

\$400,000,000**communications**

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- We will exchange all outstanding notes that are validly tendered and not validly withdrawn for an equal principal amount of exchange notes that are freely tradeable.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 June 16, 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 May 18, 2004

TABLE OF CONTENTS

	<u>Page</u>
Where You Can Find More Information	i
Prospectus Summary	1
Risk Factors	15
Forward-Looking Statements	24
Use of Proceeds	26
Capitalization	27
Selected Financial Data	28
Management's Discussion and Analysis of Results of Operations and Financial Condition	29
Business	60
Certain Relationships and Related Transactions	87
Management	88
Ownership of Capital Stock	96
Description of Other Indebtedness	99
The Exchange Offer	111
Description of the Notes	121

Material United States Federal Income Tax Considerations	160
Plan of Distribution	163
Legal Matters	163
Experts	163
Index to Financial Statements	F-1

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.

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.

[THIS PAGE INTENTIONALLY LEFT BLANK]

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">• is an affiliate of L-3 Communications Corporation;

- 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 June 16, 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:

6

- any exchange notes that you receive will be acquired in the ordinary course of your business;
- you have no arrangement or understanding with any person or entity to participate in a distribution of the exchange notes;
- 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
- 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.

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

7

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.

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"> not have been subordinated to any senior debt (excluding outstanding letters of credit); and have ranked equally with \$1,770.0 million of other senior subordinated debt. <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>

guarantors, including (1) the 8% Senior Subordinated Notes 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;

10

-
- 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.

11

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)		
Statement of Operations Data:			
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 ⁽¹⁾	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 ⁽²⁾	277.6	202.5	149.4

Balance Sheet Data (at period end):

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

Other Data:

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 ⁽³⁾	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

Balance Sheet Data, as adjusted (at period end):⁽⁴⁾

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.

	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 ^(a)	(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

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

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

-
- 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 recompile 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

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.

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.

24

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.

25

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.

26

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.

	As of December 31, 2003	
	Actual	As Adjusted
	(in millions)	
Cash and cash equivalents	\$ 134.9	\$ 134.7
Long-term debt:		
Senior credit facilities ⁽¹⁾	\$ —	\$ —
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 ⁽²⁾	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	<u>76.2</u>	<u>76.2</u>
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	2000	1999
	(in millions)				
Statement of Operations Data:					
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 ⁽¹⁾	222.7 ⁽¹⁾	150.5 ⁽¹⁾
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	<u>—</u>	<u>(24.4)</u>	<u>—</u>	<u>—</u>	<u>—</u>
Net income	<u>\$ 277.6</u>	<u>\$ 178.1</u>	<u>\$ 115.5⁽²⁾</u>	<u>\$ 82.7⁽²⁾</u>	<u>\$ 58.7⁽²⁾</u>
Balance Sheet Data (at period end):					
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>
	<i>(\$ in billions)</i>							
Total DoD budget ⁽¹⁾	<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 ⁽¹⁾	<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%

⁽¹⁾ 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 (C³ISR), 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 (C³) 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.

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 ⁽¹⁾ <i>(in millions)</i>
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 ⁽²⁾
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 ⁽³⁾
Detection Systems	June 14, 2002	\$ 110.0 ⁽⁴⁾
Telos Corporation (a California Corporation)	July 19, 2002	\$ 22.3
ComCept, Inc.	July 31, 2002	\$ 30.1 ⁽⁵⁾
Technology, Management and Analysis Corporation (TMA)	September 23, 2002	\$ 53.4 ⁽⁶⁾⁽⁷⁾
Electron Devices and Displays-Navigation Systems – San Diego businesses of Northrop Grumman	October 25, 2002	\$ 135.6 ⁽⁸⁾
Wolf Coach, Inc.	October 31, 2002	\$ 5.4 ⁽⁹⁾
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 ⁽¹⁰⁾
Avionics Systems business of Goodrich Corporation	March 28, 2003	\$ 188.7 ⁽¹¹⁾
Aeromet, Inc.	May 30, 2003	\$ 17.5 ⁽⁶⁾
Klein Associates Inc.	September 30, 2003	\$ 30.0 ⁽⁶⁾
Military Aviation Services business of Bombardier, Inc. (MAS)	October 31, 2003	\$ 87.4 ⁽⁶⁾
Vertex Aerospace LLC (Vertex)	December 1, 2003	\$ 650.0 ⁽⁶⁾⁽¹²⁾
Certain defense and aerospace assets of IPICOM, Inc.	December 10, 2003	\$ 27.5 ⁽⁶⁾

(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.

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
Acquired Businesses:				
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)		
<u>U.S. Government Contractors and Commercial Businesses Presentation</u>			
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 ⁽¹⁾
Commercial, primarily products	18.9	10.4	42.7 ⁽¹⁾
Consolidated	<u>\$ 581.0</u>	<u>\$ 454.0</u>	<u>\$ 275.3</u>
Operating margin ⁽²⁾ :			
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%
<u>Reportable Segment Presentation</u>			
Sales ⁽³⁾ :			
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	<u>1,622.4</u>	<u>1,474.1</u>	<u>1,036.8</u>
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 ⁽¹⁾
Training, Simulation & Support Services	111.6	96.5	65.7 ⁽¹⁾
Aviation Products & Aircraft Modernization	147.8	105.7	85.6 ⁽¹⁾
Specialized Products	<u>148.7</u>	<u>148.3</u>	<u>92.0⁽¹⁾</u>
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%

(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

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

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

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.

Secure Communications & ISR

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 AVCAATT 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.

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 AVCATT 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

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

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 (in millions)	Commissions and Other Offering Expenses	Net Proceeds	Semi-Annual Interest Payment Dates
<u>L-3 Communications</u>						
6 1/8% Senior Subordinated Notes due January 15, 2014	December 22, 2003	\$400.0	\$7.4	\$ 1.6	\$391.0 ⁽¹⁾	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 ⁽²⁾	January 15 and July 15
7 5/8% Senior Subordinated Notes due June 15, 2012	June 28, 2002	750.0	—	18.5	731.5 ⁽³⁾	June 15 and December 15
<u>L-3 Holdings</u>						
4% Senior Subordinated Convertible Contingent Debt Securities (CODES) due September 15, 2011 ⁽⁴⁾	October 24, 2001	420.0	—	12.8	407.2 ⁽⁵⁾	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 ⁽¹⁾	637.8	587.3	48.4	1.6	0.5
Other long-term liabilities ⁽²⁾	96.9	68.0 ⁽³⁾	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 ⁽¹⁾	Termination Date	Cash Proceeds Received at Termination ⁽²⁾				December 31, 2003	
						Interest Expense Reduction ⁽³⁾	Deferred Gain (Loss) ⁽⁴⁾	Total	Cumulative Recognized Deferred Gain (Loss) ⁽⁵⁾	Balance of Unamortized Deferred Gain (Loss) ⁽⁶⁾	
											(in millions)
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 3/4% 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.

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:

60

-
- 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;

61

-
- 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

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 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 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
------------------	-----------------------	------------------------

<i>Signals Intelligence</i>		Users
<ul style="list-style-type: none"> • Prime mission systems integration and sensor development 	<ul style="list-style-type: none"> • Signal processing, airborne radio frequency applications, antenna technology, real-time process control and software development 	<ul style="list-style-type: none"> • USAF Big Safari Fleet, Rivet Joint, Combat Sent, Cobraball and subsystems for U-2 and EP-3
<i>High Data Rate Communications</i>		
<ul style="list-style-type: none"> • Wideband data links and ground terminals 	<ul style="list-style-type: none"> • High performance, wideband secure communication links for relaying of intelligence and reconnaissance information 	<ul style="list-style-type: none"> • Manned aircraft, UAVs, naval ships, terminals and satellites
<i>Satellite Communication Terminals</i>		
<ul style="list-style-type: none"> • Ground-based satellite communication terminals and payloads 	<ul style="list-style-type: none"> • Interoperable, transportable ground terminals 	<ul style="list-style-type: none"> • Remote personnel provided with communication links to distant forces

Systems/Products	Selected Applications	Selected Platforms/End Users
<i>Satellite Communication Terminals</i>		
<ul style="list-style-type: none"> • Satellite communication and tracking system 	<ul style="list-style-type: none"> • On-board satellite external communications, video systems, solid state recorders and ground support equipment 	<ul style="list-style-type: none"> • International Space Station, Space Shuttle and various satellites
<ul style="list-style-type: none"> • Satellite command and control sustainment and support 	<ul style="list-style-type: none"> • Software integration, test and maintenance support satellite control network and engineering support for satellite launch system 	<ul style="list-style-type: none"> • U.S. Air Force Satellite Control Network and rocket launch system
<i>Military Communications</i>		
<ul style="list-style-type: none"> • Shipboard communications systems 	<ul style="list-style-type: none"> • Internal and external communications (radio room) 	<ul style="list-style-type: none"> • Naval vessels
<i>Information Security Systems</i>		
<ul style="list-style-type: none"> • Secure communication terminals and equipment 	<ul style="list-style-type: none"> • Secure and non-secure voice, data and video communication for office and battlefield utilizing Integrated Services Digital Network (ISDN) 	<ul style="list-style-type: none"> • 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

Engineering Development and Integration Support

• System Support	• C ³ 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 ³ I (Command, Control, Communication and Intelligence) systems and other engineering and technical services	• DoD, FAA and NASA
• Crisis Incident Management System	• Emergency operations support associated with natural disasters, industrial accidents and acts of terrorism	• Federal, state and local government agencies for homeland defense

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 C³ISR 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>		
• Solid state crash protected cockpit voice and flight data recorders	• 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	• Business and commercial aircraft and certain military transport aircraft; sold to both aircraft manufacturers and airlines under the Fairchild brand name
• TCAS (Traffic Alert and Collision Avoidance System)	• Reduce the potential for midair aircraft collisions by providing visual	• Commercial and business regional and military transport aircraft

	and audible warnings and maneuvering instructions to pilots	
• Advanced cockpit avionics	• Design, manufacture and supply quality pilot safety and situation awareness products	• Commercial and business regional and military transport aircraft
<i>Display Products</i>		
• Cockpit and mission displays and controls	• High performance, ruggedized flat panel and cathode ray tube displays and processors	• Military aircraft, including surveillance, fighters and bombers, attack helicopters, transport aircraft and land vehicles
<i>Aircraft Modernization</i>		
• 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 (T²CAS™), a safety avionics system that integrates aircraft performance-based Terrain Awareness Warning System (TAWS) capability into our TCAS. Unlike our competitors' products, T²CAS 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. T²CAS 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 T²CAS box and use existing power and wiring. T²CAS was certified by the FAA on February 11, 2003.

All of our TCAS products, including T²CAS, 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

71

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.

72

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">Airborne dipping sonarsSide scan sonarsSubmarine and surface ship towed arraysNaval and commercial power delivery and switching productsCommercial transfer switches, uninterruptible power supplies and power productsShipboard electronics racks, rugged computers, rugged displays and communication terminals	<ul style="list-style-type: none">Submarine detection and localizationSubmerged mine countermeasuresSubmarine and surface ship detection and localizationSwitching, distribution and protection, as well as frequency and voltage conversionProduction and maintenance of systems and high-speed switches for power interruption preventionRuggedized displays, computers and electronic systems	<ul style="list-style-type: none">Various military helicoptersU.S. Navy and foreign naviesU.S. Navy and foreign naviesAll naval combatants: submarines, surface ships and aircraft carriersFederal Aviation Administration, internet service providers, financial institutions and rail transportationNaval Vessels and other DoD applications
<i>Security Systems</i>		
<ul style="list-style-type: none">Explosives detection systemsSurveillance products	<ul style="list-style-type: none">Rapid scanning of passenger checked baggage and carry-on luggage, scanning of large cargo containersRemote surveillance for U.S. border and naval products	<ul style="list-style-type: none">Airports, embassies, federal and state facilities, customs, border patrolBorder Patrol, Immigration and Naturalization Service, U.S. Customs and U.S. Navy
<i>Telemetry, Instrumentation and Space Products</i>		
<ul style="list-style-type: none">Aircraft, missile and satellite telemetry and instrumentation systemsGlobal satellite communications systems	<ul style="list-style-type: none">Real-time data acquisition, measurement, processing, simulation, distribution, display and storage for flight testingSatellite transmission of voice, video and data	<ul style="list-style-type: none">Aircraft, missiles and satellitesRural telephony or private networks, direct to home uplinks, satellite news gathering and wideband applications
<i>Navigation Products</i>		
<ul style="list-style-type: none">GPS (Global Positioning Systems) receiversNavigation systems and subsystems, gyroscopes, reaction wheels, star sensor	<ul style="list-style-type: none">Location trackingSpace navigation	<ul style="list-style-type: none">Guided projectiles and precision munitionsHubble Space Telescope, Delta IV launch vehicle and satellites
<i>Premium Fuzing Products</i>		
<ul style="list-style-type: none">Fuzing Products	<ul style="list-style-type: none">Munitions and electronic and electro-mechanical safety and arming devices (ESADs)	<ul style="list-style-type: none">Various DoD and foreign military customers

73

Products	Selected Applications	Selected Platforms/ End Users
<i>Microwave Components</i>		
<ul style="list-style-type: none">Passive components, switches and wireless assemblies	<ul style="list-style-type: none">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)	<ul style="list-style-type: none">DoD, telephony service providers and original equipment manufacturers

- Safety products
- Satellite and wireless components (channel amplifiers, transceivers, converters, filters and multiplexers)
- Amplifiers and amplifier based components (amplifiers, up/down converters and Ka assemblies)
- Traveling wave tubes, power modules, klystrons and digital broadcast
- Radio frequency monitoring and measurement for safety
- Satellite transponder control, channel and frequency separation
- Automated test equipment military electronic warfare, ground and space communications
- Microwave vacuum electron devices and power modules to military and commercial markets
- Monitor cellular base station and industrial radio frequency emissions
- Communications satellites and wireless communications equipment
- DoD and commercial satellite operators
- DoD/Foreign, military-manned/unmanned platforms, various missile programs and commercial broadcast

Antenna Products

- Ultra-wide frequency and advanced radar antennas and rotary joints
- Precision antennas serving major military and commercial frequencies, including Ka band
- Surveillance and radar detection
- Antennas for high frequency, millimeter satellite communications
- Military aircraft including surveillance, fighters and bombers, attack helicopters and transport
- Various military and commercial customers including scientific astronomers

Training Devices and Motion Simulators

- Military Aircraft Flight Simulators
- Training for pilots, navigators, flight engineers, gunners and operators
- Military fixed and rotary winged aircraft and ground vehicles

Electro-Optical Sensors

- Targeted stabilized camera systems with integrated sensors and wireless communication systems
- Intelligence, Data Collection, Surveillance and Reconnaissance
- DoD, intelligence and security agencies, law enforcement, manned and unmanned platforms

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 (MFCS).

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.

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

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

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.

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
Secure Communication & ISR:		
Camden, NJ	—	575.0
Greenville, TX	—	3,043.5
Salt Lake City, UT	—	561.6
Training, Simulation & Support Services:		
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
Aviation Products & Aircraft Modernization:		
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
Specialized Products:		
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
Leer, Germany	32.2	33.2

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.

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,

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 ⁽¹⁾	58	Director
Thomas A. Corcoran ⁽¹⁾	59	Director
Robert B. Millard ⁽²⁾	53	Director
John M. Shalikashvili ⁽²⁾⁽³⁾	67	Director
Arthur L. Simon ⁽¹⁾⁽³⁾	71	Director
Alan H. Washkowitz ⁽²⁾⁽³⁾	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 ("C³I") 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 C³I 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

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 C³I 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 C³I 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 C³I 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 C³I 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

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 Officer)	2002	825,000	850,000	400,000	11,125
	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>

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 (\$) ⁽¹⁾	
			Exercisable	Unexercisable ⁽²⁾	Exercisable	Unexercisable ⁽²⁾
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.

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.

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.

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.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class ⁽¹⁾
Citigroup Inc. ⁽²⁾ 153 East 53rd Street New York, New York 10043.	12,646,127	12.0%
Robert V. LaPenta ⁽³⁾ 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	Percentage of Shares of Common
--------------------------	------------------------	--------------------------------

	Beneficially Owned ⁽¹⁾⁽²⁾	Stock Outstanding ⁽³⁾
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 ⁽⁴⁾	13,500	—
Robert B. Millard ⁽⁴⁾⁽⁵⁾⁽⁶⁾	144,623	—
John M. Shalikashvili ⁽⁴⁾	11,300	—
Arthur L. Simon ⁽⁴⁾	16,866	—
Alan H. Washkowitz ⁽⁴⁾⁽⁵⁾⁽⁷⁾	276,234	—
Directors and Executive Officers as a Group (11 persons) ⁽⁸⁾	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.

97

(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.

98

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.

99

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

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 SecuritiesSM (CODESSM) 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.

Antitlayering 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;

105

-
- 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:

106

-
- 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;

107

- 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.

6 1/8% Senior Subordinated Notes due 2013

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.

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 reinstated.

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 May 19, 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.

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 June 16, 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:

113

- 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

114

- 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

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

- 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.

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:

118

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
Reorganization Unit
101 Barclay Street – 7 East
New York, NY 10286
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 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.

119

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.

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;

124

- (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

125

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

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;"

- (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"),

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)

129

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.

130

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

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

132

-
- (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;

133

-
- (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:

134

- (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

135

- (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 obligations of each Guarantor under its Subsidiary Guarantee are limited so as not to constitute a fraudulent conveyance under applicable law.

136

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);

137

-
- (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.

138

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

139

-
- (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).

140

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

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).

Investors in the Global Exchange Note may hold their interests therein directly through DTC, if they are Participants in such system, or indirectly through organizations (including Euroclear and

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

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).

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

provision of information in connection with the Shelf Registration Statement. The Company and the Guarantors will use their reasonable best efforts to cause the applicable registration statement to be declared effective as 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 a "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.

146

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.

147

"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.

148

"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

"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.

150

"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:

151

- (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.

152

"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

153

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:

154

-
- (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.

155

"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;

- (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).

"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

158

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:

159

- (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

160

- 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").

161

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.

Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your United States federal income tax liability provided the required information is furnished to the Internal Revenue Service.

162

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

Report of Independent Auditors	F-2
Consolidated Balance Sheets as of December 31, 2003 and December 31, 2002	F-3
Consolidated Statements of Operations for the years ended December 31, 2003, 2002 and 2001	F-4
Consolidated Statements of Shareholders' Equity for the years ended December 31, 2003, 2002 and 2001	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002 and 2001	F-6
Notes to Consolidated Financial Statements	F-7

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

F-2

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

CONSOLIDATED BALANCE SHEETS

(in thousands, except per share data)

	December 31,	
	2003	2002
ASSETS		
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>
LIABILITIES AND SHAREHOLDERS' EQUITY		
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	2,457,300	1,847,752
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>
Total liabilities and shareholders' equity	<u>\$6,492,890</u>	<u>\$5,242,308</u>

See notes to consolidated financial statements.

F-3

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

Year Ended December 31,

	2003	2002	2001
Sales:			
Contracts, primarily U.S. Government	\$4,467,554	\$3,581,102	\$1,932,205
Commercial, primarily products	594,040	430,127	415,217
Total sales	5,061,594	4,011,229	2,347,422
Costs and expenses:			
Contracts, primarily U.S. Government	3,905,449	3,137,561	1,699,617
Commercial, primarily products:			
Cost of sales	384,727	270,800	252,790
Selling, general and administrative expenses	137,626	114,052	93,238
Research and development expenses	52,771	34,837	26,447
Total costs and expenses	4,480,573	3,557,250	2,072,092
Operating income	581,021	453,979	275,330
Interest and other income	215	4,921	1,739
Interest expense	132,683	122,492	86,390
Minority interest	3,515	6,198	4,457
Loss on retirement of debt	11,225	16,187	—
Income before income taxes and cumulative effect of a change in accounting principle	433,813	314,023	186,222
Provision for income taxes	156,173	111,556	70,764
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 tax benefit of \$6,428 (Note 5)	—	(24,370)	—
Net income	<u>\$ 277,640</u>	<u>\$ 178,097</u>	<u>\$ 115,458</u>

L-3 Holdings' earnings per common share:

Basic:

Income before cumulative effect of a change in accounting principle	\$ 2.89	\$ 2.33	\$ 1.54
Cumulative effect of a change in accounting principle	—	(0.28)	—
Net income	<u>\$ 2.89</u>	<u>\$ 2.05</u>	<u>\$ 1.54</u>

Diluted:

Income before cumulative effect of a change in accounting principle	\$ 2.71	\$ 2.18	\$ 1.47
Cumulative effect of a change in accounting principle	—	(0.25)	—
Net income	<u>\$ 2.71</u>	<u>\$ 1.93</u>	<u>\$ 1.47</u>

L-3 Holdings' weighted average common shares outstanding:

Basic	96,022	86,943	74,880
Diluted	<u>106,068</u>	<u>97,413</u>	<u>85,438</u>

See notes to consolidated financial statements.

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
For the Years Ended December 31, 2003, 2002 and 2001
(in thousands)

	L-3 Holdings' Common Stock		Additional Paid-in Capital	Retained Earnings	Unearned Compensation	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Par Value					
Balance December 31, 2000	67,213	\$672	\$ 515,254	\$186,272	\$ (2,457)	\$ (7,172)	\$ 692,569
Comprehensive income:							
Net income				115,458			115,458
Minimum pension liability, net of \$11,955 tax benefit						(19,519)	(19,519)
Foreign currency translation adjustment, net of \$164 tax benefit						(268)	(268)
Unrealized loss on securities, net of \$111 tax benefit						(180)	(180)
Unrealized loss on securities reclassified to net income from other comprehensive loss, net of \$2,274 tax expense						3,632	3,632
Unrealized losses on hedging instruments, net of \$100 tax benefit						(163)	(163)
							<u>98,960</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	<u>78,497</u>	<u>785</u>	<u>938,252</u>	<u>301,730</u>	<u>(3,205)</u>	<u>(23,670)</u>	<u>1,213,892</u>
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)
							<u>132,468</u>
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
							<u>274,102</u>
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	<u>97,077</u>	<u>\$971</u>	<u>\$1,892,517</u>	<u>\$757,467</u>	<u>\$ (3,622)</u>	<u>\$ (72,837)</u>	<u>\$2,574,496</u>

See notes to consolidated financial statements.

F-5

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2003	2002	2001
Operating activities:			
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	<u>530,300</u>	<u>415,849</u>	<u>283,468</u>
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	<u>(74,237)</u>	<u>(97,389)</u>	<u>(110,500)</u>
Net cash from operating activities	<u>456,063</u>	<u>318,460</u>	<u>172,968</u>
Investing activities:			
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	<u>(1,088,057)</u>	<u>(1,810,528)</u>	<u>(424,890)</u>
Financing activities:			
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	134,856	361,022	32,680
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.

F-6

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;

F-7

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

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;

F-8

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**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,

F-9

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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

F-10

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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

F-11

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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*

F-12

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)

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

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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.

F-15

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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	79,986
Long-term liabilities	12,894
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

F-16

**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,

F-17

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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

F-18

**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;

F-19

**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.

F-20

**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.

F-21

**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
Incurred costs ⁽¹⁾	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.

F-22

**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>\$277,640</u>	<u>\$178,097</u>	<u>\$149,357</u>
Basic EPS:				
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	<u>—</u>	<u>—</u>	<u>0.45</u>	
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>\$ 2.89</u>	<u>\$ 2.05</u>	<u>\$ 1.99</u>	
Diluted EPS:				
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	<u>—</u>	<u>—</u>	<u>0.40</u>	
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>\$ 2.71</u>	<u>\$ 1.93</u>	<u>\$ 1.87</u>	

F-23

**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.

	<u>Secure Communications & ISR</u>	<u>Training Simulation & Support Services</u>	<u>Aviation Products & Aircraft Modernization</u>	<u>Specialized Products</u>	<u>Consolidated Total</u>
Balance January 1, 2003	\$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)
Balance December 31, 2003	<u>\$726,880</u>	<u>\$480,890</u>	<u>\$1,350,818</u>	<u>\$1,093,848</u>	<u>\$3,652,436</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.

	<u>December 31, 2003</u>		
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Carrying Amount</u>
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>\$171,270</u>	<u>\$9,114</u>	<u>\$162,156</u>

	<u>December 31, 2002</u>		
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Carrying Amount</u>
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	2,000	60	1,940
Total	<u>\$92,651</u>	<u>\$2,504</u>	<u>\$90,147</u>

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.

F-24

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

	Amortization Expense
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.

	December 31,	
	2003	2002
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.

	December 31,	
	2003	2002
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>

F-25

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

	December 31,	
	2003	2002
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	<u>(220,411)</u>	<u>(191,483)</u>
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.

	December 31,	
	2003	2002
L-3 Communications:		
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>

L-3 Holdings:

5¼% Convertible Senior Subordinated Notes due 2009	298,370	300,000
4% Senior Subordinated Convertible Contingent Debt Securities due 2011 (CODES)	<u>420,000</u>	<u>420,000</u>
Principal amount of long-term debt	<u>2,468,370</u>	<u>1,850,000</u>
Less: Unamortized discounts	<u>(11,070)</u>	<u>(2,248)</u>
Carrying amount of long-term debt	<u>\$2,457,300</u>	<u>\$1,847,752</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

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)

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

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)

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.

F-28

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)

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 ⁽¹⁾	Termination Date	Cash Proceeds Received at Termination ⁽²⁾			December 31, 2003	
					Interest Expense Reduction ⁽³⁾	Deferred Gain (Loss) ⁽⁴⁾	Total	Cumulative Recognized Deferred Gain (Loss) ⁽⁵⁾	Balance of Unamortized Deferred Gain (Loss) ⁽⁶⁾
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 Notes due 2012	\$ 200,000	4.4%	June 2003	1,578	6,727	8,305	405	6,322
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

F-29

L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued) (Dollars in thousands, except per share data)

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:

F-30

L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued) (Dollars in thousands, except per share data)

- 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

F-31

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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 and 352,054 shares in 2002 of its common stock to the trustee of the ESPP. In January 2004, the Company issued 365,019 shares

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)
(Dollars in thousands, except per share data)**

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	(268)	3,452	(163)	(19,519)	(16,498)
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	65	—	(114)	(45,580)	(45,629)
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	(245)	—	896	(4,189)	(3,538)
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>

F-34

L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued) (Dollars in thousands, except per share data)

12. L- 3 Holdings Earnings Per Share

A reconciliation of basic and diluted earnings per share (EPS) is presented in the table below.

	Year Ended December 31,		
	2003	2002	2001
Basic:			
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>
Diluted:			
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	9,549	10,316	10,502
Income before cumulative effect of a change in accounting principle, including assumed conversion of Convertible Notes	287,189	212,783	125,960
Cumulative effect of a change in accounting principle, net of income taxes	—	(24,370)	—
Net income, including assumed conversion of Convertible Notes	<u>\$287,189</u>	<u>\$188,413</u>	<u>\$125,960</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	7,361	7,362	7,362
Common and potential common shares	<u>106,068</u>	<u>97,413</u>	<u>85,438</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.

F-35

L-3 COMMUNICATIONS HOLDINGS, INC. AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued) (Dollars in thousands, except per share data)

13. Income Taxes

Income before income taxes and cumulative effect of a change in accounting principle is summarized in the table below.

	Year Ended December 31,		
	2003	2002	2001
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.

	Year Ended December 31,		
	2003	2002	2001
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.

	Year Ended December 31,		
	2003	2002	2001
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

F-36

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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.

	December 31,	
	2003	2002
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	100,482	147,190
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

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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 <i>(in thousands)</i>	Weighted Average Exercise Price
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>

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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,

F-40

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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'

F-41

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

(Dollars in thousands, except per share data)

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

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)
(Dollars in thousands, except per share data)

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.

L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)
(Dollars in thousands, except per share data)

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
Change in benefit obligation:				
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>
Change in plan assets:				

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>
Funded status of the plans	\$(340,379)	\$(282,154)	\$(132,414)	\$(129,406)
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>
Amounts recognized in the balance sheets consist of:				
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.

	<u>2003</u>	<u>2002</u>
Accumulated benefit obligation	\$701,855	\$565,904
Fair value of plan assets	534,338	406,809

F-44

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

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.

	<u>Pension Plans</u>		<u>Postretirement Benefit Plans</u>	
	<u>2003</u>	<u>2002</u>	<u>2003</u>	<u>2002</u>
Benefit obligations				
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.

	<u>Pension Plans</u>			<u>Postretirement Benefit Plans</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
Components of net periodic benefit cost:						
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.

	<u>Pension Plans</u>			<u>Postretirement Benefit Plans</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
Net periodic benefit cost						
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)

**L-3 COMMUNICATIONS HOLDINGS, INC.
AND L-3 COMMUNICATIONS CORPORATION**

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.

<u>Asset Category</u>	<u>Range</u>
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	<u>2003</u>	<u>2002</u>
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	<u>100%</u>	<u>100%</u>

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.
AND L-3 COMMUNICATIONS CORPORATION**

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

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
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	—	—

F-47

**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
2003							
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
2002							
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
2001							
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.

F-48

**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.

	Year Ended December 31,		
	2003	2002	2001
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	853,321	575,010	419,884
Consolidated	<u>\$5,061,594</u>	<u>\$4,011,229</u>	<u>\$2,347,422</u>

Sales to principal customers are summarized in the table below.

	Year Ended December 31,		
	2003	2002	2001
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)	365,248	328,948	312,680
Consolidated	<u>\$5,061,594</u>	<u>\$4,011,229</u>	<u>\$2,347,422</u>

F-49

**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.

	Year Ended December 31,		
	2003	2002	2001
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	111,719	142,135	62,973
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	302,622	256,935	218,843
Subtotal Services	<u>1,008,596</u>	<u>826,286</u>	<u>597,029</u>
Intercompany eliminations	(115,409)	(64,077)	(17,444)
Consolidated	<u>\$5,061,594</u>	<u>\$4,011,229</u>	<u>\$2,347,422</u>

F-50

**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.

	March 31	June 30	September 30	December 31
2003				
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	<u>\$ 696,840</u>	<u>\$ 955,189</u>	<u>\$1,053,613</u>	<u>\$1,305,587</u>
Operating income	<u>\$ 71,307</u>	<u>\$ 97,688</u>	<u>\$ 127,387</u>	<u>\$ 157,597</u>
Income before cumulative effect of a change in accounting principle	\$ 29,279	\$ 31,640	\$ 61,760	\$ 79,788
Cumulative effect of a change in accounting principle, net of income taxes	(24,370)	—	—	—
Net income	<u>\$ 4,909</u>	<u>\$ 31,640</u>	<u>\$ 61,760</u>	<u>\$ 79,788</u>
Basic EPS:				
Income before cumulative effect of a change in accounting principle	\$ 0.37	\$ 0.40	\$ 0.66	\$ 0.84
Cumulative effect of a change in accounting principle	(0.31)	—	—	—
Net income	<u>\$ 0.06</u>	<u>\$ 0.40</u>	<u>\$ 0.66</u>	<u>\$ 0.84</u>
Diluted EPS:				

Income before cumulative effect of a change in accounting principle	\$	0.36	\$	0.38	\$	0.62	\$	0.79
Cumulative effect of a change in accounting principle		(0.30)		—		—		—
Net income	\$	<u>0.06</u>	\$	<u>0.38</u>	\$	<u>0.62</u>	\$	<u>0.79</u>

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.

F-51

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.

F-52

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 Holdings	L-3 Communications (Parent)	Guarantor Subsidiaries	Non- Guarantor Subsidiaries	Eliminations	Consolidated L-3 Communications
Condensed Combining Balance Sheets:						
At December 31, 2003:						
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	—	842,625	798,184	296,893	—	1,937,702
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	<u>2,574,496</u>	<u>2,574,496</u>	<u>3,729,131</u>	<u>597,606</u>	<u>(6,901,233)</u>	<u>2,574,496</u>
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>

At December 31, 2002:

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	<u>—</u>	<u>155,387</u>	<u>28,319</u>	<u>2,819</u>	<u>—</u>	<u>186,525</u>
Total current assets	<u>—</u>	<u>806,308</u>	<u>651,422</u>	<u>181,644</u>	<u>—</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	<u>2,202,202</u>	<u>2,202,202</u>	<u>2,643,120</u>	<u>497,691</u>	<u>(5,343,013)</u>	<u>2,202,202</u>
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>

F-53

**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>
<u>Condensed Combining Statements of Operations:</u>						
<u>For the year ended December 31, 2003:</u>						
Sales	\$ —	\$1,918,288	\$2,715,558	\$445,485	\$ (17,737)	\$5,061,594
Costs and expenses	<u>—</u>	<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>

For the year ended December 31, 2002:

Sales	\$ —	\$1,875,389	\$1,895,410	\$260,799	\$ (20,369)	\$4,011,229
Costs and expenses	<u>—</u>	<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>

For the year ended December 31, 2001:

Sales	\$ —	\$1,328,702	\$ 854,094	\$168,558	\$ (3,932)	\$2,347,422
Costs and expenses	<u>—</u>	<u>1,109,329</u>	<u>823,857</u>	<u>142,838</u>	<u>(3,932)</u>	<u>2,072,092</u>
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>

F-54

**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>
<u>Condensed Combining Statements of Cash Flows:</u>						
<u>For the year ended December 31, 2003:</u>						
Operating activities:						
Net cash from (used in) operating activities	\$ —	\$ 219,890	\$ 240,672	\$ (4,499)	\$ —	\$ 456,063
Investing activities:						
Acquisition of businesses, net of cash acquired	—	(53,626)	(869,863)	(90,950)		(1,014,439)
Other investing activities	(98,512)	(1,000,542)	(23,530)	(10,359)	1,059,325	(73,618)
Net cash used in investing activities	(98,512)	(1,054,168)	(893,393)	(101,309)	1,059,325	(1,088,057)
Financing activities:						
Proceeds from sale of senior subordinated notes	—	790,788	—	—	—	790,788
Redemption of senior subordinated notes	—	(187,650)		—	—	(187,650)
Other financing activities net	98,512	260,094	618,678	110,917	(1,059,325)	28,876
Net cash from financing activities	98,512	863,232	618,678	110,917	(1,059,325)	632,014
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>
<u>For the year ended December 31, 2002:</u>						
Operating activities:						
Net cash from operating activities	\$ —	\$ 137,837	\$ 169,221	\$ 11,402	\$ —	\$ 318,460
Investing activities:						
Acquisition of businesses, net of cash acquired	—	(146,913)	(1,499,891)	(95,329)	—	(1,742,133)
Other investing activities	(855,939)	(1,627,853)	(27,130)	(8,632)	2,451,159	(68,395)
Net cash used in investing activities	(855,939)	(1,774,766)	(1,527,021)	(103,961)	2,451,159	(1,810,528)
Financing activities:						
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	89,159	930,608	1,354,964	63,018	(2,451,159)	(13,410)
Net cash from financing activities	855,939	1,443,140	1,354,964	63,018	(2,451,159)	1,265,902
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>

F-55

**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>
<u>For the year ended December 31, 2001:</u>						
Operating activities:						
Net cash from operating activities	\$ —	\$ 104,169	\$ 30,014	\$ 38,785	\$ —	\$ 172,968
Investing activities:						
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)
Financing activities:						
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	<u>56,939</u>	<u>857,424</u>	<u>187,862</u>	<u>59,198</u>	<u>(1,164,781)</u>	<u>(3,358)</u>
Net cash from financing activities	<u>830,561</u>	<u>667,424</u>	<u>187,862</u>	<u>59,198</u>	<u>(1,164,781)</u>	<u>580,264</u>
Net increase (decrease) in cash	—	301,502	(9,323)	36,163	—	328,342
Cash and cash equivalents, beginning of the period	—	<u>18,708</u>	<u>4,911</u>	<u>9,061</u>	—	<u>32,680</u>
Cash and cash equivalents, end of the period	<u>\$ —</u>	<u>\$ 320,210</u>	<u>\$ (4,412)</u>	<u>\$ 45,224</u>	<u>\$ —</u>	<u>\$ 361,022</u>

F-56



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 JUNE 27, 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.

May 18, 2004

begin 644 html 9282713bcvlogo.jpg M_cX`02D9)1@!`0\$!(`\$@`~`__@`Z(\$EM86=E(&=E;F5R871E9"!B>2!! M;:&%D9&EN(\$=H;W-TGAKC[2YOCVO2-3,RMRUV=W1D><6F0MK6VIC5C@X+%!H@ED)\$20DY M2L,,\$\$9!1@`BQ@/GGA51\$555\$1\$5555Z1\$3[JJJOV1\$3KGN,9#&\$+\$E*5 M[1B\$-JO(0CW(UC&,:BN>][E1K6M15D=5Y+2W+(U" MQM:U[>5@S\$SQ)6IG;2CU[FXJ,]DC0HR3%"H99)0?4+&<:UNYF[W;Y8BQY M8-5-+KLH6MDX%&""YY(:|0^!;3TB+ ,9JT92XYSB<\$(,3X'G*!O1R%Z2B#@X M\$G).R).5=515M2T[E5"Z77&VK#7#5]G67%8/@SV^%[I\$9(S(^R2%V)/P'YH MY2).F\$G-Y6/9MI2TEN\$,Y,WZ=0/>CNB.3+NMY'X)T7DK<]>N4HST?A+6PIM6M8,E8]B\$FO5L^+46M@*1[QS?O8[6+ M&(^AZQA'8LAWS';%V!O6W7%0[6E<=H6\$O4F9,/,F\$ZDS]@(\LY`X"2G7N1J5* M4#/#C(3\$SDE8_%++""&,J@ MAJV@|4;""0!@;,\$0/JB-^)!>G2=>O67:ZJ=[^YU#.,;V6J^E`5R6844O9K#- M+33Q*B\A]N8P66A1B=KX'XQY#^&*;7!|XQDH)27[_G!>X?|UUNY0V[]<8L&EI M()0H;LI4TS@CX\$A!.H`ZJRQ&\$MTF9BE"D&"57LSM3XV*7"/O0"%T8Y"*\$B MU*E^<(UTW;KXQXD5+5ED.;R5D_\$@:X'+%C|B"G)V9&SGM^2L8]^3*,_@ MQCWY%ST[5:6V--;MC-SU6Y&HWM@5?,I#%9Z@ECFT7-4%9? 83*T8,X|NU. @ M"L8P(PO*MF="4+VW"3NC2[O7Y\$<%N>3:4Q5:U[93WGF1AKTBGAR" M*X14&G2K&*^)\WM;Z14#USZZRO+3]-WA'GO7]@O>%ZS5N/.8Z<9S1TU;Z&MU7 M8IXVO(E)ME#7>M?5RIY&D&._A18=@`65)-HEK'%],GTZ>.>ZX7Y!=GJ3KN] M:X5B4Q2X8^G>4A|P@`",7,S@`9B)\C3M@KR6!YC;VE<&1T'7G)65B`TTD0R#2A MB|PY:H!PR@!DQR,-D'"<<PD|@>/(\9Q=-S5R^4UJ%@[U*2EY']G\$FV ME"L.,Y]GE:FC<-*0Y'CQZK5[3I41>TZR`X')J%5O/F-P-070AR*]FXDV\$@ M#-:)SZ;26VX00&8%]801IU%&&43T5A6.<-Z*UZHLYN@CW]5_O9D\1O']&*4\!^AKDK_\`BV_7-1RX>5_O9D M\1O']&*^?2?&:W_P;_X@YP/EY_F_Y^_NW?`_.JFYU#|QS]^?^UO=Z+ M]?>+9+#MFQ+GV=D58%M%.D19-74)LV2Q=K9G^;R4QV5&256RR5:E2OY\$;64& M\$"124K;BWE2.*@D2IK1>FB+|QS|^? 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<([(TZ0^/ 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|]7)9TV"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-QCTD14]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;|XOF7^>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<(P8XQ^68 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%<FHNBC)-I:4BQX5F%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_`J@7AZ*#X^\\-N3D2=|4XQIAK975"QT^AS M5QM`Y:3.2DE`"*_`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./XSCC/[L_EX]8/=^_W_#;|O^\\A_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#>#QGV\\TUA: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:I6VIF?%)D|O|`Z,2UHY?|!#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(Q8SYJ)0G|W9%2P?OSG.K>KSKGTGJV;|+ MV? 3&N%+UM6!"`S"R\$%QE0=&T2MY;F)J`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>? R^|_`=R\$4_)=\$JVU^G.U.@VEJ)TU[K.9HJZGMJ5Y(LV|^XK/<[FTLY M/= _JI33-P3R0#B_`Q"QGPA&M;@N250X%)DQH3N9`RB.3?XYUR)2V/3F*QJ;1 M5S)=XM,(^RRF-NY12E.2Z,B\$;KPS.)1^TE,K|+7-RU,J+*5)R%)8#0@/)*_ MP; >Q>H/GT^H/J_-X M_\\H^&,Y<|?%H^%0-5(P M&R^B|K3C)LG29>+7D\$T3JG|A8'M%;/G*LY""IR;&5LDC4WHH:ZK&-Y='G|=\\ MV=R#M9G6#U-N,PIS4`?K:F.V5=-F-FX.P16WF"/UA72^_04CK.*.A688FED MSB5=2UYE3(^_O`63\$L|7&7""M3FJ;,O9=GNG>[*1V4V"MWKV|\$I|I-%>QR3* MD^AQ|3);A%R1^4Q>1..7^<5L|OTMBCG7;JYGRB2+TREC*Q(F1?(8+-*4;5A MG:6;LEM_)Y:LJS7#3I;J9LU:6NFU/78&=RVLMJS(PP6:_3URGSNHDUCD65`7 MER8V5[;GQZ7,;T`>2VR/QMTGG8KV;|?EN=E'7OL#M* MT;+SNO>MZT|V-.MN14|7^L..ND0CI[F7`YQ`VM"ZP-S3D&(92-.*%_124TIQ MC""8U:YFDX&IDAS;W8KWT%U]]]=O;\\VUE8+/L58L8J%]=JD;`]J%Z^Y^1_?K|V>|CI>I5JP`Q`V^&FBW4<^%\$S MEFI1M`H"*TFX,6"Y|L`P0%V)G(LH1OZ>8+4=,C_)OPZ+`ZMYC7 M]5> M[1.25X_-SQ\$[:;%(V2:L/T#&9(SK&5V/1FH1I]?=^H43:SWIU26[C:@^: MCZ[Z5O:KPL&:3+CH;>;M^:7*1OPG%/L/HH""BNA0A"TX0303H&/DJ,NC?E MR,)1_LVQZ`TVQ=_KMR9VD/AX^Q*AJ>J(<=Q2Q4@!4`JQDE%/89\$%US:S**? M!>LT^0FRSY;X7ENP_&G8=5V6XLM6QD&X-O;V|_];\$ (|;&JFS,I&MI;,Y+)+\$J"M)2.)U|6ZYM9;^B)=(5V""B2&J(HXDE3&NK^\\HTI MB8&R-KY\$7!=W=YI=H9L6P[3;;,518,4OF+0J@>PJ|G-FBI4YI%Y33)0|KQ4 MG`8'.4BZ_\$(|&CH=\$5%?NHES%)8>[O*^%OSKWG8#18E-/H=1-O=-/U)9 MK|M]J5J-4.H4KMA%2L1LR\$W|64!A;1`FLV84_+)4G9FQU,1HBA"^=O`*D1: M)!^4^4IKO&6J0%QHO?Y,|]#14T0L919NZ-G6%MK9|^6Y|G;02^N6IR);(@1 M>1Q_->"I=-T#;TPS#=-WU:1E!-\\."9^48\$4;B*)T,/1L9`_5+M;VPM_LPKK MKXU?|BY%N16&T%(V`Q`VCG>E%>PATUSV#C<\$GD[1RJM^_1R(AL=^UE09H^< M,L,M&#;#G|IF#|@U&I5+RS)^%.:G\$YW`U6Z,NR:FLMGV`V&1O=E+5R?7^:ZOT M!9L54VX^3W7(,BOY6|6G%YT0J7NL-6'1!+7BZ++8PQF^B4-*E.^D\$% [=E2] M9UC6-MGUK[W3.^J5C*34J%6E'(WKO0.H"2EJM=\$|B1F00)X<&Q1F|IL|QET- M1FMBM5@[,D9_VD1)&5G8)CUXU5<B^3J6-&*;WLT;BG8U)\$FJFP,Y8;Q9?Q` MM98H_*H!;:&+4K25HY|I77;J9M&J-#Z|4UTHURN`_;QC|%0&T)|9MF6E4=12XMCC4.D* M=GB^9B;-=9C>@3-48Q%D+<0P2!4-2Z!I%<86Z|&P>9V@45I%O;4,ON" &XW> MZY|]J1H.1;0VMX&IHN^H;\$%=R4LYT@L@BKK#&=Z6N52Y\$X.3(P,"_Z#>FV]Y=G*WC: SJ9LS7VT* [|"=%MWI3JALJGUZJ#5R^G\$VD89<]?WO&X5!HA M"H_)W6`3.3- [=G^XEL@T6R>!0KE24(XW^CVS#6Y)5S?/-)G^FKBX#5>Q"N]1MIM%QM6CKO6!#DVEA8GJ(C65@VZ5698398A4;NW7.(W9? D28"7A+DT*8MCIG9HY2G"D5LB,"5Z2,2 M'M.+*H!+&6U.CTS.C&6Z_L^K<_Y|]0W_`-G27^Y_`(4?XJ)U.?[EOS_VPD_N &AQQC/_9`end

begin 644 html_9282713covlogo.jpg M_C_X`02D9)1@!`0\$!(('\$@`\$__@`Z(\$EM86=E(&=E;F5R871E9"!B>2!! M;&%D9&EN(\$=H;W-T",G6:7_0`@\$!`\$\$\$ P\$!`~~~~~8\$!0@)0(`PK_Q`R M\$0`!!`% P(#!@<~~~~~"0,\$!0`&!Q\$2"!A%"(5%C\$C,T%"46\$)4E," MD?#Q_JH`#`,`!(1`Q\$`P"_QX!>/&&CQX88>0Q?-CSFKJZ+2BMJ8F^S; M3;1G:VA16*QYX5(.\$E]TERLDF1<0\$C?;(_P!Z%-MR;]'11/0;#+.]]6^>M,];]Q#DGGBU.@IMC"X>N(RN3:"=5M\$SDDKU9\$3HJS4W^>-4DDCX6T5^ MG?#5-VJ]4U^RV4VQ\3B*TI;>'(_MP3]RS>S.S:DALYDR[!DD/'Y,R4;J3?)ML&*7U:-6+=5?,S1SNHKHU22PLLLM]:N_P`#>'G5BBXH/DP3NXH*DV)`T/W M"0;J2KP0A)%%4"W%4399S5Y5MH66(NI^BBVF3(ND:-7MQ?BCL.P@2V0M(21'Q<=-Z/4G]D'=7NPK_P#R]TC"?&-<3XN M7\$PF-507@VCYXX#-6[MV@[G@.02JP7!!J/>ME'CO!.-B'BBFV[\$6WWTV02TNM)=L]E(%GD>LNDTS.5,?HMHZ+8F0=0^GO*6?(>BP6G)DFSM)KS[ZF9&@J(#NPHYC)]W>%#EQC>PY>SZ3@ M""R>I&,VF@W3E6S/ZM?Q&0MF!F2,E:\$]]=?D@ZDJ4Q!;9VV4%*YS]6+DW#` ML%H#OFNE9E4!E=A)@.C-&P:ND>[5M.(8=1=Z]?9_&;=95`H`(*)K8!2H3NL'M+=I*:]MF!=J_\$LZ6%9>B+V.V9#6\$UQ5<8@+4JQ3)"P5F3X-%)NL8)-9E!#M;3P)OL[R&?OF M\$^\$6Y7J[QNC)XTE(H^!)1^41PRCHFV>;,KA[&S>!1-1`:,]M*N%8V-AF:-+J M/7&FBSID"MR>+4#+,,\$B")KKO+U5)2&XVX8DS)OZR*\$VLE.-R+%Z9:.\$] MV4GCR**N&`=5#7%TU^V>PZSH>\$F(%17Z<.D&AAIHNH-()Z;;80*""X@2 M6;?5G+/.V`/#QX M>.,/CQXPP>/C#%9?XFZS2H#F_GVJV+E1LPLBX34E,ZI9UUR^95G%<89L ME]OGC?=MJ7FK\$C]K&,Z9=#VBFV<;I)XSM[!8G^GMQI_QRJS^6VWFF[XGBOB9M>AN;+,-5%AL&MJ61\$HNFEG?)_)\$6)-" Y593&,Y104=0)5MC;;,\$]G"R.F? MFIOICS)DQD^0@I(I(098*)#=#99@8Q=.5M"""]O@AHX*9_+T7RCUJA+=OH)"!*_#X&>W`#[\$7@9[H2BV74P>@J,OJZO.-2:L075+ESN_,%K4!?!YI6RKZ3T^ZLD_ %9<+OLP/3M6,&3ZDV_32F^VX.*=^S#W%7J5)<660WX\A%(QF!*2*&.[3(+C%R4C,2# M5S+BSP+6N\$]5>J"MTMHL:\$X#L!X]NU2U<+R+I210B7+0C:=<P4478%S5L M"Y\$0L\$G/-X:5!QK\D3B&(T99!3CIGH#?NY2>>,2Y\$!"A12.M@;#4[AENY\$8 M=<0ZC]\$O4-?] %9N-ZX9,(K&F)2QBBK!KB]9S#)-7Y^4P2:E%2Q9=16 MB*0\9&D<E(&X;1=MMHCV`\$)L215(\$5&R1&PQNRS=:3NH[I]LM\$DRG9Y&(M[:/1:=92J@J=2]/CLLPK8]I8ZJY@%^_L,RA`FNVMA(BV%i&5MMB834^UB&_- ME3E\,%9Y*;<\$%H44=K./X/WA.(B\$35VWVPUCDB\$QNP6S9;?Y_U-#DID6^FF MNV<Z)*:Z_3KC&/+`E>CX,*O2\$6X6E\T(H*HZ6A?LR!-!]>?DF[!1>.1.%8= M([?3C.VGY^&D+7.?JWU^XTWQCZ?+W;X>/"CRY8MQLP>/"C#QX>.,/"CQXPQB=V_RV`)YBM?GPXX;C5YN`^N+*W"6RNL9G8) MRD:A":3;Z5G898DSUV^3C;Y^MP57TOJ;C/F:LK`#+QV;0 M"F(-#Y6%<[HJ*#3>%=2C7"S=15NX2T=(;Y;N4%5\$+?9)PEOLFKKG.77D% M]"0RZ9K7!(5S_<+2DK-062?Q^5%X)[%C;O=NFKC<%)8Z<2RM^4DMM]=R0-MXR,BEM4WJ8;"2":XEY3&R`/%,%LS>2.3*B#DZ`&C@C[R\$>0DA("J8I[R0E7V M^?0JK-US9Y1A:2SKRMJLH2,[Q\W,SK@+(X-!F^VQ9)]@6C(V"I+.V.-#MTN1239\$1%HJ(FR^9QY\$Z>+I&WR[%DZ;Z_Z7S,KH!/QOE'6-2 MU#"2#]0]]C5T*1XCI.N&Y):<:;>]7.^`NJ:8W)^2W[1XK!EF/35C3/8(.BX%R-%H)-_KPT8#5W"R@YLS^PDQRIMAKJECZ?E4MK& M`!=!]U]J\$Q2`C2OMJY+3.M1RLEF)TQ)R:+1^5BDDDY^PY?ODH[%16KHN5=+KM[(LAS7=)LEE99N@KN/4K[F?<\$G7`"[8]B*5Q"S90V&L2SZZ&4=Q.3[1D.) M\$6]%(4TFCO`5!Z^?%7JJ#Z1%2B[.:D/M MJPI%S.-X0D1Z]5:45D;AP;!EMLAC-2]1K?D`HBT M%:RA,L]/=0NI=TLTMR`LERFZ-M.? M;:BQF6XAG:Q:![?1J(KZZ8QKKC&)&Q\>)H`"V" M@*""(" *?01%\$13]D1\$1,M:4K6TL+RTLKJVEO3[6XGS+2SG2"YR)MA82)/.V*##QX\>.,8\FNN.6(W;P[GV0])4("O@PHT1\$TJ9N"O1ELDUG^B*K!%MA7;V0H2UTN^2<(JL6Z0G9=ZDJFHU25TWUSGPL7KOE2H)_`ZHMCI:@:QM&6?A M,Q:N+!N.NX9.Y)A^IE%CD%\$I'(AIXGJ^6QE%ELU8;ZO%L92;;*J8^GRB/4D:MY:JRFNE^/87ZX;YZU]MEA^P&23,>)B5>V+%;>NYG)9V`+0FXJP[7C8%=""5 M2('I&"CU9G-QHYXUR4=(Y\$.?`VMDJD+6@6\)%B+X&U'7;>X"FC(D&)VU\$QGXF+;RD,MZ=R=J78&GH0IJLNX>*P5S]Q<`K;@;X:>\85S6I\$NDR7M7K=6[[*\$5<_`VX[@MKF^9BYUL^0IA=)3M#6\$OCEO!D+^CB^K.=\K8<],%?<89% M-Y]_"@GF[4ZPWL(8!P+"2'4+^MA\`VE2VVPX4NA&E2#ER44;[E]<.M,Q?9_MP?F!]G>VBH.,^7_T57,J]U'?&1<%I2KU8_"91.(UG0Q\QJ\$#14,W`F9\A` (M04)*#QJ^E+Z,"#S"#P@Z>*KL,7D9)T#0,0?109+;MJ"+\$Y[%#LYA#`0V;#` M3^9PB+!-I-)IA%&I\$VU<2**QN-Z,2`[(I&CP0("[:%B#MNPQEQQYPB)]E<@3Z M=QFKX)/SE-,*FD?9RV(0")7A6BV[@DS)C& MCIFZ`MUGR"BC1)1;2C-T=T6([MN;U<Z"JCH0K%:-]6/L%iRQI9)Z'LR)1=C M<"WK^GL?+UL`-8VS928W`RS`Y:TYF:PGH\$E["*+,_`"5%\$-V.=U_5?[_XG^,6Z>?:8%K`YC/=,=4:4`R#&@%J3ZN M'C\CV'1-R5JW:1,UD2\$*\$;MAAEE7PT_([)%EGD`=/L26+O\$519-1)SK]6K^7V].:=+\$]&T0A0"GR^W>"MNP!.H5!J7V:ZX TLC>08AVVVSG39KA+4QE;+MK790]O[VN=,=?#S95ZE55]ZPK][1Y[L>?^O.C.\97OTAS\$5,3*QH[`K!GBT M?8TK:UIU\$PC1@G*H.D09M=!+_>-F6;-8\$9&(-UGYQB&/31U--:<8TE`+*XN]M4D5(K)\$8H`C*`5K+D2,.8R*JRM#S4T[!";SB4 MKKW8""2PIC`ES`_\\$!8XQ;.[,]T`#7(G([OL1A;]=]'5[O,P,#C(GGFW:AFQ MV5*1[Z%WETQ9EM71(12ICGB\^PB]8ATS#.MZ.L1Q-4Y([!:'AI*DH7?3B"1*+J)E4M;3D#S> M&`GH9^R8.4U=#:IH2R+C]I*:67CQ?Q2?NIJIFO5LN]IIMGUO4C.P]7V;ZL.*E80: TO)*@VE:-0NVI)7964`A*48!98'2#&-S-V_A@8 M;E[,&3`RR&LS6A]+0BPQ?:K?LKD:XQT,5)USK`BK1[XM9A6O;LK:9C:[\$MC\$5\$W!\$K.7T=DA!M%!C%NU=.'9(XHQ8(MG"JCG71%3./&=(FFRV*/=NC>>.K+K>?`JY8FE-U=S[ZJN_(/W8:!)<^AE;*QVVSH>3"!*0(VK,FHIK(SHC@3%1N-& MP]82\$U73^88NW1SLOD686X_H")=1[2>]1;A^S)TQ`KKK8U:P]X+U6W*`-M?M#9(YE;=V,T;K;D6B@K#ECHDKLZ22PDIG5YU^_-\$7'4?T=R%3_--5R[H^7A/8 M`U,F^&NR^"9+5?;7J>)T]>RB^7G=)]/1<5FL>`HL64B:/97,R\T9.!#XK`*7`D6_8C7C#`_V3\`_end

