to notify the Company as promptly as practicable of (i) any inaccuracy or change in information previously furnished by such Holder to the Company or (ii) the occurrence of any event, in either case, as a result of which any Prospectus relating to such registration contains or would contain an untrue statement of a material fact regarding such Holder or such Holder's intended method of distribution of the applicable Transfer Restricted Securities or omits to state any material fact regarding such Holder or such Holder's intended method of distribution of the applicable Transfer Restricted Securities required to be stated therein or necessary to make the statements therein not misleading and promptly to furnish to the Company any additional information required to correct and update any previously furnish to the Company any additional information required to correct and update any previously furnished information or required so that such Prospectus shall not contain, with respect to such Holder or the distribution of the applicable Transfer Restricted Securities an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

Notwithstanding anything herein to the contrary, any party to this Agreement (and any employee, representative, or other agent of any party to this Agreement) may disclose to any and all persons, without limitation of any kind, the U.S. federal income tax treatment and tax structure of the transactions contemplated by this Agreement (the "Transactions") and all materials of any kind (including opinions or other tax analyses) that are provided to it relating to such tax treatment and tax structure; provided, however, that neither party (nor any employee, representative or other agent thereof) shall disclose any information (a) that is not relevant to an understanding of the U.S. federal income tax treatment or tax structure of the Transactions or (b) to the extent such disclosure could result in a violation of any federal or state securities laws.

#### SECTION 7 REGISTRATION EXPENSES

All expenses incident to the Company's and the Guarantors' performance of or compliance with this Agreement will be borne by the Company regardless of whether a Registration Statement becomes effective, including without limitation: (i) all registration and filing fees and expenses (including filings made by any Initial Purchaser or Holder with the NASD (and, if applicable, the fees and expenses of any "qualified independent underwriter" and its counsel that may be required by the rules and regulations of the NASD)); (ii) all fees and expenses of compliance with federal securities and state Blue Sky or securities laws; (iii) all expenses of printing (including printing certificates for the Series B Notes to be issued in the Exchange Offer and printing of Prospectuses), messenger and delivery services; (iv) all fees and disbursements of counsel for the Company and the Guarantors and the Holders of Transfer Restricted Securities; and (v) all fees and disbursements of independent certified public

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accountants of the Company (including the expenses of any special audit and comfort letters required by or incident to such performance).

The Company will, in any event, bear its and the Guarantors' internal expenses (including, without limitation, all salaries and expenses of its



officers and employees performing legal or accounting duties), the expenses of any annual audit and the fees and expenses of any Person, including special experts, retained by the Company or the Guarantors.

## SECTION 8 INDEMNIFICATION

(a) The Company and the Guarantors shall, jointly and severally, indemnify and hold harmless each Holder of Transfer Restricted Securities, its officers and employees and each person, if any, who controls any such Holders, within the meaning of the Securities Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof (including, but not limited to, any loss, claim, damage, liability or action relating to purchases, sales and registration of Notes), to which that Holder, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained (A) in any Registration Statement or Prospectus or in any amendment or supplement thereto or (B) in any blue sky application or other document prepared or executed by the Company or any Guarantor (or based upon any written information furnished by the Company or any Guarantor) specifically for the purpose of qualifying any or all of the Notes under the securities laws of any state or other jurisdiction (any such application, document or information being hereinafter called a "Blue Sky Application"), (ii) the omission or alleged omission to state in any Registration Statement or Prospectus, or in any amendment or supplement thereto, or in any Blue Sky Application any material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) any act or failure to act or any alleged act or failure to act by any Holder in connection with, or relating in any manner to, the Notes or the offering contemplated hereby, and which is included as part of or referred to in any loss, claim, damage, liability or action arising out of or based upon matters covered by clause (i) or (ii) above (provided that the Company and the Guarantors shall not be liable under this clause (iii) to the extent that it is determined in a final judgment by a court of competent jurisdiction that such loss, claim, damage, liability or action resulted directly from any such acts or failures to act undertaken or omitted to be taken by such Holder through its gross negligence or willful misconduct), and shall reimburse each Holder and each such officer, employee or controlling person promptly upon demand for any legal or other expenses reasonably incurred by that Holder, officer, employee or controlling person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the Company and the Guarantors shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of, or is based upon, any untrue statement or alleged untrue statement or omission or alleged omission made in any Registration Statement or Prospectus, or in any such amendment or supplement, or in any Blue Sky Application, in reliance upon and in conformity with written information concerning such Holder furnished to the Company by or on behalf of any Holder specifically for inclusion therein. The foregoing indemnity agreement is in addition to any liability which the Company and the Guarantors may otherwise have to any Holder or to any officer, employee or controlling person of that Holder.

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(b) Each Holder, severally and not jointly, shall indemnify and hold harmless the Company and the Guarantors, their respective officers and employees, each of their respective directors, and each person, if any, who controls the Company or the Guarantors within the meaning of the Securities Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof, to which the Company, the Guarantors or any such director, officer or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained (A) in any Registration Statement or Prospectus, or in any amendment or supplement thereto, or (B) in any Blue Sky Application or (ii) the omission or alleged omission to state in any Registration Statement or Prospectus, or in any amendment or supplement thereto, or in any Blue Sky Application any material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information concerning such Holders furnished to the Company by or on behalf of that Holder specifically for inclusion therein, and shall reimburse the Company, the Guarantors and any such director, officer or controlling person for any legal or other expenses reasonably incurred by the Company, the Guarantors or any such director, officer or controlling person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred. The foregoing indemnity agreement is in addition to any liability which any Holder may otherwise have to the Company, the Guarantors or any such director, officer, employee or controlling person. The Company and the Guarantors shall be entitled to receive indemnities from underwriters, selling brokers, dealer managers and similar securities industry professionals participating in the distribution of such Registrable Securities to the same extent as provided above with respect to information or affidavit furnished in writing by such Persons as provided specifically for in any Prospectus or Registration Statement.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of any claim or the commencement of any action, the indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the claim or the commencement of that action; provided, however, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have under this Section 8 except to the extent it has been materially prejudiced by such failure and, provided further, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have to an indemnified party otherwise than under this Section 8. If any such claim or action shall be brought against an indemnified party, and it shall notify the indemnifying party thereof, the indemnifying party shall be entitled to

participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense thereof with counsel reasonably satisfactory to the indemnified party. After notice from the indemnifying party to the indemnified party of its election to assume the defense of such claim or action, the indemnifying party shall not be liable to the indemnified party under this Section 8 for any legal or other expenses subsequently incurred by the indemnified party in connection with the defense thereof other than reasonable costs of investigation; provided, however, any indemnified party shall have the right to employ separate counsel in any such action and to participate in the defense thereof but the fees and expenses of such counsel shall be at the expense of the indemnified party unless (i) the employment thereof

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has been specifically authorized by the indemnifying party in writing, (ii) such indemnified party shall have been advised by such counsel that there may be one or more legal defenses available to it which are different from or additional to those available to the indemnifying party and in the reasonable judgment of such counsel it is advisable for such indemnified party to employ separate counsel or (iii) the indemnifying party has failed to assume the defense of such action and employ counsel reasonably satisfactory to the indemnified party, in which case, if such indemnified party notifies the indemnifying party in writing that it elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such action on behalf of such indemnified party, it being understood, however, that the indemnifying party shall not, in connection with any one such action or separate but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys (in addition to one local counsel) at any time for all such indemnified parties, which firm shall be designated in writing by Lehman Brothers Inc., if the indemnified parties under this Section 8 consist of any Initial Purchaser or any of their respective officers, employees or controlling persons, or by the Company, if the indemnified parties under this Section consist of the Company, the Guarantors or any of their respective directors, officers, employees or controlling persons. No indemnifying party shall (i) without the prior written consent of the indemnified parties (which consent shall not be unreasonably withheld), settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding, or (ii) be liable for any settlement of any such action effected without its written consent (which consent shall not be unreasonably withheld), but if settled with the consent of the indemnifying party or if there be a final judgment of the plaintiff in any such action, the indemnifying party agrees to indemnify and hold harmless any indemnified party from and against any loss or liability by reason of such settlement or judgment.

(d) If the indemnification provided for in this Section 8 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or 8(b) in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company and the Guarantors, on the one hand, and the Holders on the other, from the offering of the Notes or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and the Guarantors, on the one hand and the Holders on the other with respect to the statements or omissions which resulted in such loss, claim, damage or liability, or action in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company and the Guarantors, on the one hand and the Holders on the other with respect to such offering shall be deemed to be in the same proportion as the total net proceeds from the offering of the Series A Notes purchased under the Purchase Agreement (before deducting expenses) received by the Company and the Guarantors, on the one

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hand, and the total discounts and commissions received by the Holders with respect to the Series A Notes purchased under this Agreement, on the other hand, bear to the total gross proceeds from the offering of the Series A Notes under the Purchase Agreement. The relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company, the Guarantors or the Holders, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company, the Guarantors and the Holders agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were to be determined by pro rata allocation (even if the Holders were treated as one entity for such purpose) or by any other method of allocation which does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage or liability, or action in respect thereof, referred to above in this Section shall be deemed to include, for purposes of this Section 8(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), no Holder shall be required to contribute any amount in excess of the amount by which the net proceeds received by it in connection with its sale of Notes exceeds the amount of any damages which such Holder has otherwise paid or become liable to pay by reason of any untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning

of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Holders' obligations to contribute as provided in this Section 8(d) are several and not joint.

#### SECTION 9 RULE 144A

The Company and each Guarantor hereby agrees with each Holder of Transfer Restricted Securities, during any period in which the Company or such Guarantor is not subject to Section 13 or 15(d) of the Exchange Act within the two-year period following the Closing Date, to make available to any Holder or beneficial owner of Transfer Restricted Securities, in connection with any sale thereof and any prospective purchaser of such Transfer Restricted Securities from such Holder or beneficial owner, the information required by Rule 144A(d)(4) under the Act in order to permit resales of such Transfer Restricted Securities pursuant to Rule 144A.

#### SECTION 10 PARTICIPATION IN UNDERWRITTEN REGISTRATIONS

No Holder may participate in any Underwritten Registration hereunder unless such Holder (a) agrees to sell such Holder's Transfer Restricted Securities on the basis provided in any underwriting arrangements approved by the Persons entitled hereunder to approve such arrangements and (b) completes and executes all reasonable questionnaires, powers of attorney, indemnities, underwriting agreements, lock-up letters and other documents required under the terms of such underwriting arrangements.

#### SECTION 11 SELECTION OF UNDERWRITERS

The Holders of Transfer Restricted Securities covered by the Shelf Registration Statement who desire to do so may sell such Transfer Restricted Securities in an Underwritten

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Offering at such Holders' expense. In any such Underwritten Offering, the investment banker or investment bankers and manager or managers that will administer the offering will be selected by the Holders of a majority in aggregate principal amount of the Transfer Restricted Securities included in such offering; provided, that such investment bankers and managers must be reasonably satisfactory to the Company.

#### SECTION 12 MISCELLANEOUS

(a) Remedies. The Company and the Guarantors agree that monetary damages (including the additional interest contemplated hereby) would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Agreement and hereby agree to waive the defense in any action for specific performance that a remedy at law would be adequate.

(b) No Inconsistent Agreements. Neither the Company nor any Guarantor will, on or after the date of this Agreement, enter into any agreement with respect to its securities that is inconsistent with the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof. Except as disclosed in the Offering Memorandum or in the documents incorporated therein by reference, neither the Company nor any Guarantor has previously entered into any agreement granting any registration rights with respect to its securities to any Person that is inconsistent with the terms of this Agreement. The rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to the holders of the Company's or any Guarantor's securities under any agreement in effect on the date hereof.

(c) Adjustments Affecting the Notes. The Company and the Guarantors will not take any action, or permit any change to occur, with respect to the Notes that would materially and adversely affect the ability of the Holders to consummate any Exchange Offer.

(d) Amendments and Waivers. The provisions of this Agreement may not be amended, modified or supplemented, and waivers or consents to or departures from the provisions hereof may not be given unless the Company has obtained the written consent of Holders of a majority of the outstanding principal amount of Transfer Restricted Securities. Notwithstanding the foregoing, a waiver or consent to departure from the provisions hereof that relates exclusively to the rights of Holders whose securities are being tendered pursuant to the Exchange Offer and that does not affect directly or indirectly the rights of other Holders whose securities are not being tendered pursuant to such Exchange Offer may be given by the Holders of a majority of the outstanding principal amount of Transfer Restricted Securities being tendered or registered.

(e) Notices. All notices and other communications provided for or permitted hereunder shall be made in writing by hand-delivery, first-class mail (registered or certified, return receipt requested), telex, telecopier, or air courier guaranteeing overnight delivery:

(i) if to a Holder, at the address set forth on the records of the Registrar under the Indenture, with a copy to the Registrar under the Indenture; and

(ii) if to the Company or the Guarantors:

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New York, New York 10016,  
Attention: Christopher C. Cambria (Fax: 212-805-5494),

With a copy to:

Simpson Thacher & Bartlett LLP  
425 Lexington Avenue  
New York, NY, 10017  
Attention: Vincent Pagano Jr. (Fax: 212-455-2502)

All such notices and communications shall be deemed to have been duly given: at the time delivered by hand, if personally delivered; five business days after being deposited in the mail, postage prepaid, if mailed; when answered back, if telexed; when receipt acknowledged, if telecopied; and on the next business day, if timely delivered to an air courier guaranteeing overnight delivery.

Copies of all such notices, demands or other communications shall be concurrently delivered by the Person giving the same to the Trustee at the address specified in the Indenture.

(f) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties, including without limitation and without the need for an express assignment, subsequent Holders; provided, however, that this Agreement shall not inure to the benefit of or be binding upon a successor or assign of a Holder unless and to the extent such successor or assign acquired Transfer Restricted Securities from such Holder.

(g) Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

(h) Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(i) Governing Law. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

(j) Severability. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions contained herein shall not be affected or impaired thereby.

(a) Entire Agreement. This Agreement together with the other Operative Documents (as defined in the Purchase Agreement) is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein with respect to the registration rights granted by the Company and the Guarantors with

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respect to the Transfer Restricted Securities. This Agreement supersedes all prior agreements and understandings between the parties with respect to such subject matter.

[Signature pages follow]

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

L-3 COMMUNICATIONS CORPORATION

By:

-----  
Name: Christopher C. Cambria  
Title: Senior Vice President, Secretary  
and General Counsel

GUARANTORS:

APCOM, INC.  
BROADCAST SPORTS INC.  
ELECTRODYNAMICS, INC.  
HENSCHEL INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.

INTERSTATE ELECTRONICS CORPORATION  
KDI PRECISION PRODUCTS, INC.  
L-3 COMMUNICATIONS AEROMET, INC.  
L-3 COMMUNICATIONS AEROTECH LLC  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS ATLANTIC SCIENCE AND  
TECHNOLOGY CORPORATION  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS IMC CORPORATION  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.  
L-3 COMMUNICATIONS INVESTMENTS, INC.  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
L-3 COMMUNICATIONS MAS (US) CORPORATION  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION CALIFORNIA  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION DELAWARE

L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS TMA CORPORATION  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES  
INCORPORATED  
MICRODYNE CORPORATION  
MICRODYNE OUTSOURCING INCORPORATED  
MPRI, INC.  
PAC ORD INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION  
WESCAM AIR OPS INC.  
WESCAM AIR OPS LLC  
WESCAM HOLDINGS (US) INC.  
WESCAM INCORPORATED  
WESCAM LLC  
WESCAM SONOMA INC.  
WOLF COACH, INC.  
as Guarantors

By: -----  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.  
as Guarantor

By: L-3 COMMUNICATIONS AIS GP CORPORATION,  
as general partner

By: -----  
Name:  
Title: Authorized Person

LEHMAN BROTHERS INC.  
BANC OF AMERICA SECURITIES LLC  
MORGAN STANLEY & CO. INCORPORATED  
SG COWEN SECURITIES CORPORATION  
WACHOVIA CAPITAL MARKETS, LLC

BY LEHMAN BROTHERS INC.

By: -----  
Authorized Representative

## COUNTERPART TO REGISTRATION RIGHTS AGREEMENT

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The undersigned hereby absolutely, unconditionally and irrevocably agrees (as a "Guarantor") to use all commercially reasonable efforts to include its Subsidiary Guarantee in any Registration Statement required to be filed by the Company and the Guarantors pursuant to the Registration Rights Agreement, dated as of December 22, 2003, (the "Registration Rights Agreement") by and among L-3 Communications Corporation, a Delaware corporation, the guarantors party thereto, Lehman Brothers Inc., Banc of America Securities LLC, Morgan Stanley & Co. Incorporated, SG Cowen Securities Corporation and Wachovia Capital Markets, LLC; to use all commercially reasonable efforts to cause such Registration Statement to become effective as specified in the Registration Rights Agreement; and to otherwise be bound by the terms and provisions of the Registration Rights Agreement.

IN WITNESS WHEREOF, the undersigned has executed this Counterpart as of

\_\_\_\_\_.

[NAME]

By:

-----

Name:

Title:

March 19, 2004

L-3 Communications Corporation  
600 Third Avenue, 34th Floor  
New York, NY 10016

Ladies and Gentlemen:

We have acted as counsel to L-3 Communications Corporation, a Delaware corporation (the "Company"), and to the Delaware subsidiaries of the Company named on Schedule I attached hereto (each, a "Delaware Guarantor" and collectively, the "Delaware Guarantors") and to the non-Delaware subsidiaries of the Company named on Schedule II attached hereto (each, a "Non-Delaware Guarantor," collectively, the "Non-Delaware Guarantors," and taken together with the Delaware Guarantors, the "Guarantors") in connection with the Registration Statement on Form S-4 (the "Registration Statement") filed by the Company and the Guarantors with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, relating to the issuance by the Company of \$400,000,000 aggregate principal amount of 6% Series B Senior Subordinated Notes due 2014 (the "Exchange Notes") and the issuance by the Guarantors of guarantees (the "Guarantees") with respect to the Exchange Notes. The Exchange Notes and the Guarantees will be issued under an indenture (the "Indenture") among the Company, the Guarantors and The Bank of New York, as trustee (the "Trustee") and a supplemental indenture among the Company, the Guarantors and the Trustee. The Exchange Notes will be offered by the Company in exchange for \$400,000,000 aggregate principal amount of its outstanding 6% Senior Subordinated Notes due 2014.

We have examined the Registration Statement and the Indenture, which has been filed with the Commission as an exhibit to the Registration Statement. We also have examined the originals, or duplicates or certified or conformed copies, of such corporate records, agreements, documents and other instruments and have made such other investigations as we have deemed

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relevant and necessary in connection with the opinions hereinafter set forth. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company and the Guarantors.

In rendering the opinions set forth below, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as duplicates or certified or conformed copies and the authenticity of the originals of such latter documents. We also have assumed that the Indenture is the valid and legally binding obligation of the Trustee. We have assumed further that (1) the Non-Delaware Guarantors have duly authorized, executed and delivered the Indenture and the Guarantees, (2) the execution, delivery and performance by the Non-Delaware Guarantors of the Indenture and the Guarantees do not and will not violate the laws of the Non-Delaware Guarantors' respective states of incorporation or any other applicable laws (excepting the laws of the State of New York and the federal laws of the United States) and (3) each of the Non-Delaware Guarantors is duly incorporated and validly existing under the laws of its respective jurisdiction of organization.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that:

1. When the Exchange Notes have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Indenture upon the exchange, the Exchange Notes will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.

2. When (a) the Exchange Notes have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Indenture upon the exchange and (b) the Guarantees have been duly endorsed as a notation on the Exchange Notes, the Guarantees will constitute valid and legally binding obligations of the Guarantors enforceable against the Guarantors in accordance with their terms.

Our opinions set forth above are subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

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We are members of the Bar of the State of New York, and we do not

express any opinion herein concerning any law other than the law of the State of New York, the federal law of the United States, the Delaware General Corporation Law (including the statutory provisions, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing), the Delaware Limited Liability Company Act and the Delaware Revised Uniform Limited Partnership Act.

We hereby consent to the filing of this opinion letter as Exhibit 5 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the Prospectus included in the Registration Statement.

Very truly yours,

SIMPSON THACHER & BARTLETT LLP

#### SCHEDULE I

##### DELAWARE GUARANTORS

BROADCAST SPORTS INC., a Delaware corporation  
HENSCHEL INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a Delaware corporation  
KDI PRECISION PRODUCTS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AIS GP CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware corporation  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a Delaware corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a Delaware limited liability company  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware corporation  
SPD ELECTRICAL SYSTEMS, INC., a Delaware corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited liability company  
WESCAM HOLDINGS (US) INC., a Delaware corporation  
WESCAM LLC, a Delaware limited liability company

#### SCHEDULE II

##### NON-DELAWARE GUARANTORS

APCOM, INC., a Maryland corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
INTERSTATE ELECTRONICS CORPORATION, a California corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon corporation  
L-3 COMMUNICATIONS CSI, INC., a California corporation  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a Virginia corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA, a California corporation  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC., a California corporation  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a Nevada corporation  
MCTI ACQUISITION CORPORATION, a Maryland corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS USA, INC., a Connecticut corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation



**Consent of Independent Accountants**

We hereby consent to the use in this Registration Statement on Form S-4 of L-3 Communications Corporation and subsidiaries of our report dated January 27, 2004 relating to the consolidated financial statements of L-3 Communications Holdings, Inc. and L-3 Communications Corporation and subsidiaries, which appears in such Registration Statement. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

New York, New York

March 19, 2004

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## FORM T-1

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

STATEMENT OF ELIGIBILITY  
UNDER THE TRUST INDENTURE ACT OF 1939 OF A  
CORPORATION DESIGNATED TO ACT AS TRUSTEE

CHECK IF AN APPLICATION TO DETERMINE  
ELIGIBILITY OF A TRUSTEE PURSUANT TO  
SECTION 305(b)(2) ☐

THE BANK OF NEW YORK  
(Exact name of trustee as specified in its charter)

New York (State of incorporation if not a U.S. national bank)	13-5160382 (I.R.S. employer identification no.)
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One Wall Street, New York, N.Y. (Address of principal executive offices)	10286 (Zip code)
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L-3 COMMUNICATIONS CORPORATION  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	13-3937436 (I.R.S. employer identification no.)
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APCOM, INC.  
(Exact name of obligor as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)	52-1291447 (I.R.S. employer identification no.)
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BROADCAST SPORTS INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	52-1977327 (I.R.S. employer identification no.)
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ELECTRODYNAMICS, INC.  
(Exact name of obligor as specified in its charter)

Arizona (State or other jurisdiction of incorporation or organization)	36-3140903 (I.R.S. employer identification no.)
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HENSCHEL, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-2554418 (I.R.S. employer identification no.)
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HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	13-3992505 (I.R.S. employer identification no.)
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INTERSTATE ELECTRONICS CORPORATION  
(Exact name of obligor as specified in its charter)

California (State or other jurisdiction of incorporation or organization)	95-1912832 (I.R.S. employer identification no.)
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KDI PRECISION PRODUCTS, INC.  
(Exact name of obligor as specified in its charter)

Delaware	31-0740721
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(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)
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L-3 COMMUNICATIONS AEROMET, INC.  
(Exact name of obligor as specified in its charter)

Oregon (State or other jurisdiction of incorporation or organization)	73-1291165 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS AIS GP CORPORATION  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	13-4137187 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	38-1865601 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS AYDIN CORPORATION  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-1686808 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS CSI, INC.  
(Exact name of obligor as specified in its charter)

California (State or other jurisdiction of incorporation or organization)	77-0365380 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS ESSCO, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	04-2281486 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	02-0654591 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	75-3089735 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
(Exact name of obligor as specified in its charter)

Virginia (State or other jurisdiction of incorporation or organization)	54-1349668 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	13-3992952 (I.R.S. employer identification no.)
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L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.

(Exact name of obligor as specified in its charter)

Delaware	03-0391841
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS INVESTMENTS INC.  
(Exact name of obligor as specified in its charter)

Delaware	51-0260723
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
(Exact name of obligor as specified in its charter)

Delaware	02-0277515
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

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L-3 COMMUNICATIONS MAS (US) CORPORATION  
(Exact name of obligor as specified in its charter)

Delaware	55-0765280
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION CALIFORNIA  
(Exact name of obligor as specified in its charter)

California	95-2214952
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION DELAWARE  
(Exact name of obligor as specified in its charter)

Delaware	04-3054475
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION  
(Exact name of obligor as specified in its charter)

Delaware	13-4109775
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
(Exact name of obligor as specified in its charter)

California	77-0268547
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC  
(Exact name of obligor as specified in its charter)

Delaware	42-1569647
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS VERTEX AEROSPACE LLC  
(Exact name of obligor as specified in its charter)

Delaware	64-0941176
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

L-3 COMMUNICATIONS WESTWOOD CORPORATION  
(Exact name of obligor as specified in its charter)

Nevada	87-0430944
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

MCTI ACQUISITION CORPORATION  
(Exact name of obligor as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)	13-4109777 (I.R.S. employer identification no.)
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MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED  
(Exact name of obligor as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)	59-3500774 (I.R.S. employer identification no.)
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MICRODYNE CORPORATION  
(Exact name of obligor as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)	52-0856493 (I.R.S. employer identification no.)
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MICRODYNE OUTSOURCING INCORPORATED  
(Exact name of obligor as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)	33-0797639 (I.R.S. employer identification no.)
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MPRI, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	54-1439937 (I.R.S. employer identification no.)
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PAC ORD INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-2523436 (I.R.S. employer identification no.)
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POWER PARAGON, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	33-0638510 (I.R.S. employer identification no.)
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SHIP ANALYTICS, INC.  
(Exact name of obligor as specified in its charter)

Connecticut (State or other jurisdiction of incorporation or organization)	06-0966471 (I.R.S. employer identification no.)
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SHIP ANALYTICS INTERNATIONAL, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	06-1336772 (I.R.S. employer identification no.)
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SHIP ANALYTICS USA, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	06-1364417 (I.R.S. employer identification no.)
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SPD ELECTRICAL SYSTEMS, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-2457758 (I.R.S. employer identification no.)
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SPD SWITCHGEAR, INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-2510039 (I.R.S. employer identification no.)
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SYCOLEMAN CORPORATION  
(Exact name of obligor as specified in its charter)

Florida (State or other jurisdiction of incorporation or organization)	59-2039476 (I.R.S. employer identification no.)
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TROLL TECHNOLOGY CORPORATION  
(Exact name of obligor as specified in its charter)

California (State or other jurisdiction of incorporation or organization)	95-4552257 (I.R.S. employer identification no.)
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WESCAM AIR OPS INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	52-2304424 (I.R.S. employer identification no.)
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WESCAM AIR OPS LLC  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	Pending (I.R.S. employer identification no.)
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WESCAM HOLDINGS (US) INC.  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	51-0376332 (I.R.S. employer identification no.)
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WESCAM INCORPORATED  
(Exact name of obligor as specified in its charter)

Florida (State or other jurisdiction of incorporation or organization)	59-3316817 (I.R.S. employer identification no.)
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WESCAM LLC  
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	91-2077866 (I.R.S. employer identification no.)
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WESCAM SONOMA INC.  
(Exact name of obligor as specified in its charter)

California (State or other jurisdiction of incorporation or organization)	95-2942016 (I.R.S. employer identification no.)
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WOLF COACH, INC.  
(Exact name of obligor as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation or organization)	04-2482502 (I.R.S. employer identification no.)
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600 Third Avenue New York, New York (Address of principal executive offices)	10016 (Zip code)
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6-1/8% Series B Senior Subordinated Notes due 2014  
(Title of the indenture securities)

1. GENERAL INFORMATION. FURNISH THE FOLLOWING INFORMATION AS TO THE TRUSTEE:

(A) NAME AND ADDRESS OF EACH EXAMINING OR SUPERVISING AUTHORITY TO WHICH IT IS SUBJECT.

Name

Address

Superintendent of Banks of the State of New York	2 Rector Street, New York, N.Y. 10006, and Albany, N.Y. 12203
Federal Reserve Bank of New York	33 Liberty Plaza, New York, N.Y. 10045
Federal Deposit Insurance Corporation	Washington, D.C. 20429
New York Clearing House Association	New York, New York 10005

(B) WHETHER IT IS AUTHORIZED TO EXERCISE CORPORATE TRUST POWERS.

Yes.

2. AFFILIATIONS WITH OBLIGOR.

IF THE OBLIGOR IS AN AFFILIATE OF THE TRUSTEE, DESCRIBE EACH SUCH AFFILIATION.

None.

16. LIST OF EXHIBITS.

EXHIBITS IDENTIFIED IN PARENTHESES BELOW, ON FILE WITH THE COMMISSION, ARE INCORPORATED HEREIN BY REFERENCE AS AN EXHIBIT HERETO, PURSUANT TO RULE 7a-29 UNDER THE TRUST INDENTURE ACT OF 1939 (THE "ACT") AND 17 C.F.R. 229.10(d).

1. A copy of the Organization Certificate of The Bank of New York (formerly Irving Trust Company) as now in effect, which contains the authority to commence business and a grant of powers to exercise corporate trust powers. (Exhibit 1 to Amendment No. 1 to Form T-1 filed with Registration Statement No. 33-6215, Exhibits 1a and 1b to Form T-1 filed with Registration Statement No. 33-21672 and Exhibit 1 to Form T-1 filed with Registration Statement No. 33-29637.)
4. A copy of the existing By-laws of the Trustee. (Exhibit 4 to Form T-1 filed with Registration Statement No. 33-31019.)

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6. The consent of the Trustee required by Section 321(b) of the Act. (Exhibit 6 to Form T-1 filed with Registration Statement No. 33-44051.)
7. A copy of the latest report of condition of the Trustee published pursuant to law or to the requirements of its supervising or examining authority.

SIGNATURE

Pursuant to the requirements of the Act, the Trustee, The Bank of New York, a corporation organized and existing under the laws of the State of New York, has duly caused this statement of eligibility to be signed on its behalf by the undersigned, thereunto duly authorized, all in The City of New York, and State of New York, on the 10th day of March, 2004.

THE BANK OF NEW YORK

By: /s/ ROBERT MASSIMILLO

Name: ROBERT MASSIMILLO  
Title: VICE PRESIDENT

Consolidated Report of Condition of

THE BANK OF NEW YORK

of One Wall Street, New York, N.Y. 10286  
And Foreign and Domestic Subsidiaries,

a member of the Federal Reserve System, at the close of business December 31, 2003, published in accordance with a call made by the Federal Reserve Bank of this District pursuant to the provisions of the Federal Reserve Act.

	Dollar Amounts In Thousands
<b>ASSETS</b>	
Cash and balances due from depository institutions:	
Noninterest-bearing balances and currency and coin.....	\$3,752,987
Interest-bearing balances.....	7,153,561
Securities:	
Held-to-maturity securities.....	260,388
Available-for-sale securities.....	21,587,862
Federal funds sold and securities purchased under agreements to resell	
Federal funds sold in domestic offices.....	165,000
Securities purchased under agreements to resell.....	2,804,315
Loans and lease financing receivables:	
Loans and leases held for sale.....	557,358
Loans and leases, net of unearned income.....	36,255,119
LESS: Allowance for loan and lease losses.....	664,233
Loans and leases, net of unearned income and allowance...	35,590,886
Trading Assets.....	4,892,480
Premises and fixed assets (including capitalized leases)....	926,789
Other real estate owned.....	409
Investments in unconsolidated subsidiaries and associated companies.....	277,788
Customers' liability to this bank on acceptances outstanding	144,025
Intangible assets.....	
Goodwill.....	2,635,322
Other intangible assets.....	781,009
Other assets.....	7,727,722
Total assets.....	\$89,257,901
	=====
<b>LIABILITIES</b>	
Deposits:	
In domestic offices.....	\$33,763,250
Noninterest-bearing.....	14,511,050
Interest-bearing.....	19,252,200
In foreign offices, Edge and Agreement subsidiaries, and IBFs.....	22,980,400
Noninterest-bearing.....	341,376
Interest-bearing.....	22,639,024
Federal funds purchased and securities sold under agreements to repurchase	
Federal funds purchased in domestic offices.....	545,681
Securities sold under agreements to repurchase.....	695,658
Trading liabilities.....	2,338,897
Other borrowed money:	
(includes mortgage indebtedness and obligations under capitalized leases).....	11,078,363
Bank's liability on acceptances executed and outstanding....	145,615
Subordinated notes and debentures.....	2,408,665
Other liabilities.....	6,441,088
Total liabilities.....	\$80,397,617
	=====
Minority interest in consolidated subsidiaries.....	640,126
<b>EQUITY CAPITAL</b>	
Perpetual preferred stock and related surplus.....	0
Common stock.....	1,135,284
Surplus.....	2,077,255
Retained earnings.....	4,955,319
Accumulated other comprehensive income.....	52,300
Other equity capital components.....	0
Total equity capital.....	8,220,158
Total liabilities minority interest and equity capital.....	\$89,257,901
	=====

I, Thomas J. Mastro, Senior Vice President and Comptroller of the above-named bank do hereby declare that this Report of Condition is true and correct to the best of my knowledge and belief.

Thomas J. Mastro,  
Senior Vice President and Comptroller

We, the undersigned directors, attest to the correctness of this



statement of resources and liabilities. We declare that it has been examined by us, and to the best of our knowledge and belief has been prepared in conformance with the instructions and is true and correct.

Thomas A. Renyi        --  
Gerald L. Hassell    |  
Alan R. Griffith       |  
                         --

Directors

- - - - -

## L-3 COMMUNICATIONS CORPORATION

THE BANK OF NEW YORK

Total

\* Need not be completed by book-entry holders.

\*\* Unless otherwise indicated, the holder will be deemed to have tendered the full aggregate principal amount represented by such Outstanding Notes. See Instruction 2.

Holders of Outstanding Notes whose Outstanding Notes are not immediately available or who cannot deliver all other required documents to the Exchange Agent on or prior to the Expiration Date or who cannot complete the procedures for book-entry transfer on a timely basis, must tender their Outstanding Notes according to the guaranteed delivery procedures set forth in the Prospectus.

Unless the context otherwise requires, the term "holder" for purposes of this Letter of Transmittal means any person in whose name Outstanding Notes are registered or any other person who has obtained a properly completed bond power from the registered holder or any person whose Outstanding Notes are held of record by The Depository Trust Company ("DTC").

[ ] CHECK HERE IF TENDERED OUTSTANDING NOTES ARE BEING DELIVERED PURSUANT TO A NOTICE OF GUARANTEED DELIVERY AND COMPLETE THE FOLLOWING:

Name of Registered Holder(s): \_\_\_\_\_

Name of Eligible Institution that Guaranteed Delivery: \_\_\_\_\_

Date of Execution of Notice of Guaranteed Delivery: \_\_\_\_\_

If Delivered by Book-Entry Transfer:

Name of Tendering Institution: \_\_\_\_\_

Account Number: \_\_\_\_\_

Transaction Code Number: \_\_\_\_\_

[ ] CHECK HERE IF EXCHANGE NOTES ARE TO BE DELIVERED TO A PERSON OTHER THAN THE PERSON SIGNING THIS LETTER OF TRANSMITTAL:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

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[ ] CHECK HERE IF EXCHANGE NOTES ARE TO BE DELIVERED TO AN ADDRESS DIFFERENT FROM THAT LISTED ELSEWHERE IN THIS LETTER OF TRANSMITTAL:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

[ ] CHECK HERE IF YOU ARE A BROKER-DEALER WHO ACQUIRED OUTSTANDING NOTES FOR YOUR OWN ACCOUNT AS A RESULT OF MARKET MAKING OR OTHER TRADING ACTIVITIES AND WISH TO RECEIVE 10 ADDITIONAL COPIES OF THE PROSPECTUS AND 10 COPIES OF ANY AMENDMENTS OR SUPPLEMENTS THERETO:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

If the undersigned is not a broker-dealer, the undersigned represents that it is not engaged in, and does not intend to engage in, a distribution of Exchange Notes. If the undersigned is a broker-dealer that will receive Exchange Notes for its own account in exchange for Outstanding Notes that were acquired as a result of market-making activities or other trading activities, it acknowledges that it will deliver a prospectus in connection with any resale of such Exchange Notes; however, by so acknowledging and by delivering a prospectus, the undersigned will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act. A broker-dealer may not participate in the Exchange Offer with respect to Outstanding Notes acquired other than as a result of market-making activities or other trading activities. Any holder who is an "affiliate" of the Company or who has an arrangement or understanding with respect to the distribution of the Exchange Notes to be acquired pursuant to the Exchange Offer, or any broker-dealer who purchased Outstanding Notes from the Company to resell pursuant to Rule 144A under the Securities Act or any other available exemption under the Securities Act must comply with the registration and prospectus delivery requirements under the Securities Act.

PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY

Ladies and Gentlemen:

Upon the terms and subject to the conditions of the Exchange Offer, the undersigned hereby tenders to the Company the principal amount of the Outstanding Notes indicated above. Subject to, and effective upon, the acceptance for exchange of all or any portion of the Outstanding Notes tendered herewith in accordance with the terms and conditions of the Exchange Offer (including, if the Exchange Offer is extended or amended, the terms and conditions of any such extension or amendment), the undersigned hereby exchanges, assigns and transfers to, or upon the order of, the Company all right, title and interest in and to such Outstanding Notes as are being tendered herewith. The undersigned hereby irrevocably constitutes and appoints the Exchange Agent as its true and lawful agent and attorney in-fact of the undersigned (with full knowledge that the Exchange Agent also acts as the agent of the Company, in connection with the Exchange Offer) to cause the Outstanding Notes to be assigned, transferred and exchanged.

The undersigned represents and warrants that it has full power and authority to tender, exchange, assign and transfer the Outstanding Notes and to acquire Exchange Notes issuable upon the exchange of such tendered Outstanding Notes, and that, when the same are accepted for exchange, the Company will acquire good and unencumbered title to the tendered Outstanding Notes, free and clear of all liens, restrictions, charges and encumbrances and not subject to any adverse claim. The undersigned also warrants that it will, upon request, execute and deliver any additional documents deemed by the Exchange Agent or the Company to be necessary or desirable to complete the exchange, assignment and transfer of the tendered Outstanding Notes or transfer ownership of such Outstanding Notes on the account books maintained by the book-entry transfer facility. The undersigned further agrees that acceptance of any and all validly tendered Outstanding Notes by the Company and the issuance of Exchange Notes in exchange therefor shall constitute performance in full by the Company of its obligations under the Registration Rights Agreement, dated as of December 22, 2003 (the "Registration Rights Agreement"), by and among the Company, the guarantors named therein, and Lehman Brothers Inc., Banc of America Securities LLC, Morgan Stanley & Co. Incorporated, SG Cowen Securities Corporation, and Wachovia Capital Markets, LLC and that the Company shall have no further obligations or liabilities thereunder except as provided in the first paragraph of Section 4 of such agreement. The undersigned will comply with its obligations under the Registration Rights Agreement. The undersigned has read and agrees to all terms of the Exchange Offer. The Exchange Offer is subject to certain conditions as set forth in the Prospectus under the caption "The Exchange Offer--Certain Conditions to the Exchange Offer." The undersigned recognizes that as a result of these conditions (which may be waived, in whole or in part, by the Company), as more particularly set forth in the Prospectus, the Company may not be required to exchange any of the Outstanding Notes tendered hereby and, in such event, the Outstanding Notes not exchanged will be returned to the undersigned at the address shown below unless indicated otherwise above, promptly following the expiration or termination of the Exchange Offer. In addition, the Company may amend the Exchange Offer at any time prior to the Expiration Date if any of the conditions set under "The Exchange Offer--Certain Conditions to the Exchange Offer" occur.

The undersigned understands that tenders of Outstanding Notes pursuant to any one of the procedures described in the Prospectus and in the instructions attached hereto will, upon the Company's acceptance for exchange of such tendered Outstanding Notes, constitute a binding agreement between the undersigned and the Company upon the terms and subject to the conditions of the Exchange Offer. The undersigned recognizes that, under circumstances set forth in the Prospectus, the Company may not be required to accept for exchange any of the Outstanding Notes.

By tendering Outstanding Notes and executing this Letter of Transmittal, the undersigned represents that Exchange Notes acquired in the exchange will be obtained in the ordinary course of business of the undersigned, that the undersigned has no arrangement or understanding with any person to participate in a distribution (within the meaning of the Securities Act) of such Exchange Notes, that the undersigned is not an "affiliate" of the Company within the meaning of Rule 405 under the Securities Act and that if the undersigned or the person receiving such Exchange Notes, whether or not such person is the undersigned, is not a broker-dealer, the undersigned represents that it is not engaged in, and does not intend to engage in, a distribution of Exchange Notes. If the undersigned or the person receiving such Exchange Notes,

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whether or not such person is the undersigned, is a broker-dealer that will receive Exchange Notes for its own account in exchange for Outstanding Notes that were acquired as a result of market-making activities or other trading activities, it acknowledges that it will deliver a prospectus in connection with any resale of such Exchange Notes; however, by so acknowledging and by delivering a prospectus, the undersigned will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act. If the undersigned is a person in the United Kingdom, the undersigned represents that its ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business.

Any holder of Outstanding Notes using the Exchange Offer to participate in a distribution of the Exchange Notes (i) cannot rely on the position of the staff of the Securities and Exchange Commission enunciated in its interpretive letter with respect to Exxon Capital Holdings Corporation (available April 13, 1989) or similar interpretive letters and (ii) must comply with the registration and prospectus requirements of the Securities Act in connection with a secondary resale transaction.

All authority herein conferred or agreed to be conferred shall survive the death, bankruptcy or incapacity of the undersigned and every obligation of the undersigned hereunder shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned. Tendered Outstanding Notes may be withdrawn at any time prior to the Expiration Date in accordance with the terms of this Letter of Transmittal. Except as stated in the Prospectus, this tender is irrevocable.

Certificates for all Exchange Notes delivered in exchange for tendered Outstanding Notes and any Outstanding Notes delivered herewith but not exchanged, and registered in the name of the undersigned, shall be delivered to the undersigned at the address shown below the signature of the undersigned.

The undersigned, by completing the box entitled "Description of Outstanding Notes Tendered Herewith" above and signing this letter, will be deemed to have tendered the Outstanding Notes as set forth in such box.

TENDERING HOLDER(S) SIGN HERE  
(COMPLETE ACCOMPANYING SUBSTITUTE FORM W-9)

MUST BE SIGNED BY REGISTERED HOLDER(S) EXACTLY AS NAME(S) APPEAR(S) ON CERTIFICATE(S) FOR OUTSTANDING NOTES HEREBY TENDERED OR IN WHOSE NAME OUTSTANDING NOTES ARE REGISTERED ON THE BOOKS OF DTC OR ONE OF ITS PARTICIPANTS, OR BY ANY PERSON(S) AUTHORIZED TO BECOME THE REGISTERED HOLDER(S) BY ENDORSEMENTS AND DOCUMENTS TRANSMITTED HERewith. IF SIGNATURE IS BY A TRUSTEE, EXECUTOR, ADMINISTRATOR, GUARDIAN, ATTORNEY-IN-FACT, OFFICER OF A CORPORATION OR OTHER PERSON ACTING IN A FIDUCIARY OR REPRESENTATIVE CAPACITY, PLEASE SET FORTH THE FULL TITLE OF SUCH PERSON. SEE INSTRUCTION 3.

(Signature(s) of Holder(s))

Date:-----

Name(s):-----

(Please Print)

Capacity (full title):-----

Address:-----

(Including Zip Code)

Daytime Area Code and Telephone No.:-----

Taxpayer Identification No.:-----

GUARANTEE OF SIGNATURE(S)  
(IF REQUIRED--SEE INSTRUCTION 3)

Authorized Signature:-----

Date:-----

Name(s):-----

Title:-----

Name of Firm:-----

Address:-----

(Include Zip Code)

Area Code and Telephone No.:-----

SPECIAL ISSUANCE INSTRUCTIONS  
(SEE INSTRUCTIONS 3 AND 4)

To be completed ONLY if Exchange Notes or Outstanding Notes not tendered are to be issued in the name of someone other than the registered holder of the Outstanding Notes whose name(s) appear(s) above.

Issue: [ ] Outstanding Notes not tendered to:  
[ ] Exchange Notes to:

Name(s):-----

(Please Print)

Address:-----

(Include Zip Code)

Daytime Area Code and Telephone No.:

Tax Identification No.:

SPECIAL DELIVERY INSTRUCTIONS  
(SEE INSTRUCTIONS 3 AND 4)

To be completed ONLY if Exchange Notes or Outstanding Notes not tendered are to be sent to someone other than the registered holder of the Outstanding Notes whose name(s) appear(s) above, or such registered holder(s) at an address other than that shown above.

Mail: ☐ Outstanding Notes not tendered to:  
☐ Exchange Notes to:

Name(s): \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_

\_\_\_\_\_  
(Include Zip Code)

Area Code and Telephone No.:

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INSTRUCTIONS

FORMING PART OF THE TERMS AND CONDITIONS OF THE EXCHANGE OFFER

1. DELIVERY OF THIS LETTER OF TRANSMITTAL AND CERTIFICATES; GUARANTEED DELIVERY PROCEDURES. A holder of Outstanding Notes may tender the same by (i) properly completing and signing this Letter of Transmittal or a facsimile hereof (all references in the Prospectus to the Letter of Transmittal shall be deemed to include a facsimile thereof) and delivering the same, together with the certificate or certificates, if applicable, representing the Outstanding Notes being tendered and any required signature guarantees and any other documents required by this Letter of Transmittal, to the Exchange Agent at its address set forth above on or prior to the Expiration Date, or (ii) complying with the procedure for book-entry transfer described below, or (iii) complying with the guaranteed delivery procedures described below.

Holders of Outstanding Notes may tender Outstanding Notes by book-entry transfer by crediting the Outstanding Notes to the Exchange Agent's account at DTC in accordance with DTC's Automated Tender Offer Program ("ATOP") and by complying with applicable ATOP procedures with respect to the Exchange Offer. DTC participants that are accepting the Exchange Offer should transmit their acceptance to DTC, which will edit and verify the acceptance and execute a book-entry delivery to the Exchange Agent's account at DTC. DTC will then send a computer-generated message (an "Agent's Message") to the Exchange Agent for its acceptance in which the holder of the Outstanding Notes acknowledges and agrees to be bound by the terms of, and makes the representations and warranties contained in, this Letter of Transmittal, the DTC participant confirms on behalf of itself and the beneficial owners of such Outstanding Notes all provisions of this Letter of Transmittal (including any representations and warranties) applicable to it and such beneficial owner as fully as if it had completed the information required herein and executed and transmitted this Letter of Transmittal to the Exchange Agent.

DELIVERY OF THE AGENT'S MESSAGE BY DTC WILL SATISFY THE TERMS OF THE EXCHANGE OFFER AS TO EXECUTION AND DELIVERY OF A LETTER OF TRANSMITTAL BY THE PARTICIPANT IDENTIFIED IN THE AGENT'S MESSAGE. DTC PARTICIPANTS MAY ALSO ACCEPT THE EXCHANGE OFFER BY SUBMITTING A NOTICE OF GUARANTEED DELIVERY THROUGH ATOP.

THE METHOD OF DELIVERY OF THIS LETTER OF TRANSMITTAL, THE OUTSTANDING NOTES AND ANY OTHER REQUIRED DOCUMENTS IS AT THE ELECTION AND RISK OF THE HOLDER, AND EXCEPT AS OTHERWISE PROVIDED BELOW, THE DELIVERY WILL BE DEEMED MADE ONLY WHEN ACTUALLY RECEIVED OR CONFIRMED BY THE EXCHANGE AGENT. IF SUCH DELIVERY IS BY MAIL, IT IS SUGGESTED THAT REGISTERED MAIL WITH RETURN RECEIPT REQUESTED, PROPERLY INSURED, BE USED. IN ALL CASES SUFFICIENT TIME SHOULD BE ALLOWED TO PERMIT TIMELY DELIVERY. NO OUTSTANDING NOTES OR LETTERS OF TRANSMITTAL SHOULD BE SENT TO THE COMPANY.

Holders whose Outstanding Notes are not immediately available or who cannot deliver their Outstanding Notes and all other required documents to the Exchange Agent on or prior to the Expiration Date or comply with book-entry transfer procedures on a timely basis must tender their Outstanding Notes pursuant to the guaranteed delivery procedure set forth in the Prospectus. Pursuant to such procedure: (i) such tender must be made by or through an Eligible Institution (as defined below); (ii) on or prior to the Expiration Date, the Exchange Agent must have received from such Eligible Institution a letter, telegram or facsimile transmission (receipt confirmed by telephone and an original delivered by guaranteed overnight courier) setting forth the name and address of the tendering holder, the names in which such Outstanding Notes are registered, and, if applicable, the certificate numbers of the Outstanding Notes to be tendered; and (iii) all tendered Outstanding Notes (or a confirmation of any book-entry transfer of such Outstanding Notes into the Exchange Agent's account at a book-entry transfer facility) as well as this Letter of Transmittal and all other documents required by this Letter of Transmittal, must be received by the Exchange Agent within three New York Stock Exchange trading days after the date of execution of such letter, telegram or

facsimile transmission, all as provided in the Prospectus.

No alternative, conditional, irregular or contingent tenders will be accepted. All tendering holders, by execution of this Letter of Transmittal (or facsimile thereof), shall waive any right to receive notice of the acceptance of the Outstanding Notes for exchange.

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2. PARTIAL TENDERS; WITHDRAWALS. If less than the entire principal amount of Outstanding Notes evidenced by a submitted certificate is tendered, the tendering holder must fill in the aggregate principal amount of Outstanding Notes tendered in the box entitled "Description of Outstanding Notes Tendered Herewith." A newly issued certificate for the Outstanding Notes submitted but not tendered will be sent to such holder as soon as practicable after the Expiration Date. All Outstanding Notes delivered to the Exchange Agent will be deemed to have been tendered unless otherwise clearly indicated.

If not yet accepted, a tender pursuant to the Exchange Offer may be withdrawn prior to the Expiration Date.

To be effective with respect to the tender of Outstanding Notes, a written notice of withdrawal must: (i) be received by the Exchange Agent at one of the addresses for the Exchange Agent set forth above before the Company notifies the Exchange Agent that it has accepted the tender of Outstanding Notes Pursuant to the Exchange Offer, (ii) specify the name of the person who tendered the Outstanding Notes to be withdrawn; (iii) identify the Outstanding Notes to be withdrawn (including the principal amount of such Outstanding Notes, or, if applicable, the certificate numbers shown on the particular certificates evidencing such Outstanding Notes and the principal amount of Outstanding Notes represented by such certificates); (iv) include a statement that such holder is withdrawing its election to have such Outstanding Notes exchanged; and (v) be signed by the holder in the same manner as the original signature on this Letter of Transmittal (including any required signature guarantee). The Exchange Agent will return the properly withdrawn Outstanding Notes promptly following receipt of a notice of withdrawal. If Outstanding Notes have been tendered pursuant to the procedure for book-entry transfer, any notice of withdrawal must specify the name and number of the account at the book-entry transfer facility to be credited with the withdrawn Outstanding Notes or otherwise comply with the book-entry transfer facility's procedures. All questions as to the validity of notices of withdrawals, including time of receipt, will be determined by the Company, and such determination will be final and binding on all parties.

Any Outstanding Notes so withdrawn will be deemed not to have been validly tendered for exchange for purposes of the Exchange Offer. Any Outstanding Notes which have been tendered for exchange but which are not exchanged for any reason will be returned to the holder thereof without cost to such holder (or, in the case of Outstanding Notes tendered by book-entry transfer into the Exchange Agent's account at the book-entry transfer facility pursuant to the book-entry transfer procedures described above, such Outstanding Notes will be credited to an account with such book-entry transfer facility specified by the holder) as soon as practicable after withdrawal, rejection of tender or termination of the Exchange Offer. Properly withdrawn Outstanding Notes may be retendered by following one of the procedures described under the caption "The Exchange Offer -- Procedures for Tendering" in the Prospectus at any time prior to the Expiration Date.

3. SIGNATURES ON THIS LETTER OF TRANSMITTAL; WRITTEN INSTRUMENTS AND ENDORSEMENTS; GUARANTEES OF SIGNATURES. If this Letter of Transmittal is signed by the registered holder(s) of the Outstanding Notes tendered hereby, the signature must correspond with the name(s) as written on the face of the certificates without alteration, enlargement or any change whatsoever.

If any of the Outstanding Notes tendered hereby are owned of record by two or more joint owners, all such owners must sign this Letter of Transmittal.

If a number of Outstanding Notes registered in different names are tendered, it will be necessary to complete, sign and submit as many separate copies of this Letter of Transmittal as there are different registrations of Outstanding Notes.

When this Letter of Transmittal is signed by the registered holder or holders (which term, for the purposes described herein, shall include the book-entry transfer facility whose name appears on a security listing as the owner of the Outstanding Notes) of Outstanding Notes listed and tendered hereby, no endorsements of certificates or separate written instruments of transfer or exchange are required.

If this Letter of Transmittal is signed by a person other than the registered holder or holders of the Outstanding Notes listed, such Outstanding Notes must be endorsed or accompanied by separate written instruments of transfer or exchange in form satisfactory to the Company and duly executed by the registered holder, in either case signed exactly as the name or names of the registered holder or holders appear(s) on the Outstanding Notes.

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If this Letter of Transmittal, any certificates or separate written instruments of transfer or exchange are signed by trustees, executors, administrators, guardians, attorneys-in-fact, officers of corporations or others acting in a fiduciary or representative capacity, such persons should so indicate when, signing, and, unless waived by the Company, proper evidence satisfactory to the Company of their authority so to act must be submitted.

Endorsements on certificates or signatures on separate written instruments of transfer or exchange required by this Instruction 3 must be guaranteed by an Eligible Institution.

Signatures on this Letter of Transmittal must be guaranteed by an Eligible Institution, unless Outstanding Notes are tendered: (i) by a holder who has not completed the box entitled "Special Issuance Instructions" or "Special Delivery Instructions" on this Letter of Transmittal; or (ii) for the account of an Eligible Institution (as defined below). In the event that the signatures in this Letter of Transmittal or a notice of withdrawal, as the case may be, are required to be guaranteed, such guarantees must be by an eligible guarantor institution which is a member of a firm of a registered national securities exchange or of the National Association of Securities Dealers, Inc., a commercial bank or trust company having an office or correspondent in the United States or another "eligible institution" within the meaning of Rule 17Ad-15 under the Securities Exchange Act of 1934, as amended (an "Eligible Institution"). If Outstanding Notes are registered in the name of a person other than the signer of this Letter of Transmittal, the Outstanding Notes surrendered for exchange must be endorsed by, or be accompanied by a written instrument or instruments of transfer or exchange, in satisfactory form as determined by the Company, in its sole discretion, duly executed by the registered holder with the signature thereon guaranteed by an Eligible Institution.

4. SPECIAL ISSUANCE AND DELIVERY INSTRUCTIONS. Tendering holders should indicate, as applicable, the name and address to which the Exchange Notes or certificates for Outstanding Notes not exchanged are to be issued or sent, if different from the name and address of the person signing this Letter of Transmittal. In the case of issuance in a different name, the tax identification number of the person named must also be indicated. Holders tendering Outstanding Notes by book-entry transfer may request that Outstanding Notes not exchanged be credited to such account maintained at the book-entry transfer facility as such holder may designate.

5. TRANSFER TAXES. The Company shall pay all transfer taxes, if any, applicable to the transfer and exchange of Outstanding Notes to it or its order pursuant to the Exchange Offer, except in the case of deliveries of certificates for Outstanding Notes for Exchange Notes that are to be registered or issued in the name of any person other than the holder of Outstanding Notes tendered thereby. If a transfer tax is imposed for any reason other than the transfer and exchange of Outstanding Notes to the Company or its order pursuant to the Exchange Offer, the amount of any such transfer taxes (whether imposed on the registered holder or any other person) will be payable by the tendering holder. If satisfactory evidence of payment of such taxes or exception therefrom is not submitted herewith the amount of such transfer taxes will be billed directly to such tendering holder.

6. WAIVER OF CONDITIONS. The Company reserves the absolute right to waive, in whole or in part, any of the conditions to the Exchange Offer set forth in the Prospectus.

7. MUTILATED, LOST, STOLEN OR DESTROYED SECURITIES. Any holder whose Outstanding Notes have been mutilated, lost, stolen or destroyed, should contact the Exchange Agent at the address indicated below for further instructions.

8. REQUESTS FOR ASSISTANCE OR ADDITIONAL COPIES. Questions relating to the procedure for tendering, as well as requests for additional copies of the Prospectus and this Letter of Transmittal, may be directed to the Exchange Agent at the address and telephone number set forth above. In addition, all questions relating to the Exchange Offer, as well as requests for assistance or additional copies of the Prospectus and this Letter of Transmittal, may be directed to the Exchange Agent at the address and telephone number indicated above.

If backup withholding applies, the Exchange Agent is required to withhold 28% of any payments to be made to the holder of Outstanding Notes. Backup withholding is not an additional tax. Rather, the tax

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liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund may be obtained by filing a tax return with the Internal Revenue Service. The Exchange Agent cannot refund amounts withheld by reason of backup withholding.

9. IRREGULARITIES. All questions as to the validity, form, eligibility (including time of receipt), and acceptance of Letters of Transmittal or Outstanding Notes will be resolved by the Company, whose determination will be final and binding. The Company reserves the absolute right to reject any or all Letters of Transmittal or tenders that are not in proper form or the acceptance of which would, in the opinion of the Company's counsel, be unlawful. The Company also reserves the right to waive any irregularities or conditions of tender as to the particular Outstanding Notes covered by any Letter of Transmittal or tendered pursuant to such Letter of Transmittal. Neither the Company, the Exchange Agent nor any other person will be under any duty to give notification of any defects or irregularities in tenders or incur any liability for failure to give any such notification. The Company's interpretation of the terms and conditions of the Exchange Offer shall be final and binding.

IMPORTANT: THIS LETTER OF TRANSMITTAL OR A FACSIMILE OR COPY THEREOF (TOGETHER WITH CERTIFICATES OF OUTSTANDING NOTES OR CONFORMATION OF BOOK-ENTRY TRANSFER AND ALL OTHER REQUIRED DOCUMENTS) OR A NOTICE OF GUARANTEED DELIVERY MUST BE RECEIVED BY THE EXCHANGE AGENT PRIOR TO THE EXPIRATION DATE.

#### IMPORTANT TAX INFORMATION

Under U.S. federal income tax law, a holder of Outstanding Notes whose Outstanding Notes are accepted for exchange may be subject to backup withholding unless the holder provides The Bank of New York, as Paying Agent (the "Paying Agent"), through the Exchange Agent, with either (i) such holder's correct taxpayer identification number ("TIN") on Substitute Form W-9 attached hereto, certifying (A) that the TIN provided on Substitute Form W-9 is correct



PAYER'S NAME: THE BANK OF NEW YORK	
-----	
SUBSTITUTE  FORM W-9	PART 1 -- PLEASE PROVIDE YOUR TIN IN THE BOX AT RIGHT AND CERTIFY BY SIGNING AND DATING BELOW.
	----- Name -----
	----- Social Security Number OR -----
DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE	----- Employer Identification Number -----
PAYER'S REQUEST FOR TAXPAYER IDENTIFICATION NUMBER (TIN)	PART 3 -- [ ] Awaiting TIN
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PART 2 -- CERTIFICATION -- Under the penalties of perjury, I certify that:	
(1) The number shown on this form is my correct Taxpayer Identification Number (or I am waiting for a number to be issued to me), and	
(2) I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (the "IRS") that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and	
(3) I am a U.S. person (including a U.S. resident alien).	
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CERTIFICATE INSTRUCTIONS -- You must cross out item (2) above if you have been notified by the IRS that you are currently subject to backup withholding because of under-reporting interest or dividends on your tax return. However, if after being notified by the IRS that you were subject to backup withholding	

you received another notification from the IRS that you are no longer subject to backup withholding, do not cross out such item (2).

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The Internal Revenue Service does not require your consent to any provision of this document other than the certifications required to avoid backup withholding.

SIGN HERE    --->    Signature \_\_\_\_\_ Date \_\_\_\_\_, 2004

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NOTE: FAILURE TO COMPLETE AND RETURN THIS FORM MAY RESULT IN BACKUP WITHHOLDING OF 28% OF ANY PAYMENTS MADE TO YOU PURSUANT TO THE OFFER. PLEASE REVIEW THE ENCLOSED GUIDELINES FOR CERTIFICATION OF TAXPAYER IDENTIFICATION NUMBER ON SUBSTITUTE FORM W-9 FOR ADDITIONAL DETAILS.

YOU MUST COMPLETE THE FOLLOWING CERTIFICATE IF YOU CHECKED THE BOX IN PART 3 OF THE SUBSTITUTE FORM W-9.

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CERTIFICATE OF AWAITING TAXPAYER IDENTIFICATION NUMBER

I certify under penalties of perjury that a taxpayer identification number has not been issued to me, and either (1) I have mailed or delivered an application to receive a taxpayer identification number to the appropriate Internal Revenue Service Center or Social Security Administration Office, or (2) I intend to mail or deliver an application in the near future. I understand that if I do not provide a taxpayer identification number by the time of payment, 28% of all reportable payments made to me will be withheld.

Signature \_\_\_\_\_ Date \_\_\_\_\_, 2004

NOTICE OF GUARANTEED DELIVERY  
FOR  
TENDER OF ALL OUTSTANDING  
\$400,000,000 6 1/8% SENIOR SUBORDINATED NOTES DUE 2014  
IN EXCHANGE FOR  
NEW \$400,000,000 6 1/8% SERIES B SENIOR SUBORDINATED NOTES DUE 2014  
OF  
L-3 COMMUNICATIONS CORPORATION

Registered holders of outstanding 6 1/8% Senior Subordinated Notes due 2014 (the "Outstanding Notes") who wish to tender their Outstanding Notes in exchange for a like principal amount of new 6 1/8% Series B Senior Subordinated Notes due 2014 (the "Exchange Notes") and whose Outstanding Notes are not immediately available or who cannot deliver their Outstanding Notes and Letter of Transmittal (and any other documents required by the Letter of Transmittal) to The Bank of New York (the "Exchange Agent") prior to the Expiration Date, may use this Notice of Guaranteed Delivery or one substantially equivalent hereto. This Notice of Guaranteed Delivery may be delivered by hand or sent by facsimile transmission (receipt confirmed by telephone and an original delivered by guaranteed overnight courier) or mail to the Exchange Agent. See "The Exchange Offer -- Procedures for Tendering" in the Prospectus.

The Exchange Agent for the Exchange Offer is:

THE BANK OF NEW YORK

By Mail:

The Bank of New York  
Reorganization Unit  
101 Barclay Street - 7 East  
New York, NY 10286  
Attention: Carolle Montreuil

By Facsimile:

The Bank of New York  
Attention: Carolle Montreuil  
(212) 298-1915  
  
Confirm Receipt of  
Facsimile by telephone  
(212) 815-5920

By Hand or Overnight Delivery:

The Bank of New York  
Reorganization Unit  
101 Barclay Street  
Lobby Level - Corp. Trust Window  
New York, NY 10286  
Attention: Carolle Montreuil

DELIVERY OF THIS NOTICE OF GUARANTEED DELIVERY TO AN ADDRESS OTHER THAN AS SET FORTH ABOVE OR TRANSMISSION VIA A FACSIMILE TRANSMISSION TO A NUMBER OTHER THAN AS SET FORTH ABOVE WILL NOT CONSTITUTE A VALID DELIVERY.

This Notice of Guaranteed Delivery is not to be used to guarantee signatures. If a signature on a Letter of Transmittal is required to be guaranteed by an eligible institution (as defined in the Letter of Transmittal), such signature guarantee must appear in the applicable space provided on the Letter of Transmittal for Guarantee of Signatures.

Ladies and Gentlemen:

The undersigned hereby tenders the principal amount of Outstanding Notes indicated below, upon the terms and subject to the conditions contained in the Prospectus dated , 2004 of L-3 Communications Corporation (the "Prospectus"), receipt of which is hereby acknowledged.

DESCRIPTION OF OUTSTANDING NOTES TENDERED

Name of Tendering Holder	Name and Address of Registered Holder as it Appears on the Outstanding Notes (Please print)	Certificate Number(s) of Outstanding Notes Tendered (or Account Number at Book-Entry Facility)	Principal Amount Outstanding Notes Tendered
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SIGN HERE

Name of Registered or Acting Holder:

Signature(s):

Name(s) (Please Print):

Address:

Telephone Number: -----

Date: -----

IF OUTSTANDING NOTES WILL BE TENDERED BY BOOK-ENTRY TRANSFER, PROVIDE THE FOLLOWING INFORMATION:

DTC Account Number: -----

Date: -----

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THE FOLLOWING GUARANTEE MUST BE COMPLETED  
GUARANTEE OF DELIVERY  
(NOT TO BE USED FOR SIGNATURE GUARANTEE)

The undersigned, a member of a recognized signature guarantee medallion program within the meaning of Rule 17Ad-15 under the Securities Exchange Act of 1934, as amended, hereby guarantees to deliver to the Exchange Agent at one of its addresses set forth on the reverse hereof, the certificates representing the Outstanding Notes (or a confirmation of book-entry transfer of such Outstanding Notes into the Exchange Agent's account at the book-entry transfer facility), together with a properly completed and duly executed Letter of Transmittal (or facsimile thereof), with any required signature guarantees, and any other documents required by the Letter of Transmittal within three New York Stock Exchange trading days after the Expiration date (as defined in the Letter of Transmittal).

Name of Firm: -----  
(authorized signature)

Address: ----- Title: -----

-----  
(zip code) Name: -----  
(please type or print)

Area Code and  
Telephone No.: ----- Date: -----

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NOTE: DO NOT SEND OUTSTANDING NOTES WITH THIS NOTICE OF GUARANTEED DELIVERY.  
OUTSTANDING NOTES SHOULD BE SENT WITH YOUR LETTER OF TRANSMITTAL.

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