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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**FORM 10-K**

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2003

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file numbers 001-14141 and 333-46983

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

**L-3 COMMUNICATIONS CORPORATION**

(Exact names of registrants as specified in their charters)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**13-3937434 and 13-3937436**

(I.R.S. Employer Identification Nos.)

**600 Third Avenue, New York NY**

(Address of principal executive offices)

**10016**

(Zip Code)

**(212) 697-1111**

(Telephone number)

**Securities registered pursuant to Section 12(b) of the Act:**

**Title of each class**

L-3 Communications Holdings, Inc.  
common stock, par value \$0.01 per share

**Name of each exchange on which registered:**

New York Stock Exchange

**Securities registered pursuant to Section 12(g) of the Act:**

None.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is an accelerated filer (as defined in the Rule 12 b-2 of the Act) ☒ Yes ☐ No

The aggregate market value of the L-3 Communications Holdings, Inc. voting stock held by non-affiliates of the registrant as of June 27, 2003 was approximately \$3,896 million. For purposes of this calculation, the Registrants have assumed that their directors and executive officers are affiliates.

There were 105,338,853 shares of L-3 Communications Holdings, Inc. common stock with a par value of \$0.01 outstanding as of the close of business on February 27, 2004.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive proxy statement to be filed with Securities and Exchange Commission ("SEC") pursuant to Regulation 14A relating to the Registrant's Annual Meeting of Shareholders, to be held on April 27, 2004, will be incorporated by reference in Part III of this Form 10-K. Such proxy statement will be filed with the SEC not later than 120 days after the registrant's fiscal year ended December 31, 2003.

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

**INDEX TO ANNUAL REPORT ON FORM 10-K  
For the Year Ended December 31, 2003**

**PART I**

Item 1:	Business	1
Item 2:	Properties	25
Item 3:	Legal Proceedings	26
Item 4:	Submission of Matters to a Vote of Security Holders	27

**PART II**

Item 5:	Market for Registrant's Common Equity and Related Stockholder Matters	28
Item 6:	Selected Financial Data	29
Item 7:	Management's Discussion and Analysis of Results of Operations and Financial Condition	30
Item 7A:	Quantitative and Qualitative Disclosures about Market Risk	60
Item 8:	Financial Statements and Supplementary Data	60
Item 9:	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	60
Item 9A:	Controls and Procedures	60
PART III		
Item 10:	Directors and Executive Officers of the Registrant	62
Item 11:	Executive Compensation	62
Item 12:	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	62
Item 13:	Certain Relationships and Related Transactions	62
Item 14:	Principal Accounting Fees and Services	63
PART IV:		
Item 15:	Exhibits, Financial Statement Schedules and Reports on Form 8-K	63
Signatures		68

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## PART I

*For convenience purposes in this filing on Form 10-K, "L-3 Holdings" refers to L-3 Communications Holdings, Inc., and "L-3 Communications" refers to L-3 Communications Corporation, a wholly-owned operating subsidiary of L-3 Holdings. "L-3", "we", "us" and "our" refer to L-3 Holdings and its subsidiaries, including L-3 Communications.*

### Item 1. Business

L-3 Holdings, a Delaware corporation organized in 1997, derives all of its operating income and cash flow from its wholly-owned subsidiary, L-3 Communications. L-3 Communications, a Delaware corporation, was organized in April 1997. The only obligations of L-3 Holdings at December 31, 2003, were its 5¼% Convertible Senior Subordinated Notes due 2009, substantially all of which converted into L-3 Holdings' common stock in January 2004, and its 4% Senior Subordinated Convertible Contingent Debt Securities due 2011 (CODES), which are jointly and severally guaranteed by substantially all of its direct and indirect domestic subsidiaries, including L-3 Communications. L-3 Holdings also has guaranteed the indebtedness under the bank credit facilities of L-3 Communications. In order to generate the funds necessary to pay principal and interest on its indebtedness, L-3 Holdings relies on dividends and other payments from its subsidiaries or it must raise funds in public or private equity or debt offerings.

### 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:

- 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;
- 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

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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 reducing overhead expenses, consolidating certain of our businesses and business processes and increasing the productivity of our businesses.

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

capabilities to several closely aligned commercial business markets and applications such as transportation and broadband wireless communications and we expect to continue to explore other similar commercial opportunities.

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

**Capitalize on Strategic Acquisition Opportunities.** Recent U.S. defense industry consolidation has dramatically reduced the number of traditional middle-tier aerospace and defense companies, which are smaller than the five dominant prime system contractors and larger than the many smaller publicly and privately owned companies, as well as the non-core aerospace and defense businesses of the prime contractors. We intend to enhance our existing product base through internal research and development efforts and selective acquisitions that will add new products in areas that complement our present technologies. We intend to continue acquiring select, smaller publicly and privately owned companies, as well as non-core aerospace and defense businesses of larger companies, that exhibit the following criteria:

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

#### Selected Recent Acquisitions

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

Business	Date Acquired	Acquired From	Purchase Price (\$ millions)	Business Description
Avionics Systems	March 28, 2003	Goodrich Corporation	\$188.7	Develops and manufactures innovative avionics solutions for substantially all segments of the aviation market, and sells its products to the military, business jet, general aviation, rotary wing aircraft and air transport markets.
Aeromet, Inc.	May 30, 2003	Aeromet, Inc. Shareholders	\$17.5	Designs, develops and integrates infrared and optical systems for airborne ISR.

Business	Date Acquired	Acquired From	Purchase Price (\$ millions)	Business Description
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.
Military Aviation Services	October 31, 2003	Bombardier, Inc.	\$ 87.4	Provides systems engineering support and avionics modernization, and provides a full range of technical

				services in the areas of aircraft maintenance, repair and upgrade for military aircraft and business and regional jets and the refurbishment and modernization of selected commercial aircraft.
Vertex Aerospace LLC	December 1, 2003	Veritas Capital	\$650.0	Provider of aerospace and other technical services to the U.S. Department of Defense and other government agencies. Services include logistics support, fixed and rotary wing aircraft modernization and maintenance, supply chain management and pilot training. Support for tactical, cargo and utility aircraft and other defense-related platforms.

## Products and Services

### Secure Communications & ISR

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

Systems/Products	Selected Applications	Selected Platforms/End Users
<i>Signals Intelligence</i>		
<ul style="list-style-type: none"> <li>Prime mission systems integration and sensor development</li> </ul>	<ul style="list-style-type: none"> <li>Signal processing, airborne radio frequency applications, antenna technology, real-time process control and software development</li> </ul>	<ul style="list-style-type: none"> <li>USAF Big Safari Fleet, Rivet Joint, Combat Sent, Cobraball and subsystems for U-2 and EP-3</li> </ul>
<i>High Data Rate Communications</i>		
<ul style="list-style-type: none"> <li>Wideband data links and ground terminals</li> </ul>	<ul style="list-style-type: none"> <li>High performance, wideband secure communication links for relaying of intelligence and reconnaissance information</li> </ul>	<ul style="list-style-type: none"> <li>Manned aircraft, UAVs, naval ships, terminals and satellites</li> </ul>
<i>Satellite Communication Terminals</i>		
<ul style="list-style-type: none"> <li>Ground-based satellite communication terminals and payloads</li> </ul>	<ul style="list-style-type: none"> <li>Interoperable, transportable ground terminals</li> </ul>	<ul style="list-style-type: none"> <li>Remote personnel provided with communication links to distant forces</li> </ul>
<i>Space Communication and Satellite Control</i>		
<ul style="list-style-type: none"> <li>Satellite communication and tracking system</li> </ul>	<ul style="list-style-type: none"> <li>On-board satellite external communications, video systems, solid state recorders and ground support equipment</li> </ul>	<ul style="list-style-type: none"> <li>International Space Station, Space Shuttle and various satellites</li> </ul>
<ul style="list-style-type: none"> <li>Satellite command and control sustainment and support</li> </ul>	<ul style="list-style-type: none"> <li>Software integration, test and maintenance support satellite control network and engineering support for satellite launch system</li> </ul>	<ul style="list-style-type: none"> <li>U.S. Air Force Satellite Control Network and rocket launch system</li> </ul>
<i>Military Communications</i>		
<ul style="list-style-type: none"> <li>Shipboard communications systems</li> </ul>	<ul style="list-style-type: none"> <li>Internal and external communications (radio room)</li> </ul>	<ul style="list-style-type: none"> <li>Naval vessels</li> </ul>
<i>Information Security Systems</i>		
<ul style="list-style-type: none"> <li>Secure communication terminals and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Secure and non-secure voice, data and video communication for office and battlefield utilizing Integrated Services Digital Network (ISDN)</li> </ul>	<ul style="list-style-type: none"> <li>U.S. Armed services, intelligence and security agencies</li> </ul>

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.

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

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

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

#### Aviation Products & Aircraft Modernization

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

Systems/Products	Selected Applications	Selected Platforms/End Users
<i>Aviation Products</i>		
• 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 and audible warnings and maneuvering instructions to pilots	• Commercial and business regional and military transport aircraft
• Advanced cockpit avionics	• Design, manufacture and supply quality pilot safety and situation awareness products	• Commercial and business regional and military transport aircraft

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

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

Advanced Cockpit Avionics

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

Display Products

We design, develop and manufacture ruggedized displays for military and high-end commercial applications. Our current product lines include a family of high performance display processing systems, which use either a cathode ray tube or an active matrix liquid crystal display. Our displays are used in numerous airborne, ship-board and ground-based platforms and are designed to survive in military and harsh environments.

Aircraft Modernization

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

Specialized Products

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

Products	Selected Applications	Selected Platforms/End Users
<i>Naval Warfare Products</i>		
• Airborne dipping sonars	• Submarine detection and localization	• Various military helicopters
• Side scan sonars	• Submerged mine countermeasures	• U.S. Navy and foreign navies
• Submarine and surface ship towed arrays	• Submarine and surface ship detection and localization	• U.S. Navy and foreign navies
• Naval and commercial power delivery and switching products	• Switching, distribution and protection, as well as frequency and voltage conversion	• All naval combatants: submarines, surface ships and aircraft carriers
• Commercial transfer switches, uninterruptible power supplies and power products	• Production and maintenance of systems and high-speed switches for power interruption prevention	• Federal Aviation Administration, internet service providers, financial institutions and rail transportation
• Shipboard electronics racks, rugged computers, rugged displays and communication terminals	• Ruggedized displays, computers and electronic systems	• Naval Vessels and other DoD applications
<i>Security Systems</i>		
• Explosives detection systems	• Rapid scanning of passenger checked	• Airports, embassies, federal and

	baggage and carry-on luggage, scanning of large cargo containers	state facilities, customs, border patrol
• Surveillance products	• Remote surveillance for U.S. border and naval products	• Border Patrol, Immigration and Naturalization Service, U.S. Customs and U.S. Navy
<i>Telemetry, Instrumentation and Space Products</i>		
• Aircraft, missile and satellite telemetry and instrumentation systems	• Real-time data acquisition, measurement, processing, simulation, distribution, display and storage for flight testing	• Aircraft, missiles and satellites
• Global satellite communications systems	• Satellite transmission of voice, video and data	• Rural telephony or private networks, direct to home uplinks, satellite news gathering and wideband applications
<i>Navigation Products</i>		
• GPS (Global Positioning Systems) receivers	• Location tracking	• Guided projectiles and precision munitions
• Navigation systems and subsystems, gyroscopes, reaction wheels, star sensor	• Space navigation	• Hubble Space Telescope, Delta IV launch vehicle and satellites
<i>Premium Fuzing Products</i>		
• Fuzing Products	• Munitions and electronic and electro-mechanical safety and arming devices (ESADs)	• Various DoD and foreign military customers

<b>Products</b>	<b>Selected Applications</b>	<b>Selected Platforms/End Users</b>
<i>Microwave Components</i>		
• Passive components, switches and wireless assemblies	• 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)	• DoD, telephony service providers and original equipment manufacturers
• Safety products	• Radio frequency monitoring and measurement for safety	• Monitor cellular base station and industrial radio frequency emissions
• Satellite and wireless components (channel amplifiers, transceivers, converters, filters and multiplexers)	• Satellite transponder control, channel and frequency separation	• Communications satellites and wireless communications equipment
• Amplifiers and amplifier based components (amplifiers, up/down converters and Ka assemblies)	• Automated test equipment military electronic warfare, ground and space communications	• DoD and commercial satellite operators
• Traveling wave tubes, power modules, klystrons and digital broadcast	• Microwave vacuum electron devices and power modules to military and commercial markets	• DoD/Foreign, military-manned/unmanned platforms, various missile programs and commercial broadcast
<i>Antenna Products</i>		
• Ultra-wide frequency and advanced radar antennas and rotary joints	• Surveillance and radar detection	• Military aircraft including surveillance, fighters and bombers, attack helicopters and transport
• Precision antennas serving major military and commercial frequencies, including Ka band	• Antennas for high frequency, millimeter satellite communications	• Various military and commercial customers including scientific astronomers
<i>Training Devices and Motion Simulators</i>		

<ul style="list-style-type: none"> <li>• Military Aircraft Flight Simulators</li> </ul>	<ul style="list-style-type: none"> <li>• Training for pilots, navigators, flight engineers, gunners and operators</li> </ul>	<ul style="list-style-type: none"> <li>• Military fixed and rotary winged aircraft and ground vehicles</li> </ul>
<i>Electro-Optical Sensors</i> <ul style="list-style-type: none"> <li>• Targeted stabilized camera systems with integrated sensors and wireless communication systems</li> </ul>	<ul style="list-style-type: none"> <li>• Intelligence, Data Collection, Surveillance and Reconnaissance</li> </ul>	<ul style="list-style-type: none"> <li>• DoD, intelligence and security agencies, law enforcement, manned and unmanned platforms</li> </ul>

*Naval Warfare Products*

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

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

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

*Telemetry, Instrumentation and Space Products*

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

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

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

*Navigation Products*

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

*Microwave Components*

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

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

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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>.

## Item 2. Properties

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

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

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### Item 3. 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. 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 these matters.

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

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

provision of maintenance services to Air Midwest. Based on the availability of insurance and the indemnification from Air Midwest, we do not believe we will have a material liability in this matter.

#### Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.

## PART II

#### Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

##### Price Range of Common Stock

The common stock of L-3 Holdings is traded on the New York Stock Exchange (the "NYSE") under the symbol "LLL". The following table sets forth, for each of the quarterly periods indicated, the high and low closing price of the common stock as reported on the NYSE.

	Price Range of Common Stock	
	High	Low
<b>Fiscal Year Ended December 31, 2002:</b>		
Quarter Ended:		
March 31, 2002	\$58.23	\$44.09
June 30, 2002	65.99	51.35
September 30, 2002	57.50	42.29
December 31, 2002	53.75	41.09
<b>Fiscal Year Ended December 31, 2003:</b>		
Quarter Ended:		
March 31, 2003	\$47.90	\$35.60
June 30, 2003	46.22	36.24
September 30, 2003	51.09	42.35
December 31, 2003	51.60	43.57

On February 27, 2004, the closing price of L-3 Holdings common stock, as reported by the NYSE, was \$53.52 per share and the number of holders of L-3 Holdings' common stock was approximately 75,000.

L-3 Communications is a wholly owned subsidiary of L-3 Holdings.

##### Equity Compensation Plan Information

The table below sets forth information with respect to shares of L-3 Holdings common stock that may be issued under our equity compensation plans as of December 31, 2003.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	10,399,327 <sup>(1)</sup>	\$ 28.41 <sup>(2)</sup>	954,914
Equity compensation plans not approved by security holders	—	—	—
Total	<u>10,339,327</u>	<u>\$ 28.41</u>	<u>954,914</u>

(1) Includes the 1999 Long-term Performance Plan and the 1997 Stock Option Plan. Included in column (a) are restricted stock awards of 315,544 shares.

(2) The calculation of the weighted average exercise price excludes the effect of the restricted stock awards of 315,544 shares, which have been granted to employees at no cost.

##### Dividend Policy

On January 26, 2004, L-3 Holdings announced that its Board of Directors had declared L-3's first quarterly cash dividend of \$0.10 per share, payable on 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.

#### Item 6. 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 in the Form 10-K. 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 in the Form 10-K. 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, except per share data)				
Statement of Operations Data:					
Sales	\$5,061.6	\$4,011.2	\$2,347.4	\$1,910.1	\$1,405.5
Operating income	581.0	454.0	275.3 <sup>(1)</sup>	222.7 <sup>(1)</sup>	150.5 <sup>(1)</sup>
Interest and other income	0.2	5.0	1.8	4.4	5.5
Interest expense	132.7	122.5	86.4	93.0	60.6
Loss on retirement of debt	11.2	16.2	—	—	—
Minority interest	3.5	6.2	4.4	—	—
Provision for income taxes	156.2	111.6	70.8	51.4	36.7
Income before cumulative effect of a change in accounting principle	277.6	202.5	115.5	82.7	58.7
Cumulative effect of a change in accounting principle	—	(24.4)	—	—	—
Net income	<u>\$ 277.6</u>	<u>\$ 178.1</u>	<u>\$ 115.5<sup>(2)</sup></u>	<u>\$ 82.7<sup>(2)</sup></u>	<u>\$ 58.7<sup>(2)</sup></u>
Earnings per common share:					
Basic:					
Income before cumulative effect of a change in accounting principle	\$ 2.89	\$ 2.33	\$ 1.54 <sup>(3)</sup>	\$ 1.24 <sup>(3)</sup>	\$ 0.91 <sup>(3)</sup>
Cumulative effect of a change in accounting principle	—	(0.28)	—	—	—
Net income	<u>\$ 2.89</u>	<u>\$ 2.05</u>	<u>\$ 1.54<sup>(3)</sup></u>	<u>\$ 1.24<sup>(3)</sup></u>	<u>\$ 0.91<sup>(3)</sup></u>
Diluted:					
Income before cumulative effect of a change in accounting principle	\$ 2.71	\$ 2.18	\$ 1.47 <sup>(3)</sup>	\$ 1.18 <sup>(3)</sup>	\$ 0.88 <sup>(3)</sup>
Cumulative effect of a change in accounting principle	—	(0.25)	—	—	—
Net income	<u>\$ 2.71</u>	<u>\$ 1.93</u>	<u>\$ 1.47<sup>(3)</sup></u>	<u>\$ 1.18<sup>(3)</sup></u>	<u>\$ 0.88<sup>(3)</sup></u>
Weighted average common shares outstanding:					
Basic	96.0	86.9	74.9	66.7	64.2
Diluted	106.1	97.4	85.4	69.9	67.0
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.

(3) Basic earnings per share, as adjusted to exclude goodwill amortization expense, was \$1.99 in 2001, \$1.68 in 2000 and \$1.19 in 1999. Diluted earnings per share, as adjusted, was \$1.87 in 2001, \$1.61 in 2000 and \$1.14 in 1999.

## Item 7. 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 (i) the DoD budget and DoD spending for all defense weapons platforms and programs do not grow or decline at the same rate, (ii) there are timing differences between DoD budget authority and actual DoD spending, (iii) 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 (iv) 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 <sup>(1)</sup>	<u>\$364.6</u>	<u>\$375.2</u>	<u>\$401.7</u>	<u>\$422.6</u>	<u>\$443.8</u>	<u>\$465.6</u>	<u>\$487.6</u>	5.4%
DoD								
Investment								
account <sup>(1)</sup>	<u>\$126.8</u>	<u>\$139.6</u>	<u>\$143.8</u>	<u>\$151.4</u>	<u>\$161.3</u>	<u>\$176.7</u>	<u>\$184.7</u>	5.8%

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

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

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

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

## Acquisitions

A significant component of our growth strategy has been to enhance our existing product base through selective acquisitions that will add new products in areas that complement our present technologies. We intend to continue acquiring select smaller publicly and privately owned companies, as well as non-core aerospace and defense businesses of larger companies, that (i) exhibit significant market position(s) in their business area(s), (ii) offer products that complement and/or extend our product offerings, and (iii) 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 <sup>(1)</sup> (in millions)
KDI Precision Products	May 4, 2001	\$ 78.9
EER Systems	May 31, 2001	\$ 124.4
Spar Aerospace Limited	November 23, 2001	\$ 146.8
Emergent Government Services Group	November 30, 2001	\$ 39.0 <sup>(2)</sup>
BT Fuze Products	December 19, 2001	\$ 51.1
SY Technology (SY)	December 31, 2001	\$ 61.5
Aircraft Integration Systems (AIS) business of Raytheon Company	March 8, 2002	\$1,148.7 <sup>(3)</sup>
Detection Systems	June 14, 2002	\$ 110.0 <sup>(4)</sup>
Telos Corporation (a California Corporation)	July 19, 2002	\$ 22.3
ComCept, Inc.	July 31, 2002	\$ 30.1 <sup>(5)</sup>
Technology, Management and Analysis Corporation (TMA)	September 23, 2002	\$ 53.4 <sup>(6)(7)</sup>
Electron Devices and Displays-Navigation Systems – San Diego businesses of Northrop Grumman	October 25, 2002	\$ 135.6 <sup>(8)</sup>
Wolf Coach, Inc.	October 31, 2002	\$ 5.4 <sup>(9)</sup>
International Microwave Corporation (IMC)	November 8, 2002	\$ 41.1
Westwood Corporation	November 13, 2002	\$ 22.1
Wescam Inc.	November 21, 2002	\$ 124.3
Ship Analytics, Inc.	December 19, 2002	\$ 18.0 <sup>(10)</sup>
Avionics Systems business of Goodrich Corporation	March 28, 2003	\$ 188.7 <sup>(11)</sup>
Aeromet, Inc.	May 30, 2003	\$ 17.5 <sup>(6)</sup>
Klein Associates Inc.	September 30, 2003	\$ 30.0 <sup>(6)</sup>
Military Aviation Services business of Bombardier, Inc. (MAS)	October 31, 2003	\$ 87.4 <sup>(6)</sup>
Vertex Aerospace LLC (Vertex)	December 1, 2003	\$ 650.0 <sup>(6)(12)</sup>
Certain defense and aerospace assets of IPICOM, Inc.	December 10, 2003	\$ 27.5 <sup>(6)</sup>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Critical Accounting Policies

Our significant accounting policies are described in Note 2 to the consolidated financial statements. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and costs and expenses during the reporting period. The most significant of these estimates and assumptions relate to (i) contract revenues and profit recognition, (ii) market values for inventories reported at lower of cost or market, (iii) pension and postretirement benefit obligations, (iv) valuation of long-lived assets, including identifiable intangible assets and goodwill, (v) income taxes, including the valuations of deferred tax assets, (vi) litigation reserves, and (vii) 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

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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

payments, working capital changes, and capital expenditures, as well as, expected growth rates for cash flows and long-term interest rates, all of which are impacted by economic conditions related to the industries in which we operate as well as conditions in the U.S. capital markets. A decline in estimated fair value of a reporting unit could result in an unexpected impairment charge to goodwill, which could have a material adverse effect on our business, financial condition and results of operations.

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

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

## Results of Operations

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

**Presentation of Sales and Costs and Expenses.** L-3 presents its sales and costs and expenses in two categories on the statement of operations, "Contracts, primarily U.S. Government" and "Commercial, primarily products." This categorization is based on how revenue is recognized. Sales and costs and expenses for L-3's businesses that are primarily U.S. Government contractors are presented as "Contracts, primarily U.S. Government." The sales for L-3's U.S. Government contractor businesses are transacted using written contractual arrangements for products and services according to the specifications provided by the customer and are within the scope of SOP 81-1, ARB 43 and ARB 45. Sales reported under "Contracts, primarily U.S. Government" also include certain sales by L-3's U.S. Government contractor businesses transacted using contracts for domestic and foreign commercial customers, which also are within the scope of SOP 81-1 and ARB 45. Sales and costs and expenses for L-3's businesses whose customers are primarily commercial business enterprises are presented as "Commercial, primarily products." These sales are recognized in accordance with SAB No. 104, and are not within the scope of SOP 81-1, ARB 43 or ARB 45. L-3's commercial businesses are substantially comprised of Aviation Communication & Surveillance Systems (ACSS), Aviation Recorders, Microwave Components, Detection Systems and Avionics Systems.

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

	Year Ended December 31,		
	2003	2002	2001
	(in millions)		
<b><u>U.S. Government Contractors and Commercial Businesses Presentation</u></b>			
Sales:			
Contracts, primarily U.S. Government	\$4,467.6	\$3,581.1	\$1,932.2
Commercial, primarily products	594.0	430.1	415.2
Consolidated	<u>\$5,061.6</u>	<u>\$4,011.2</u>	<u>\$2,347.4</u>
Operating income:			
Contracts, primarily U.S. Government	\$ 562.1	\$ 443.6	\$ 232.6 <sup>(1)</sup>
Commercial, primarily products	18.9	10.4	42.7 <sup>(1)</sup>
Consolidated	<u>\$ 581.0</u>	<u>\$ 454.0</u>	<u>\$ 275.3</u>
Operating margin <sup>(2)</sup> :			
Contracts, primarily U.S. Government	12.6%	12.4%	12.0%
Commercial, primarily products	3.2%	2.4%	10.3%
Consolidated	11.5%	11.3%	11.7%

**Reportable Segment Presentation**

Sales <sup>(3)</sup> :			
Secure Communications & ISR	\$1,439.4	\$1,053.3	\$ 450.5
Training, Simulation & Support Services	980.2	806.3	596.8
Aviation Products & Aircraft Modernization	1,019.6	677.5	263.3
Specialized Products	<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 <sup>(1)</sup>
Training, Simulation & Support Services	111.6	96.5	65.7 <sup>(1)</sup>
Aviation Products & Aircraft Modernization	147.8	105.7	85.6 <sup>(1)</sup>
Specialized Products	<u>148.7</u>	<u>148.3</u>	<u>92.0<sup>(1)</sup></u>
Consolidated	<u>\$ 581.0</u>	<u>\$ 454.0</u>	<u>\$ 275.3</u>
Operating margin <sup>(2)</sup> :			
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) for the early retirement of \$180 million of our 8% 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) 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.

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. 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.

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 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 sale 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

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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

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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

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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.

Basic EPS before cumulative effect of a change in accounting principle increased \$0.79 to \$2.33 for 2002 from \$1.54 for 2001. 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 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%. Basic EPS was \$2.05 and 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.

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 our common stock effective May 2, 2001, and the sale of 14.0 million shares of our common stock effective June 28, 2002.

The 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.

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## **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 AVCATT contract.

## Liquidity and Capital Resources

### Balance Sheet

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

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

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

L-3's billed receivables, net of uncollectible account allowances, increased by \$68.9 million to \$637.3 million at December 31, 2003, compared to \$568.4 million at December 31, 2002. The increase in billed receivables was from L-3's U.S. Government contractor businesses and related to organic sales growth, as well as the Vertex and MAS business acquisitions. The uncollectible accounts allowance increased by

\$12.4 million to \$25.2 million at December 31, 2003, compared to \$12.8 million at December 31, 2002, and was for receivables from L-3's commercial businesses. Our U.S. Government and foreign government customers, which generated 86.3% of L-3's sales for 2003, present very low uncollectible account risks due to their high credit quality, and therefore, generally require no uncollectible account allowances.

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

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

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

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 (i) \$796.2 million for acquisitions completed during 2003, (ii) \$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 (iii) \$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

47

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.

48

## 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 (in millions)	2001
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 AVCAIT 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.

50

**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.

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

(1) The net proceeds from this offering were used to repay \$275.0 million of borrowings outstanding under our senior credit facilities and to increase cash and cash equivalents.

(2) The net proceeds from this offering were used to redeem the 8 1/2% Senior Subordinated Notes due 2008 and to increase cash and cash equivalents.

(3) The net proceeds from this offering and the concurrent sale of 14.0 million shares of our 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

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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, we announced that our Board of Directors had declared our 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

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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 (i) repay \$500.0 million borrowed on March 8, 2002, under our senior subordinated bridge loan facility, (ii) repay the indebtedness outstanding under our senior credit facilities, (iii) repurchase and redeem the 10 3/8% Senior Subordinated Notes due 2007 discussed above and (iv) increase cash and cash equivalents.

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

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

Based upon our current level of operations, we believe that our cash from operating activities, together with available borrowings under the senior credit facilities, will be adequate to meet our anticipated requirements for working capital, capital expenditures, commitments, research and development expenditures, contingent purchase prices, program and other discretionary investments, and interest payments for the foreseeable future. There can be no assurance, however, that our business will continue to generate cash flow at current levels, or that currently

anticipated improvements will be achieved. If we are unable to generate sufficient cash flow from operations to service our debt, we may be required to sell assets, reduce capital expenditures, refinance all or a portion of our existing debt or obtain additional financing. Our ability to make scheduled principal payments or to pay interest on or to refinance our indebtedness depends on our future performance and financial results, which, to a certain extent, are subject to general conditions in or affecting the defense industry and to general economic, political, financial, competitive, legislative and regulatory factors beyond our control. There can be no assurance that sufficient funds will be available to enable us to service our indebtedness, to make necessary capital expenditures and to make discretionary investments.

### **Contractual Obligations**

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

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

(1) Represents open purchase orders at December 31, 2003 for amounts expected to be paid for goods or services that are legally binding on us.

(2) Other long-term liabilities primarily consists of workers compensation, deferred compensation and litigation settlement accruals for the years ending December 31, 2005 and thereafter and also includes pension and postretirement benefit plan contributions that we expect to pay in 2004.

(3) Our pension and postretirement benefit plan funding policy is generally to contribute in accordance with cost accounting standards that affect government contractors, subject to the Internal Revenue Code and regulations thereon. During 2002 and 2003, U.S. Congress had granted plan sponsors an interest rate reduction for calculating minimum pension plan contributions. For 2004, we expect to contribute approximately \$55.0 million to our pension plans, assuming the extension of such interest

rate reduction, or \$75.0 million if the interest rate reduction is not extended and \$13.0 million to our postretirement benefit plans. Due to the current uncertainty of the amounts used to compute our expected pension and postretirement benefit plan funding, we believe it is not practicable to reasonably estimate such future funding for periods in excess of 1 year.

### **Off Balance Sheet Arrangements**

On December 31, 2002, we entered into two real estate lease agreements, as lessee, with a third-party lessor, which expire on December 31, 2005 and are accounted for as operating leases. On or before the lease expiration date, we can exercise options under the lease agreements to either renew the leases, purchase both properties for \$28.0 million, or sell both properties on behalf of the lessor (the "Sale Option"). If we elect the Sale Option, we must pay the lessor a residual guarantee amount of \$22.7 million for both properties, on or before the lease expiration date, and at the time both properties are sold, we must pay the lessor a supplemental rent equal to the gross sales proceeds in excess of the residual guarantee amount not to exceed \$5.3 million.

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

### **Derivative Financial Instruments**

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

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

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

Inception Date	Fixed Rate Debt Obligation	Notional Amount	Average Variable Rate Paid <sup>(1)</sup>	Termination Date	Cash Proceeds Received at Termination <sup>(2)</sup>			December 31, 2003	
					Interest Expense Reduction <sup>(3)</sup>	Deferred Gain (Loss) <sup>(4)</sup>	Total	Cumulative Recognized Deferred Gain (Loss) <sup>(5)</sup>	Balance of Unamortized Deferred Gain (Loss) <sup>(6)</sup>
July 2003	\$400.0 million of 6 1/8% Senior Subordinated Notes due 2013	\$ 400.0	2.1%	September 2003	\$ 2.7	\$ 8.0	\$ 10.7	\$ 0.2	\$ 7.8
March 2003	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$ 200.0	4.4%	June 2003	1.6	6.7	8.3	0.4	6.3
January 2003	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$ 200.0	4.0%	March 2003	1.2	5.2	6.4	0.4	4.8
June 2002	\$750.0 million of 7 5/8% Senior Subordinated Notes due 2012	\$ 200.0	4.1%	September 2002	1.7	12.2	13.9	1.6	10.6
November 2001	\$180.0 million of 8½% 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.

	<b>For the Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
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. 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 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

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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

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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.

## 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," "intends" 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;

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- 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 that we operate 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 document 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.

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 filing to reflect events or changes or circumstances or changes in expectations or the occurrence of anticipated events.

#### Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Data regarding quantitative and qualitative disclosures related to our market risk sensitive financial instruments are presented in (i) "Management's Discussion and Analysis of Results of Operations and Financial Condition — Liquidity and Capital Resources — Derivative Financial Instruments" included herein under Item 7 and (ii) Note 9 to the consolidated financial statements.

#### Item 8. Financial Statements and Supplementary Data

See Financial Statements beginning on page F-1.

#### Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

#### Item 9A. Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's

60

rules and forms, and that such information is accumulated and communicated to our management, including our Chairman and Chief Executive Officer and our President and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Our management, with the participation of our Chairman and Chief Executive Officer and our President and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2003. Based upon that evaluation and subject to the foregoing, our Chairman and Chief Executive Officer and our President and Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures provided reasonable assurance that the disclosure controls and procedures are effective to accomplish their objectives.

In addition, there was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2003 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

61

### PART III

#### Item 10. Directors and Executive Officers of the Registrant

The following table provides information concerning the directors and executive officers of the Registrants 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 — Controllor
Kenneth R. Goldstein	57	Vice President — Taxes
Joseph S. Paresi	48	Vice President — Product Development
Robert W. RisCassi	68	Vice President — Washington D.C. Operations
Stephen M. Souza	51	Vice President — Treasurer
Dr. Jill J. Wittels	54	Vice President — Business Development
Claude R. Canizares <sup>(1)</sup>	58	Director
Thomas A. Corcoran <sup>(1)</sup>	59	Director
Robert B. Millard <sup>(2)</sup>	53	Director
John M. Shalikashvili <sup>(2)(3)</sup>	67	Director
Arthur L. Simon <sup>(1)(3)</sup>	71	Director
Alan H. Washkowitz <sup>(2)(3)</sup>	63	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of Nominating/Corporate Governance Committee.

All Executive Officers serve at the discretion of the Board of Directors.

The remaining information called for by Item 10 is incorporated herein by reference to the definitive proxy statement relating to Annual Meeting of Shareholders of L-3 Holdings, to be held on April 27, 2004. L-3 Holdings will file such definitive proxy statement with the Securities and Exchange Commission pursuant to regulation 14A within 120 days after the end of the fiscal year covered by this Form 10-K.

#### **Item 11. Executive Compensation**

The information called for by Item 11 is incorporated herein by reference to the definitive proxy statement referred to above in Item 10.

#### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information called for by Item 12 is incorporated herein by reference to the definitive proxy statement referred to above in Item 10.

#### **Item 13. Certain Relationships and Related Transactions**

The information called for by Item 13 is incorporated herein by reference to the definitive proxy statement referred to above in Item 10.

62

#### **Item 14. Principal Accounting Fees and Services**

This information called for by Item 14 is incorporated herein by reference to the definitive proxy statement referred to above in Item 10.

#### **Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K**

##### **(a) Financial statements filed as part of this report:**

	<u>Page Number</u>
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

##### **(a) Financial Statement Schedules**

Not applicable

##### **(b) Reports Filed on Form 8-K**

The following reports have been filed during the quarter ended December 31, 2003:

- (i) On December 17, 2003, the Registrant filed a report on Form 8-K announcing to its intention to raise \$400.0 million through a private placement of senior subordinated notes and to redeem all of its outstanding 5.25% Convertible Senior Subordinated Notes due 2009.
- (ii) On December 22, 2003, the Registrant filed a report on Form 8-K announcing the completion of its offering of \$400.0 million principal amount of 6 1/8% Senior Subordinated Notes due 2014 and the initiation of a full redemption of all of its outstanding 5.25% Convertible Senior Subordinated Notes due 2009.

##### **(c) Exhibits**

Exhibits identified in parentheses below are on file with the SEC and are incorporated herein by reference to such previous filings.

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
3.1	Certificate of Incorporation of L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 3.1 to the Registrants' Quarterly Report on Form 10-Q for the period ended June 30, 2002).
3.2	By laws of L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 No. 333-46975).
3.3	Certificate of Incorporation of L-3 Communications Corporation (incorporated by reference to Exhibit 3.1 to L-3 Communications Corporation's Registration Statement on Form S-4 No. 333-31649).
3.4	Bylaws of L-3 Communications Corporation (incorporated by reference to Exhibit 3.2 to L-3 Communications Corporation's Registration Statement on Form S-4 No. 333-31649).

63

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 No. 333-46975).

10.6	Employment Agreement dated April 30, 1997 between Frank C. Lanza and L-3 Communications Holdings, Inc. (incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 No. 333-46975).
10.11	1997 Stock Option Plan for Key Employees (incorporated by reference to Exhibit 10.11 to Registrant's Registration Statement on Form S-1, No. 333-70125).
10.12	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Frank C. Lanza (incorporated by reference to Exhibit 10.12 to Registrant's Registration Statement on Form S-1, No. 333-70125).
10.13	Non-Qualified Stock Option Agreement dated as of April 30, 1997 by and between L-3 Communications Holdings, Inc. and Robert V. LaPenta (incorporated by reference to Exhibit 10.13 to Registrant's Registration Statement on Form S-1, No. 333-70125).
10.15	Option Plan for Non-Employee Directors of L-3 Communication's Holdings, Inc (incorporated by reference to Exhibit 10.15 to Registrant's annual report on Form 10-K, filed on March 31, 1999).
10.16	1999 Long Term Performance Plan dated as of April 27, 1999 (incorporated by reference to Exhibit 10.16 to Registrant's Registration annual report on Form 10-K filed on March 30, 2000).
10.20	L-3 Communications Corporation Pension Plan (incorporated by reference to Exhibit 10.10 to Registrant's Registration Statement on Form S-1, No. 333-46975).
10.25	L-3 Communications Corporation Employee Stock Purchase Plan (incorporated by reference to Appendix A of the Registrant's Definitive Proxy Statement filed April 2, 2001).
10.31	Indenture dated as of May 21, 2003 ("May 2003 Indenture") between L-3 Communications Corporation and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 to L-3 Communications Corporation's Registration Statement on Form S-4 No. 333-106106).
10.32	Indenture dated as of December 11, 1998 ("December 1998 Indenture") among L-3 Communications Corporation, the Guarantors named therein and the Bank of New York, as Trustee (incorporated by reference to Exhibit 10.32 to Registrant's Registration Statement on Form S-1, No. 333-70125).
**10.33	Indenture dated as of December 22, 2003 ("December 2003 Indenture") among L-3 Communications Corporation, Inc., the Guarantors named therein and the Bank of New York, as Trustee.
10.40	Third Amended and Restated Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.40 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.41	Second Amended and Restated 364-Day Credit Agreement dated as of May 16, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.41 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.42	First Amendment to Third Amended and Restated Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.42 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.43	First Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of October 17, 2001 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.43 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.44	Second Amendment to Third Amended and Restated Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named therein and the other parties thereto (incorporated by reference to Exhibit 10.44 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.45	Consent and Second Amendment to Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2002 among L-3 Communications Corporation, the lenders named herein and the other parties thereto (incorporated by reference to Exhibit 10.45 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.46	Consent, Waiver and Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the lenders named therein and the other parties thereto.
10.47	Consent, Waiver and Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of February 25, 2003 among L-3 Communications Corporation, the lenders named therein and the other parties thereto.
**10.48	Second Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto.
**10.49	Second Omnibus Amendment Regarding Second Amended and Restated 364-Day Credit Agreement dated as of January 23, 2004 among L-3 Communications Corporation the lenders named therein and the other parties thereto.
**10.50	Consent, Waiver and Third Omnibus Amendment Regarding Second Amended and Restated 364 Day Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto.
**10.51	Third Omnibus Amendment Regarding Third Amended and Restated Credit Agreement dated as of February 24, 2004 among L-3 Communications Corporation, the lenders named therein and the other parties thereto.
10.53	Indenture dated as of October 24, 2001 ("2001 Indenture") among L-3 Communications Holdings, Inc., the guarantors named therein and The Bank of New York, as trustee (Incorporated by reference to Exhibit 4.f of the Registrant's Registration Statement on form S-3, No. 333-75558).
**10.55	Supplemental Indenture dated as of February 25, 2004, among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the May 2003 Indenture.
**10.56	Supplemental Indenture dated as of February 25, 2004, among L-3 Communications Corporation,

Exhibit No.	Description of Exhibit
**10.58	Supplemental Indenture dated as of February 25, 2004, among L-3 Communications Corporation, L-3 Holdings, Inc., The Bank of New York, as trustee, and the guarantors named therein to the 2001 Indenture.
10.59	Asset Purchase Agreement dated as of January 11, 2002 among Raytheon Company, Raytheon Australia Pty Ltd. and L-3 Communications Corporation (incorporated by reference to Exhibit 10.59 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.60	Amendment dated as of March 8, 2002 among Raytheon Company, Raytheon Australia Pty Ltd., L-3 Communications Corporation, L-3 Communications Integrated Systems L.P. and L-3 Communications Australia Pty Ltd to the Asset Purchase Agreement dated as of January 11, 2002 (incorporated by reference to Exhibit 10.60 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.91	Asset Purchase Agreement relating to the Honeywell TCAS Business by and among Honeywell Inc., L-3 Communications Corporation and, solely in respect of the Guaranty in Article XIV, Honeywell International Inc. dated as of February 10, 2000 (incorporated by reference to Exhibit 10.91 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001).
10.92	Asset Purchase and Sale Agreement, dated January 7, 2000 by and between L-3 Communications Corporation and Raytheon Company (incorporated by reference to Exhibit 10.92 of the Registrants' Annual Report on Form 10-K for the year ended December 31, 2000).
10.93	Indenture dated as of June 28, 2002, ("2002 Indenture") among L-3 Communications Corporation, the guarantors named therein and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 of L-3 Communications Corporation's Registration Statement on Form S-4, No. 333-99757).
**10.94	Supplemental Indenture dated as of February 25, 2004, among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the 2002 Indenture.
**10.95	Transaction Agreement dated as of October 21, 2003 by and among L-3 Communications Corporation, RAAH I, LLC and Vertex Aerospace LLC.
**10.96	Supplemental Indenture dated as of February 25, 2004, among L-3 Communications Corporation, The Bank of New York, as trustee, and the guarantors named therein to the December 2003 Indenture.
*11	L-3 Communications Holdings, Inc. Computation of Basic Earnings Per Share and Diluted Earnings Per Share.
**12	Ratio of Earnings to Fixed Charges.
**21	Subsidiaries of the Registrant.
**23.1	Consent of PricewaterhouseCoopers LLP.
**31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended.
**31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended.
**32	Section 1350 Certifications.

\* The information required in this exhibit is presented on Note 12 to the Consolidated Financial Statements as of December 31, 2003 in accordance with the provisions of SFAS No. 128, *Earnings Per Share*.

\*\* Filed herewith

### Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized, on March 4, 2004.

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

By: /s/ Robert V.  
LaPenta

Title: President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrants on March 4, 2004 and in the capacities indicated.

Signature	Title
<u>/s/ Frank C. Lanza</u>	Chairman, Chief Executive Officer (Principal)

Frank C. Lanza	Executive Officer) and Director
<u>/s/ Robert V. LaPenta</u> Robert V. LaPenta	President, Chief Financial Officer (Principal Financial Officer) and Director
<u>/s/ Michael T. Strianese</u> Michael T. Strianese	Senior Vice President, Finance (Principal Accounting Officer)
<u>/s/ Claude R. Canizares</u> Claude R. Canizares	Director
<u>/s/ Thomas A. Corcoran</u> Thomas A. Corcoran	Director
<u>/s/ Robert B. Millard</u> Robert B. Millard	Director
<u>/s/ John M. Shalikashvili</u> John M. Shalikashvili	Director
<u>/s/ Arthur L. Simon</u> Arthur L. Simon	Director
<u>/s/ Alan H. Washkowitz</u> Alan H. Washkowitz	Director

## 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*.

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

**CONSOLIDATED BALANCE SHEETS**

(in thousands, except per share data)

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 134,876	\$ 134,856
Contracts in process	1,615,348	1,317,993
Deferred income taxes	152,785	143,634
Other current assets	34,693	42,891
Total current assets	<u>1,937,702</u>	<u>1,639,374</u>
Property, plant and equipment, net	519,749	458,639
Goodwill	3,652,436	2,794,548
Intangible assets	162,156	90,147
Deferred income taxes	100,482	147,190
Deferred debt issue costs	48,572	48,839
Other assets	71,793	63,571
Total assets	<u>\$6,492,890</u>	<u>\$5,242,308</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable, trade	\$ 195,548	\$ 167,240
Accrued employment costs	239,690	187,754
Accrued expenses	72,880	56,763
Customer advances	58,078	62,645
Accrued interest	25,898	18,395
Income taxes	70,159	33,729
Other current liabilities	261,959	183,416
Total current liabilities	<u>924,212</u>	<u>709,942</u>
Pension and postretirement benefits	359,020	343,527
Other liabilities	101,651	65,644
Long-term debt	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.

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

**CONSOLIDATED STATEMENTS OF OPERATIONS**

(in thousands, except per share data)

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
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	<u>5,061,594</u>	<u>4,011,229</u>	<u>2,347,422</u>
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	<u>4,480,573</u>	<u>3,557,250</u>	<u>2,072,092</u>
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	<u>156,173</u>	<u>111,556</u>	<u>70,764</u>
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	<u>96,022</u>	<u>86,943</u>	<u>74,880</u>
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)**

	<b>L-3 Holdings' Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Retained Earnings</b>	<b>Unearned Compensation</b>	<b>Accumulated Other Comprehensive Income (Loss)</b>	<b>Total</b>
	<b>Shares Issued</b>	<b>Par Value</b>					
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	<u>94,577</u>	<u>946</u>	<u>1,794,030</u>	<u>479,827</u>	<u>(3,302)</u>	<u>(69,299)</u>
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
<b>Operating activities:</b>			
Net income	\$ 277,640	\$ 178,097	\$ 115,458
Cumulative effect of a change in accounting principle	—	24,370	—
Loss on retirement of debt	11,225	16,187	—
Goodwill amortization	—	—	42,356
Depreciation	77,340	66,230	40,362
Amortization of intangibles and other assets	18,083	9,630	4,233
Amortization of deferred debt issue costs (included in interest expense)	7,977	7,392	6,388
Deferred income tax provision	94,747	79,092	52,638
Minority interest	3,515	6,198	4,457
Other non-cash items, principally contributions to employee savings plans in L-3 Holdings' common stock	39,773	28,653	17,576
Subtotal	<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>
<b>Investing activities:</b>			
Acquisition of businesses, net of cash acquired	(1,014,439)	(1,742,133)	(446,911)
Proceeds from sale of businesses	8,795	—	75,206
Capital expenditures	(82,874)	(62,058)	(48,121)
Disposition of property, plant and equipment	3,854	3,548	1,237
Other investing activities	(3,393)	(9,885)	(6,301)
Net cash used in investing activities	<u>(1,088,057)</u>	<u>(1,810,528)</u>	<u>(424,890)</u>
<b>Financing activities:</b>			
Borrowings under revolving credit facilities	295,000	566,000	316,400
Repayment of borrowings under revolving credit facilities	(295,000)	(566,000)	(506,400)
Borrowings under bridge loan facility	—	500,000	—
Repayment of borrowings under bridge loan facility	—	(500,000)	—
Proceeds from sale of senior subordinated notes	790,788	750,000	420,000
Redemption of senior subordinated notes	(187,650)	(237,468)	—
Proceeds from sale of L-3 Holdings' common stock, net	—	766,780	353,622
Debt issuance costs	(9,591)	(19,759)	(16,671)
Proceeds from exercise of stock options	14,273	17,372	16,325
Proceeds from employee stock purchase plan	26,384	17,478	4,861
Distributions paid to minority interest	(1,975)	(2,854)	(2,530)
Other financing activities	(215)	(25,647)	(5,343)
Net cash from financing activities	<u>632,014</u>	<u>1,265,902</u>	<u>580,264</u>
Net increase (decrease) in cash	20	(226,166)	328,342
Cash and cash equivalents, beginning of the period	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

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(Dollars in thousands, except per share data)**

**1. Description of Business**

L-3 Communications Holdings, Inc. conducts its operations and derives all its operating income and cash flow through its wholly owned subsidiary, L-3 Communications Corporation ("L-3 Communications"). L-3 Communications Holdings, Inc. ("L-3 Holdings" and together with its subsidiaries, "L-3" or the "Company") is a leading supplier of a broad range of products used in a substantial number of aerospace and defense platforms. L-3 also is a major supplier of subsystems on many platforms, including those for secure communication networks, mobile satellite communications, information security systems, shipboard communications, naval power systems, fuzes and safety and arming devices for missiles and munitions, microwave assemblies for radars and missiles, telemetry and instrumentation and airport security systems. The Company also is a prime system contractor for aircraft modernization and maintenance, Intelligence, Surveillance and Reconnaissance (ISR) collection platforms, simulation and training, and government systems support services. The Company's customers include the U.S. Department of Defense (DoD) and its prime contractors, certain U.S. Government intelligence agencies, major aerospace and defense contractors, foreign governments, commercial customers and certain other U.S. federal, state and local government agencies.

The Company has four reportable segments: (1) Secure Communications & ISR; (2) Training, Simulation & Support Services; (3) Aviation Products & Aircraft Modernization; and (4) Specialized Products.

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

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

*Training, Simulation & Support Services.* The businesses in this segment provide a full range of training, simulation and support services, including:

- services designed to meet customer training requirements for aircrews, navigators, mission operators, gunners and maintenance technicians for virtually any platform, including military fixed and rotary wing aircraft, air vehicles and various ground vehicles;

F-7

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**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS —(continued)**  
**(Dollars in thousands, except per share data)**

- 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;
- telemetry, instrumentation, space and navigation products, including tracking and flight termination;

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)

- 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, *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

F-9

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

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

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 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

F-10

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

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

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 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.

F-11

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

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

**Goodwill:** 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 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,

F-12

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

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

*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 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

F-13

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

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

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 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

F-14

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

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

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.

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	<u>12,894</u>
Total liabilities assumed	<u>92,880</u>
Net assets acquired	<u>\$653,900</u>

*Military Aviation Services, Klein Associates, Aeromet, Avionics Systems and certain defense and aerospace assets of IPICOM, Inc.* During 2003, in separate transactions, the Company acquired five businesses for an

aggregate consideration of \$351,116 in cash, plus acquisition costs. These acquisitions were financed with cash on hand. The purchase prices for Military Aviation Services, Klein Associates, Aeromet and certain defense and aerospace assets of IPICOM, Inc. are subject to adjustment based on closing date net assets or net working capital of the acquired businesses. The Company acquired the following:

- Certain defense and aerospace assets of IPICOM, Inc. (IPICOM) on December 10, 2003. The Company paid \$8,676 of the purchase price on the closing date, and the balance of the purchase price of \$18,824 was recorded in other current liabilities at December 31, 2003 and subsequently

F-15

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

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

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 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

F-16

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

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

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, 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

F-17

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

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

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 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

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)**

- 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;
- 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

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)**

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.

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.

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)**

#### **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.

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
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.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
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 <sup>(1)</sup>	496,461	429,386	298,317

Less: Amounts included in cost of sales	(509,314)	(431,520)	(304,318)
Balance in inventoried contract costs at end of period	<u>\$ 39,400</u>	<u>\$ 52,253</u>	<u>\$ 19,970</u>

- (1) Incurred costs include IRAD and B&P costs of \$135,761, \$125,108, and \$81,019 for the years ended December 31, 2003, 2002 and 2001, respectively.

F-21

**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>
<b>Basic EPS:</b>			
Reported before cumulative effect of a change in accounting principle	\$ 2.89	\$ 2.33	\$ 1.54
Goodwill amortization, net of income tax and minority interest	—	—	0.45
Adjusted before cumulative effect of a change in accounting principle	<u>\$ 2.89</u>	<u>\$ 2.33</u>	<u>\$ 1.99</u>
Adjusted net income	<u>\$ 2.89</u>	<u>\$ 2.05</u>	<u>\$ 1.99</u>
<b>Diluted EPS:</b>			
Reported before cumulative effect of a change in accounting principle	\$ 2.71	\$ 2.18	\$ 1.47
Goodwill amortization, net of income tax and minority interest	—	—	0.40
Adjusted before cumulative effect of a change in accounting principle	<u>\$ 2.71</u>	<u>\$ 2.18</u>	<u>\$ 1.87</u>
Adjusted net income	<u>\$ 2.71</u>	<u>\$ 1.93</u>	<u>\$ 1.87</u>

F-22

**L-3 COMMUNICATIONS HOLDINGS, INC.  
AND L-3 COMMUNICATIONS CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (continued)**  
**(Dollars in thousands, except per share data)**

*Goodwill.* The table below presents the changes in goodwill allocated to the reportable segments during the year ended December 31, 2003. During 2003, the Company reclassified the goodwill from the Microdyne acquired businesses among its reportable segments to the reportable segments where the goodwill is tested for impairment.

	Secure Communications & ISR	Training Simulation & Support Services	Aviation Products & Aircraft Modernization	Specialized Products	Consolidated Total
<b>Balance January 1, 2003</b>	\$722,135	\$445,427	\$ 620,289	\$1,006,697	\$2,794,548
Acquisitions	50,724	12,594	730,529	68,216	862,063

Reclassifications	(45,979)	22,869	—	23,110	—
Sale of businesses	—	—	—	(4,175)	(4,175)
<b>Balance December 31, 2003</b>	<u><u>\$726,880</u></u>	<u><u>\$480,890</u></u>	<u><u>\$1,350,818</u></u>	<u><u>\$1,093,848</u></u>	<u><u>\$3,652,436</u></u>

*Identifiable Intangible Assets.* The gross carrying amount and accumulated amortization balances of the Company's identifiable intangible assets that are subject to amortization are presented in the tables below. The Company has no indefinite-lived identifiable intangible assets.

	December 31, 2003		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Identifiable intangible assets that are subject to amortization:			
Customer relationships	\$154,770	\$6,519	\$148,251
Technology	14,500	2,325	12,175
Non-compete agreements	2,000	270	1,730
Total	<u><u>\$171,270</u></u>	<u><u>\$9,114</u></u>	<u><u>\$162,156</u></u>

	December 31, 2002		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Identifiable intangible assets that are subject to amortization:			
Customer relationships	\$80,826	\$ 600	\$80,226
Technology	9,825	1,844	7,981
Non-compete agreements	2,000	60	1,940
Total	<u><u>\$92,651</u></u>	<u><u>\$2,504</u></u>	<u><u>\$90,147</u></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-23

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

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

Year Ending December 31,	Estimated 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><u>\$261,959</u></u>	<u><u>\$183,416</u></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><u>\$ 41,184</u></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-24

**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	138,654	121,814
Gross property, plant and equipment	740,160	650,122
Less: accumulated depreciation and amortization	(220,411)	(191,483)
Property, plant and equipment, net	<u>\$ 519,749</u>	<u>\$ 458,639</u>

Depreciation expense for property, plant and equipment was \$77,340 for 2003, \$66,230 for 2002, and \$40,362 for 2001.

**8. Debt**

The components of long-term debt and a reconciliation to the carrying amount of long-term debt are presented in the table below.

	December 31,	
	2003	2002
<b>L-3 Communications:</b>		
Borrowings under Senior Credit Facilities	\$ —	\$ —
8½% Senior Subordinated Notes due 2008	—	180,000
8% Senior Subordinated Notes due 2008	200,000	200,000
7 5/8% Senior Subordinated Notes due 2012	750,000	750,000
6 1/8% Senior Subordinated Notes due 2013	400,000	—
6 1/8% Senior Subordinated Notes due 2014	400,000	—
	<u>1,750,000</u>	<u>1,130,000</u>
<b>L-3 Holdings:</b>		
5¼% Convertible Senior Subordinated Notes due 2009	298,370	300,000
4% Senior Subordinated Convertible Contingent Debt Securities due 2011 (CODES)	420,000	420,000
Principal amount of long-term debt	2,468,370	1,850,000
Less: Unamortized discounts	(11,070)	(2,248)
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 and the Bank

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)**

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 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

F-26

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

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

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.

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

F-27

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

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

Company's interest rate swap agreements activity through December 31, 2003.

Inception Date	Fixed Rate Debt Obligation	Notional Amount	Average Variable Rate Paid <sup>(1)</sup>	Termination Date	Cash Proceeds Received at Termination <sup>(2)</sup>			December 31, 2003	
					Interest Expense Reduction <sup>(3)</sup>	Deferred Gain (Loss) <sup>(4)</sup>	Total	Cumulative Recognized Deferred Gain (Loss) <sup>(5)</sup>	Balance of Unamortized Deferred Gain (Loss) <sup>(6)</sup>
July 2003	\$400,000 of 6 1/8 % Senior Subordinated Notes due 2013	\$ 400,000	2.1%	September 2003	\$ 2,687	\$ 8,017	\$10,704	\$ 205	\$ 7,812
March 2003	\$750,000 of 7 5/8 % Senior Subordinated 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 8 1/4 % 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 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

F-28

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

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

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:

- 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

F-29

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

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

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 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

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

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

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 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.

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

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

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 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

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

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

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	Unrealized gains	Unrealized gains (losses)	Minimum pension	Accumulated other
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	translation adjustments	(losses) on securities	on hedging instruments	liability adjustments	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>

## 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
<b>Basic:</b>			
Income before cumulative effect of a change in accounting principle	\$277,640	\$202,467	\$115,458
Cumulative effect of a change in accounting principle, net of income taxes	—	(24,370)	—
Net income	<u>\$277,640</u>	<u>\$178,097</u>	<u>\$115,458</u>
Weighted average common shares outstanding	<u>96,022</u>	<u>86,943</u>	<u>74,880</u>
Basic earnings per share before cumulative effect of a change in accounting principle	<u>\$ 2.89</u>	<u>\$ 2.33</u>	<u>\$ 1.54</u>
Basic earnings per share	<u>\$ 2.89</u>	<u>\$ 2.05</u>	<u>\$ 1.54</u>
<b>Diluted:</b>			
Income before cumulative effect of a change in accounting principle	\$277,640	\$202,467	\$115,458
After-tax interest expense savings on the assumed conversion of Convertible Notes	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)

F-33

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

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

	Year Ended December 31,		
	2003	2002	2001
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>\$ 2.71</u>	<u>\$ 1.93</u>	<u>\$ 1.47</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-34

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

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (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	<u>29,473</u>	<u>18,618</u>	<u>6,724</u>
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><u>\$156,173</u></u>	<u><u>\$111,556</u></u>	<u><u>\$70,764</u></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><u>36.0%</u></u>	<u><u>35.5%</u></u>	<u><u>38.0%</u></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-35

**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><u>\$253,267</u></u>	<u><u>\$290,824</u></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><u>\$253,267</u></u>	<u><u>\$290,824</u></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 Compensation Committee of the Board of Directors. Awards under the 1999 Plan may be in the form of non-qualified

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)

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 (in thousands)	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	(362)	21.23
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	(155)	35.62
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	(406)	39.95
Outstanding at December 31, 2003 (5,919 exercisable)	<u>10,084</u>	<u>\$ 28.41</u>

F-37

### 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 equipment

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

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)

#### (Dollars in thousands, except per share data)

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, required under federal law to remediate the Greenville, Texas site location, and to pay a portion of those

F-39

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)**

**(Dollars in thousands, except per share data)**

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' 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.

F-40

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)**

**(Dollars in thousands, except per share data)**

The Company 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 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.

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)**

**(Dollars in thousands, except per share data)**

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
<b>Change in benefit obligation:</b>				
Benefit obligation at beginning of year	\$ 713,925	\$ 533,451	\$ 129,406	\$ 87,143
Service cost	45,901	35,825	3,803	3,777
Interest cost	49,789	43,108	7,781	7,779
Participants' contributions	246	260	1,006	720
Amendments	9,657	(2,554)	(6,796)	(10,032)
Actuarial loss	76,863	49,990	6,972	4,411
Acquisitions	25,754	77,066	2,272	41,639
Settlement	—	—	(107)	—
Foreign currency exchange rate changes	8,452	—	2,965	—
Benefits paid	(28,455)	(23,221)	(6,149)	(6,031)
Benefit obligation at end of year	<u>\$ 902,132</u>	<u>\$ 713,925</u>	<u>\$ 141,153</u>	<u>\$ 129,406</u>
<b>Change in plan assets:</b>				
Fair value of plan assets at beginning of year	\$ 431,771	\$ 430,915	\$ —	\$ —
Actual return on plan assets	64,043	(27,819)	121	—
Acquisitions	24,122	4,250	—	—
Employer contributions	60,846	47,386	13,761	5,311
Participants' contributions	246	260	1,006	720
Foreign currency exchange rate changes	9,180	—	—	—
Benefits paid	(28,455)	(23,221)	(6,149)	(6,031)
Fair value of plan assets at end of year	<u>\$ 561,753</u>	<u>\$ 431,771</u>	<u>\$ 8,739</u>	<u>\$ —</u>
<b>Funded status of the plans</b>	<u>\$(340,379)</u>	<u>\$(282,154)</u>	<u>\$(132,414)</u>	<u>\$(129,406)</u>
Unrecognized actuarial loss (gain)	224,641	184,894	7,706	(188)
Unrecognized prior service cost	9,631	560	(13,347)	(8,877)
Net amount recognized	<u>\$(106,107)</u>	<u>\$ (96,700)</u>	<u>\$(138,055)</u>	<u>\$(138,471)</u>
<b>Amounts recognized in the balance sheets consist of:</b>				
Net amount recognized	\$(106,107)	\$ (96,700)	\$(138,055)	\$(138,471)
Additional minimum liability	(114,858)	(108,356)	—	—
Accrued benefit liability	<u>\$(220,965)</u>	<u>\$(205,056)</u>	<u>\$(138,055)</u>	<u>\$(138,471)</u>

The aggregate accumulated benefit obligation (ABO) for all of the Company's pension plans combined was \$721,123 at year end 2003 and \$582,861 at year end 2002. The table below presents the aggregate ABO and fair value of plan assets for those pension plans with ABO in excess of the fair value of plan assets at year end 2003 and 2002.

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

F-43

**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.

	Pension Plans		Postretirement Benefit Plans	
	2003	2002	2003	2002
<b>Benefit obligations</b>				
Discount rate	6.25%	6.75%	6.25%	6.75%
Rate of compensation increase	4.50%	4.50%	4.50%	4.50%

The following table summarizes the components of net periodic benefit cost for the Company's pension and postretirement benefit plans for the years ended 2003, 2002 and 2001.

	Pension Plans			Postretirement Benefit Plans		
	2003	2002	2001	2003	2002	2001
<b>Components of net periodic benefit cost:</b>						
Service cost	\$ 45,901	\$ 35,825	\$ 18,516	\$ 3,803	\$ 3,777	\$1,709
Interest cost	49,789	43,108	31,428	7,781	7,779	4,746
Amortization of prior service cost	625	312	351	(2,326)	(1,701)	(99)
Expected return on plan assets	(39,357)	(40,663)	(37,716)	(155)	—	—
Recognized actuarial (gain) loss	13,591	3,246	(424)	(743)	(530)	(887)
Recognition due to settlement	—	62	—	(155)	—	—
Net periodic benefit cost	<u>\$ 70,549</u>	<u>\$ 41,890</u>	<u>\$ 12,155</u>	<u>\$ 8,205</u>	<u>\$ 9,325</u>	<u>\$5,469</u>

The table below summarizes the weighted average assumptions used to determine the net periodic benefit cost for the years ended 2003, 2002 and 2001.

	Pension Plans			Postretirement Benefit Plans		
	2003	2002	2001	2003	2002	2001
<b>Net periodic benefit cost</b>						
Discount rate	6.75%	7.25%	7.50%	6.75%	7.25%	7.50%
Expected long-term return on plan assets	9.00%	9.50%	9.50%	9.00%	n.a.	n.a.
Rate of compensation increase	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%

The expected long-term return on plan asset assumption at year-end 2003 and 2002 is 9.00%. This assumption represents the average rate that the Company expects to earn over the long-term on the assets of the Company's benefit plans, including those from dividends, interest income and capital appreciation. The assumption has been determined based on expectations regarding future rates of return for the plans' investment portfolio, with consideration given to the allocation of investments by asset class and historical rates of return for each individual asset class.

The annual increase in cost of benefits (health care cost trend rate) is assumed to be an average of 11.50% in 2004 and is assumed to gradually decrease to a rate of 5.0% thereafter. Assumed health care cost trend rates have a significant effect on amounts reported for postretirement medical benefit plans. A one percentage point decrease in the assumed health care cost trend rates would have the effect of decreasing the aggregate service and interest cost by \$577 and the postretirement medical obligations by \$7,345. A one percentage point increase in the assumed health care cost trend rate would have the effect of increasing the aggregate service and interest cost by \$711 and the postretirement medical obligations by \$8,977.

*Plan Assets.* The Company's Benefit Plan Committee (Committee) has the responsibility to formulate the investment policies and strategies for the plans' assets. These policies and strategies are: (1) invest assets of the plans in a manner consistent with the fiduciary standards of ERISA; (2) preserve the plans' assets; (3) maintain sufficient liquidity to fund benefit payments and pay expenses; (4) evaluate the

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)**

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.

<u>Asset Category</u>	<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 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.

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS— (continued)**

**(Dollars in thousands, except per share data)**

but the Company would be required to reimburse Lockheed Martin for these costs. To date, there has been no impact on pension expense and funding requirements resulting from this arrangement. However, should Lockheed Martin assume sponsorship of the Subject Plans or if these plans were terminated, the impact of any increased pension expenses or funding requirements could be material to the Company. For the year ended December 31, 2003, the Company contributed \$4,808 to the Subject Plans. The Company has performed its obligations under the letter agreement with Lockheed Martin and the Lockheed Martin Commitment and has not received any communications from the PBGC concerning actions which the PBGC contemplates taking in respect of the Subject Plans.

*Employee Savings Plans.* Under its various employee savings plans, the Company matches the contributions of participating employees up to a designated level. The extent of the match, vesting terms and the form of the matching contributions vary among the plans. Under these plans, the Company's matching contributions in L-3 Holdings' common stock and cash were \$43,262 for 2003, \$36,120 for 2002 and \$21,462 for 2001.

**17. Supplemental Cash Flow Information**

	Year Ended December 31,		
	2003	2002	2001
Interest paid	\$119,940	\$109,301	\$81,552
Income tax payments, net of refunds	17,298	2,127	4,904
Noncash transactions:			
Common stock issued for acquisition consideration	4,969	10,607	17,357
Company's employer contribution to savings plans paid in common stock	39,494	28,138	16,868
Conversion of 5¼% convertible senior subordinated notes to equity	1,630	—	—

F-46

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(continued)**

**(Dollars in thousands, except per share data)**

**18. Segment Information**

The Company has four reportable segments: (1) Secure Communications & ISR, (2) Training, Simulation & Support Services, (3) Aviation Products & Aircraft Modernization and (4) Specialized Products, which are described in Note 1. The Company evaluates the performance of its operating segments and reportable segments based on their sales and operating income. All corporate expenses are allocated to the Company's divisions using an allocation methodology prescribed by U.S. Government regulations for government contractors. Accordingly, all costs and expenses are included in the Company's measure of segment profitability.

	Secure Communications & ISR	Training Simulation & Support Services	Aviation Products & Aircraft Modernization	Specialized Products	Corporate	Elimination of Intersegment Sales	Consolidated Total
<b>2003</b>							
Sales	\$1,440,596	\$1,008,596	\$1,021,861	\$1,663,596	\$ —	\$(73,055)	\$5,061,594
Operating income	172,903	111,581	147,834	148,703	—	—	581,021
Total assets	1,201,187	741,059	2,043,677	2,001,881	505,086	—	6,492,890
Capital expenditures	25,982	2,920	10,281	43,368	323	—	82,874
Depreciation and amortization	29,169	7,892	18,720	39,642	—	—	95,423
<b>2002</b>							
Sales	\$1,054,297	\$ 826,286	\$ 677,846	\$1,479,996	\$ —	\$(27,196)	\$4,011,229
Operating income	103,449	96,513	105,680	148,337	—	—	453,979
Total assets	1,149,016	648,554	965,038	1,940,982	538,718	—	5,242,308
Capital expenditures	19,350	4,957	14,035	23,542	174	—	62,058
Depreciation and amortization	23,692	6,857	15,513	29,798	—	—	75,860
<b>2001</b>							
Sales	\$ 452,152	\$ 597,029	\$ 263,450	\$1,040,753	\$ —	\$ (5,962)	\$2,347,422
Operating income	31,975	65,715	85,602	92,038	—	—	275,330
Total assets	366,482	497,368	545,517	1,382,010	547,872	—	3,339,249
Capital expenditures	11,561	2,999	9,625	23,657	279	—	48,121
Depreciation and	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-47

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

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

The Company's sales attributable to U.S. customers and foreign customers is summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
U.S.	\$4,208,273	\$3,436,219	\$1,927,538
Foreign:			
United Kingdom	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.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
U.S. Government agencies	\$3,843,025	\$3,107,271	\$1,614,858
Foreign governments	506,508	395,062	200,913
Commercial export	346,813	179,948	218,971
Other (principally U.S. commercial)	365,248	328,948	312,680
Consolidated	<u>\$5,061,594</u>	<u>\$4,011,229</u>	<u>\$2,347,422</u>

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 by product and services are summarized in the table below.

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Intelligence, surveillance and reconnaissance products	\$ 817,909	\$ 410,412	\$ —
Aircraft modification, maintenance and technical services	733,744	517,309	15,067
Naval warfare products	418,019	280,564	299,684
Communication systems for intelligence collection and imagery processing	396,383	306,650	231,895
Avionics products	305,726	229,734	254,983
Security and detection systems	282,261	431,325	18,058
Information security systems	232,728	201,934	140,153
Space and commercial communications, satellite control and tactical sensor systems	210,701	155,578	136,023
Telemetry and instrumentation	181,631	193,926	206,866
Microwave components	164,952	93,365	112,896
Training devices and motion simulators	160,718	144,310	160,549
Guidance and navigation products	151,916	141,778	128,690
Fuzing products	111,719	142,135	62,973
Subtotal products	4,168,407	3,249,020	1,767,837
Simulation, engineering and support services	705,974	569,351	378,186
Training services	302,622	256,935	218,843
Subtotal Services	1,008,596	826,286	597,029
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-49

**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.

	<u>March 31</u>	<u>June 30</u>	<u>September 30</u>	<u>December 31</u>
<b>2003</b>				
Sales	\$1,089,047	\$1,226,881	\$1,264,611	\$1,481,055
Operating income	108,837	128,746	152,372	191,066
Net income	49,737	53,379	76,107	98,417
Basic EPS	\$ 0.52	\$ 0.56	\$ 0.79	\$ 1.02
Diluted EPS	\$ 0.50	\$ 0.53	\$ 0.74	\$ 0.94
<b>2002</b>				
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-50

**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 Communications Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Total</u>
	<u>Shares Issued</u>	<u>Par Value</u>		
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			98,512	98,512

Holdings				
Balance at				
December 31,				
2003	<u>100</u>	<u>\$ —</u>	<u>\$ 1,893,488</u>	<u>\$ 1,893,488</u>

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-51

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

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

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b><u>Condensed Combining Balance Sheets:</u></b>						
<b><u>At December 31, 2003:</u></b>						
Current assets:						
Cash and cash equivalents	\$ —	\$ 155,375	\$ (41,291)	\$ 20,792	\$ —	\$ 134,876
Contracts in process	—	528,056	817,547	269,745	—	1,615,348
Other current assets	—	159,194	21,928	6,356	—	187,478
Total current assets	—	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	2,574,496	2,574,496	3,729,131	597,606	(6,901,233)	2,574,496
Total liabilities and shareholders' equity	<u>\$3,290,873</u>	<u>\$5,700,916</u>	<u>\$4,266,874</u>	<u>\$851,837</u>	<u>\$(7,617,610)</u>	<u>\$6,492,890</u>
<b><u>At December 31, 2002:</u></b>						
Current assets:						
Cash and cash equivalents	\$ —	\$ 126,421	\$ (7,248)	\$ 15,683	\$ —	\$ 134,856
Contracts in process	—	524,500	630,351	163,142	—	1,317,993
Other current assets	—	155,387	28,319	2,819	—	186,525
Total current assets	—	806,308	651,422	181,644	—	1,639,374
Goodwill	—	753,672	1,702,384	338,492	—	2,794,548
Other assets	—	372,207	355,866	80,313	—	808,386
Investment in and amounts due from consolidated subsidiaries	2,919,954	2,688,750	398,282	53,779	(6,060,765)	—
Total assets	<u>\$2,919,954</u>	<u>\$4,620,937</u>	<u>\$3,107,954</u>	<u>\$654,228</u>	<u>\$(6,060,765)</u>	<u>\$5,242,308</u>
Current liabilities	\$ —	\$ 336,050	\$ 298,646	\$ 75,246	\$ —	\$ 709,942
Other long-term liabilities	—	234,933	166,188	8,050	—	409,171
Long-term debt	717,752	1,847,752	—	—	(717,752)	1,847,752
Minority interest	—	—	—	73,241	—	73,241
Shareholders' equity	2,202,202	2,202,202	2,643,120	497,691	(5,343,013)	2,202,202
Total liabilities and shareholders' equity	<u>\$2,919,954</u>	<u>\$4,620,937</u>	<u>\$3,107,954</u>	<u>\$654,228</u>	<u>\$(6,060,765)</u>	<u>\$5,242,308</u>

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)**

	<u>L-3 Holdings</u>	<u>L-3 Communications (Parent)</u>	<u>Guarantor Subsidiaries</u>	<u>Non- Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Consolidated L-3 Communications</u>
<b><u>Condensed Combining Statements of Operations:</u></b>						
<b><u>For the year ended December 31, 2003:</u></b>						
Sales	\$ —	\$1,918,288	\$2,715,558	\$445,485	\$ (17,737)	\$5,061,594
Costs and expenses	—	1,635,998	2,464,534	397,778	(17,737)	4,480,573
Operating income	—	282,290	251,024	47,707	—	581,021
Interest and other income (expense)	—	9,575	(92)	(784)	(8,484)	215
Interest expense	34,058	131,734	501	8,932	(42,542)	132,683
Minority interest	—	—	—	3,515	—	3,515
Loss on retirement of debt	—	11,225	—	—	—	11,225
Provision (benefit) for income taxes	(12,261)	53,607	90,155	12,411	12,261	156,173
Equity in net income of consolidated subsidiaries	299,437	182,341	—	—	(481,778)	—
Net income	<u>\$277,640</u>	<u>\$ 277,640</u>	<u>\$ 160,276</u>	<u>\$ 22,065</u>	<u>\$(459,981)</u>	<u>\$ 277,640</u>
<b><u>For the year ended December 31, 2002:</u></b>						
Sales	\$ —	\$1,875,389	\$1,895,410	\$260,799	\$ (20,369)	\$4,011,229
Costs and expenses	—	1,622,200	1,736,233	219,186	(20,369)	3,557,250
Operating income	—	253,189	159,177	41,613	—	453,979
Interest and other income (expense)	—	11,202	(286)	262	(6,257)	4,921
Interest expense	35,499	120,774	1,622	6,353	(41,756)	122,492
Minority interest	—	—	—	6,198	—	6,198
Loss on retirement of debt	—	16,187	—	—	—	16,187
Provision (benefit) for income taxes	(13,880)	44,942	56,145	10,469	13,880	111,556
Cumulative effect of a change in accounting principle	—	(14,749)	—	(9,621)	—	(24,370)
Equity in net income of consolidated subsidiaries	199,716	110,358	—	—	(310,074)	—
Net income	<u>\$178,097</u>	<u>\$ 178,097</u>	<u>\$ 101,124</u>	<u>\$ 9,234</u>	<u>\$(288,455)</u>	<u>\$ 178,097</u>
<b><u>For the year ended December 31, 2001:</u></b>						
Sales	\$ —	\$1,328,702	\$ 854,094	\$168,558	\$ (3,932)	\$2,347,422
Costs and expenses	—	1,109,329	823,857	142,838	(3,932)	2,072,092
Operating income	—	219,373	30,237	25,720	—	275,330
Interest and other income (expense)	—	8,335	(515)	(6,081)	—	1,739
Interest expense	20,400	86,024	51	315	(20,400)	86,390
Minority interest	—	—	—	4,457	—	4,457
Provision (benefit) for income taxes	(7,976)	53,840	11,275	5,649	7,976	70,764
Equity in net income of consolidated subsidiaries	127,882	27,614	—	—	(155,496)	—
Net income	<u>\$115,458</u>	<u>\$ 115,458</u>	<u>\$ 18,396</u>	<u>\$ 9,218</u>	<u>\$(143,072)</u>	<u>\$ 115,458</u>

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>
<b><u>Condensed Combining Statements of Cash Flows:</u></b>						
<b><u>For the year ended December 31, 2003:</u></b>						
<b><u>Operating activities:</u></b>						
Net cash from (used in) operating activities	\$ —	\$ 219,890	\$ 240,672	\$ (4,499)	\$ —	\$ 456,063
<b><u>Investing activities:</u></b>						
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	<u>(98,512)</u>	<u>(1,054,168)</u>	<u>(893,393)</u>	<u>(101,309)</u>	<u>1,059,325</u>	<u>(1,088,057)</u>

**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	<u>98,512</u>	<u>863,232</u>	<u>618,678</u>	<u>110,917</u>	<u>(1,059,325)</u>	<u>632,014</u>
Net increase (decrease) in cash	—	28,954	(34,043)	5,109	—	20
Cash and cash equivalents, beginning of the period	—	126,421	(7,248)	15,683	—	134,856
Cash and cash equivalents, end of the period	<u>\$ —</u>	<u>\$ 155,375</u>	<u>\$ (41,291)</u>	<u>\$ 20,792</u>	<u>\$ —</u>	<u>\$ 134,876</u>

**For the year ended December 31, 2002:****Operating activities:**

Net cash from operating activities	<u>\$ —</u>	<u>\$ 137,837</u>	<u>\$ 169,221</u>	<u>\$ 11,402</u>	<u>\$ —</u>	<u>\$ 318,460</u>
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**Investing activities:**

Acquisition of businesses, net of cash acquired	—	(146,913)	(1,499,891)	(95,329)	—	(1,742,133)
Other investing activities	<u>(855,939)</u>	<u>(1,627,853)</u>	<u>(27,130)</u>	<u>(8,632)</u>	<u>2,451,159</u>	<u>(68,395)</u>
Net cash used in investing activities	<u>(855,939)</u>	<u>(1,774,766)</u>	<u>(1,527,021)</u>	<u>(103,961)</u>	<u>2,451,159</u>	<u>(1,810,528)</u>

**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	<u>89,159</u>	<u>930,608</u>	<u>1,354,964</u>	<u>63,018</u>	<u>(2,451,159)</u>	<u>(13,410)</u>
Net cash from financing activities	<u>855,939</u>	<u>1,443,140</u>	<u>1,354,964</u>	<u>63,018</u>	<u>(2,451,159)</u>	<u>1,265,902</u>
Net decrease in cash	—	(193,789)	(2,836)	(29,541)	—	(226,166)
Cash and cash equivalents, beginning of the period	—	320,210	(4,412)	45,224	—	361,022
Cash and cash equivalents, end of the period	<u>\$ —</u>	<u>\$ 126,421</u>	<u>\$ (7,248)</u>	<u>\$ 15,683</u>	<u>\$ —</u>	<u>\$ 134,856</u>

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>
<b>For the year ended December 31, 2001:</b>						
<b>Operating activities:</b>						
Net cash from operating activities	<u>\$ —</u>	<u>\$ 104,169</u>	<u>\$ 30,014</u>	<u>\$ 38,785</u>	<u>\$ —</u>	<u>\$ 172,968</u>
<b>Investing activities:</b>						
Acquisition of businesses, net of cash acquired	—	(112,691)	(212,556)	(121,664)	—	(446,911)
Other investing activities	<u>(830,561)</u>	<u>(357,400)</u>	<u>(14,643)</u>	<u>59,844</u>	<u>1,164,781</u>	<u>22,021</u>
Net cash used in investing activities	<u>(830,561)</u>	<u>(470,091)</u>	<u>(227,199)</u>	<u>(61,820)</u>	<u>1,164,781</u>	<u>(424,890)</u>
<b>Financing activities:</b>						
Repayment of borrowings under revolving credit facilities, net	—	(190,000)	—	—	—	(190,000)
Proceeds from sale of senior subordinated notes	420,000	—	—	—	—	420,000
Proceeds from sale of L-3 Holdings' common stock, net	353,622	—	—	—	—	353,622
Other financing activities	<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	—	18,708	4,911	9,061	—	32,680
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-55

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L-3 COMMUNICATIONS CORPORATION,  
As Issuer

6-1/8% SENIOR SUBORDINATED NOTES DUE 2014

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INDENTURE

Dated as of December 22, 2003

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The Bank of New York,  
As Trustee

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TABLE OF CONTENTS

ARTICLE 1. DEFINITIONS AND INCORPORATION BY REFERENCE.....	2
SECTION 1.01 DEFINITIONS.....	2
SECTION 1.02 OTHER DEFINITIONS.....	19
SECTION 1.03 INCORPORATION BY REFERENCE OF TRUST INDENTURE ACT.....	20
SECTION 1.04 RULES OF CONSTRUCTION.....	20
ARTICLE 2. THE NOTES.....	21
SECTION 2.01 FORM AND DATING.....	21
SECTION 2.02 EXECUTION AND AUTHENTICATION.....	21
SECTION 2.03 REGISTRAR AND PAYING AGENT.....	22
SECTION 2.04 PAYING AGENT TO HOLD MONEY IN TRUST.....	22
SECTION 2.05 HOLDER LISTS.....	23
SECTION 2.06 TRANSFER AND EXCHANGE.....	23
SECTION 2.07 REPLACEMENT NOTES.....	35
SECTION 2.08 OUTSTANDING NOTES.....	36
SECTION 2.09 TREASURY NOTES.....	36
SECTION 2.10 TEMPORARY NOTES.....	36
SECTION 2.11 CANCELLATION.....	36
SECTION 2.12 DEFAULTED INTEREST.....	37
SECTION 2.13 CUSIP NUMBERS.....	37
ARTICLE 3. REDEMPTION AND PREPAYMENT.....	37
SECTION 3.01 NOTICES TO TRUSTEE.....	37
SECTION 3.02 SELECTION OF NOTES TO BE REDEEMED.....	37
SECTION 3.03 NOTICE OF REDEMPTION.....	38
SECTION 3.04 EFFECT OF NOTICE OF REDEMPTION.....	39
SECTION 3.05 DEPOSIT OF REDEMPTION PRICE.....	39
SECTION 3.06 NOTES REDEEMED IN PART.....	39
SECTION 3.07 OPTIONAL REDEMPTION.....	39

SECTION 3.08	MANDATORY REDEMPTION.....	40
SECTION 3.09	OFFER TO PURCHASE BY APPLICATION OF EXCESS PROCEEDS.....	40
ARTICLE 4. COVENANTS.....		42
SECTION 4.01	PAYMENT OF NOTES.....	42
SECTION 4.02	MAINTENANCE OF OFFICE OR AGENCY.....	42
SECTION 4.03	REPORTS.....	43
SECTION 4.04	COMPLIANCE CERTIFICATE.....	43
SECTION 4.05	TAXES.....	44
SECTION 4.06	STAY, EXTENSION AND USURY LAWS.....	44
SECTION 4.07	RESTRICTED PAYMENTS.....	45
SECTION 4.08	DIVIDEND AND OTHER PAYMENT RESTRICTIONS AFFECTING RESTRICTED SUBSIDIARIES.....	47
SECTION 4.09	INCURRENCE OF INDEBTEDNESS AND ISSUANCE OF PREFERRED STOCK.....	48
SECTION 4.10	ASSET SALES.....	51
SECTION 4.11	TRANSACTIONS WITH AFFILIATES.....	52
SECTION 4.12	LIENS.....	52
SECTION 4.13	FUTURE SUBSIDIARY GUARANTEES.....	53
	i	
SECTION 4.14	CORPORATE EXISTENCE.....	54
SECTION 4.15	OFFER TO REPURCHASE UPON CHANGE OF CONTROL.....	54
SECTION 4.16	NO SENIOR SUBORDINATED DEBT.....	55
SECTION 4.17	PAYMENTS FOR CONSENT.....	55
SECTION 4.18	CHANGES IN COVENANTS WHEN NOTES RATED INVESTMENT GRADE.....	56
ARTICLE 5. SUCCESSORS.....		56
SECTION 5.01	MERGER, CONSOLIDATION, OR SALE OF ASSETS.....	56
SECTION 5.02	SUCCESSOR CORPORATION SUBSTITUTED.....	57
ARTICLE 6. DEFAULTS AND REMEDIES.....		58
SECTION 6.01	EVENTS OF DEFAULT.....	58
SECTION 6.02	ACCELERATION.....	59
SECTION 6.03	OTHER REMEDIES.....	60
SECTION 6.04	WAIVER OF PAST DEFAULTS.....	60
SECTION 6.05	CONTROL BY MAJORITY.....	61
SECTION 6.06	LIMITATION ON SUITS.....	61
SECTION 6.07	RIGHTS OF HOLDERS OF NOTES TO RECEIVE PAYMENT.....	61
SECTION 6.08	COLLECTION SUIT BY TRUSTEE.....	62
SECTION 6.09	TRUSTEE MAY FILE PROOFS OF CLAIM.....	62
SECTION 6.10	PRIORITIES.....	62
SECTION 6.11	UNDERTAKING FOR COSTS.....	63
ARTICLE 7. TRUSTEE.....		63
SECTION 7.01	DUTIES OF TRUSTEE.....	63
SECTION 7.02	RIGHTS OF TRUSTEE.....	64
SECTION 7.03	INDIVIDUAL RIGHTS OF TRUSTEE.....	65
SECTION 7.04	TRUSTEE'S DISCLAIMERS.....	65
SECTION 7.05	NOTICE OF DEFAULTS.....	66
SECTION 7.06	REPORTS BY TRUSTEE TO HOLDERS OF THE NOTES.....	66
SECTION 7.07	COMPENSATION AND INDEMNITY.....	66
SECTION 7.08	REPLACEMENT OF TRUSTEE.....	67
SECTION 7.09	SUCCESSOR TRUSTEE BY MERGER, ETC.....	68
SECTION 7.10	ELIGIBILITY; DISQUALIFICATION.....	68
SECTION 7.11	PREFERENTIAL COLLECTION OF CLAIMS AGAINST COMPANY.....	68
ARTICLE 8. LEGAL DEFEASANCE AND COVENANT DEFEASANCE.....		68
SECTION 8.01	OPTION TO EFFECT LEGAL DEFEASANCE OR COVENANT DEFEASANCE.....	68
SECTION 8.02	LEGAL DEFEASANCE AND DISCHARGE.....	68
SECTION 8.03	COVENANT DEFEASANCE.....	69
SECTION 8.04	CONDITIONS TO LEGAL OR COVENANT DEFEASANCE.....	69
SECTION 8.05	DEPOSITED MONEY AND GOVERNMENT SECURITIES TO BE HELD IN TRUST; OTHER MISCELLANEOUS PROVISIONS.....	71
SECTION 8.06	REPAYMENT TO COMPANY.....	71
SECTION 8.07	REINSTATEMENT.....	72
ARTICLE 9. AMENDMENT, SUPPLEMENT AND WAIVER.....		72
SECTION 9.01	WITHOUT CONSENT OF HOLDERS OF NOTES.....	72
SECTION 9.02	WITH CONSENT OF HOLDERS OF NOTES.....	73
	ii	
SECTION 9.03	COMPLIANCE WITH TRUST INDENTURE ACT.....	74
SECTION 9.04	REVOCATION AND EFFECT OF CONSENTS.....	74
SECTION 9.05	NOTATION ON OR EXCHANGE OF NOTES.....	75
SECTION 9.06	TRUSTEE TO SIGN AMENDMENTS, ETC.....	75
ARTICLE 10. SUBSIDIARY GUARANTEES.....		75
SECTION 10.01	AGREEMENT TO GUARANTEE.....	75
SECTION 10.02	EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.....	76

SECTION 10.03	GUARANTORS MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.....	77
SECTION 10.04	RELEASES.....	78
SECTION 10.05	NO RECOURSE AGAINST OTHERS.....	79
SECTION 10.06	SUBORDINATION OF SUBSIDIARY GUARANTEES.....	79
ARTICLE 11. SUBORDINATION.....		79
SECTION 11.01	AGREEMENT TO SUBORDINATE.....	79
SECTION 11.02	LIQUIDATION; DISSOLUTION; BANKRUPTCY.....	79
SECTION 11.03	DEFAULT ON DESIGNATED SENIOR DEBT.....	79
SECTION 11.04	ACCELERATION OF SECURITIES.....	80
SECTION 11.05	WHEN DISTRIBUTION MUST BE PAID OVER.....	80
SECTION 11.06	NOTICE BY COMPANY.....	81
SECTION 11.07	SUBROGATION.....	81
SECTION 11.08	RELATIVE RIGHTS.....	81
SECTION 11.09	SUBORDINATION MAY NOT BE IMPAIRED BY COMPANY.....	82
SECTION 11.10	DISTRIBUTION OR NOTICE TO REPRESENTATIVE.....	82
SECTION 11.11	RIGHTS OF TRUSTEE AND PAYING AGENT.....	82
SECTION 11.12	AUTHORIZATION TO EFFECT SUBORDINATION.....	83
SECTION 11.13	AMENDMENTS.....	83
ARTICLE 12. MISCELLANEOUS.....		83
SECTION 12.01	TRUST INDENTURE ACT CONTROLS.....	83
SECTION 12.02	NOTICES.....	83
SECTION 12.03	COMMUNICATIONS BY HOLDERS OF NOTES WITH OTHER HOLDERS OF NOTES.....	84
SECTION 12.04	CERTIFICATE AND OPINION AS TO CONDITIONS PRECEDENT.....	84
SECTION 12.05	STATEMENTS REQUIRED IN CERTIFICATE OR OPINION.....	85
SECTION 12.06	RULE BY TRUSTEE AND AGENTS.....	85
SECTION 12.07	NO PERSONAL LIABILITY OF DIRECTORS, OFFICERS, EMPLOYEES AND STOCKHOLDERS.....	85
SECTION 12.08	GOVERNING LAW.....	85
SECTION 12.09	NO ADVERSE INTERPRETATION OF OTHER AGREEMENTS.....	86
SECTION 12.10	SUCCESSORS.....	86
SECTION 12.11	SEVERABILITY.....	86
SECTION 12.12	COUNTERPART ORIGINALS.....	86
SECTION 12.13	TABLE OF CONTENTS, HEADINGS, ETC.....	86

iii

#### EXHIBITS

EXHIBIT A	FORM OF NOTE	
EXHIBIT B	FORM OF CERTIFICATE OF TRANSFER	
EXHIBIT C	FORM OF CERTIFICATE OF EXCHANGE	
EXHIBIT D	FORM OF CERTIFICATE FROM ACQUIRING INSTITUTIONAL ACCREDITED INVESTORS	
EXHIBIT E	FORM OF SUPPLEMENTAL INDENTURE	
EXHIBIT F	FORM OF NOTATION ON SENIOR SUBORDINATED NOTE RELATING TO SUBSIDIARY GUARANTEE	

iv

#### Cross-Reference Table\*

Trust Indenture Act Section	Indenture Section
310 (a) (1).....	7.10
(a) (2).....	7.10
(a) (3).....	N.A.
(a) (4).....	N.A.
(a) (5).....	7.10
(b).....	7.10
(c).....	N.A.
311 (a).....	7.11
(b).....	7.11
(c).....	N.A.

312	(a).....	2.05
	(b).....	12.03
	(c).....	12.03
313	(a).....	7.06
	(b) (1).....	11.03
	(b) (2).....	7.07
	(c).....	7.06;12.02
	(d).....	7.06
314	(a).....	4.03;12.02
	(b).....	11.02
	(c) (1).....	12.04
	(c) (2).....	12.04
	(c) (3).....	N.A.
	(d).....	11.03, 11.04, 11.05
	(e).....	12.05
	(f).....	N.A.
315	(a).....	7.01
	(b).....	7.05, 12.02
	(c).....	7.01
	(d).....	7.01
	(e).....	6.11
316	(a) (last sentence).....	2.09
	(a) (1) (A).....	6.05
	(a) (1) (B).....	6.04
	(a) (2).....	N.A.
	(b).....	6.07
	(c).....	2.12
317	(a) (1).....	6.08

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\* This Cross-Reference Table is not part of the Indenture.

v

	(a) (2).....	6.09
	(b).....	2.04
318	(a).....	12.01
	(b).....	N.A.
	(c).....	12.01

N.A. means not applicable.

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\* This Cross-Reference Table is not part of the Indenture.

vi

This INDENTURE, dated as of December 22, 2003, among Apcom, Inc., a Maryland corporation, Broadcast Sports Inc., a Delaware corporation, Electrodynamics, Inc., an Arizona corporation, Henschel Inc., a Delaware corporation, Hygienetics Environmental Services, Inc., a Delaware corporation, Interstate Electronics Corporation, a California corporation, KDI Precision Products, Inc., a Delaware corporation, L-3 Communications Aeromet, Inc., an Oregon corporation, L-3 Communications Aerotech LLC, a Delaware limited liability company, L-3 Communications AIS GP Corporation, a Delaware corporation, L-3 Communications Atlantic Science and Technology Corporation, a New Jersey corporation, L-3 Communications Avionics Systems, Inc., a Delaware corporation, L-3 Communications Aydin Corporation, a Delaware corporation, L-3 Communications Corporation, a Delaware corporation, L-3 Communications CSI, Inc., a California corporation, L-3 Communications ESSCO, Inc., a Delaware corporation, L-3 Communications Flight International Aviation LLC, a Delaware limited liability company, L-3 Communications Flight Capital LLC, a Delaware limited liability company, L-3 Communications Government Services, Inc., a Virginia corporation, L-3 Communications ILEX Systems, Inc., a Delaware corporation, L-3 Communications IMC Corporation, a Connecticut corporation, L-3 Communications Integrated Systems L.P., a Delaware limited partnership, L-3 Communications Investments Inc., a Delaware corporation, L-3 Communications Klein Associates, Inc., a Delaware corporation, L-3 Communications MAS (US) Corporation, a Delaware corporation, L-3 Communications Security And Detection Systems Corporation California, a California corporation, L-3 Communications Security And Detection Systems Corporation Delaware, a Delaware corporation, L-3 Communications Storm Control Systems, Inc., a California corporation, L-3 Communications Vector International Aviation LLC, a Delaware limited liability company, L-3 Communications TMA Corporation, a Virginia corporation, L-3

Communications Westwood Corporation, a Nevada corporation, MCTI Acquisition Corporation, a Maryland corporation, Microdyne Communications Technologies Incorporated, a Maryland corporation, Microdyne Corporation, a Maryland corporation, Microdyne Outsourcing Incorporated, a Maryland corporation, MPRI, Inc., a Delaware corporation, Pac Ord Inc., a Delaware corporation, Power Paragon, Inc., a Delaware corporation, Ship Analytics, Inc., a Connecticut corporation, Ship Analytics International, Inc., a Delaware corporation, Ship Analytics USA, Inc., a Connecticut corporation, SPD Electrical Systems, Inc., a Delaware corporation, SPD Switchgear Inc., a Delaware corporation, SYColeman Corporation, a Florida corporation, Troll Technology Corporation, a California corporation, Wescam Air Ops Inc., a Delaware corporation, Wescam Air Ops LLC, a Delaware limited liability company, Wescam Holdings (US) Inc., a Delaware corporation, Wescam Incorporated, a Florida corporation, Wescam LLC, a Delaware limited liability company, Wescam Sonoma Inc., a California corporation and Wolf Coach, Inc., a Massachusetts corporation (collectively, the "Guarantors"), and The Bank of New York, as trustee (the "Trustee").

The Company and the Trustee agree as follows for the benefit of each other and for the equal and ratable benefit of the Holders of the 6-1/8% Senior Subordinated Notes due 2014 (the "Series A Notes") and the 6-1/8% Senior Subordinated Notes due 2014 (the "Exchange Notes" and, together with the Series A Notes, the "Notes"):

ARTICLE 1  
DEFINITIONS AND INCORPORATION  
BY REFERENCE

Section 1.01            Definitions.

"144A Global Note" means the global note in the form of Exhibit A hereto bearing the Global Note Legend and the Private Placement Legend and deposited with and registered in the name of the Depositary or its nominee that will be issued in a denomination equal to the outstanding principal amount of the Notes sold in reliance on Rule 144A.

"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 party thereto, 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 party thereto, 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 party 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, (i) 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 (ii) 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.

"Additional Notes" means any Notes (other than the Initial Notes) issued under this Indenture in accordance with Sections 2.02 and 4.09 hereof.

"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.

"Agent" means any Registrar, Paying Agent or co-registrar.

"Applicable Procedures" means, with respect to any transfer or exchange of or for beneficial interests in any Global Note, the rules and procedures of the Depositary, Euroclear and Clearstream that apply to such transfer or exchange.

"Asset Sale" means (i) 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 shall be governed by the covenant contained in Section 4.15 and/or the covenant contained in Section 5.01 and not by the covenant contained in Section 4.10), and (ii) 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 (i) or (ii), 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: (i) a transfer of assets by the Company to a Restricted Subsidiary or by a Restricted Subsidiary to the Company or to another Restricted Subsidiary, (ii) an issuance of Equity Interests by a Restricted Subsidiary to the Company or to another Restricted Subsidiary, (iii) a Restricted Payment that is permitted by the covenant contained in Section 4.07 and (iv) a disposition of Cash Equivalents in the ordinary course of business shall 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).

"Bankruptcy Law" means Title 11, U.S. Code or any similar federal or state law for the relief of debtors.

"Board of Directors" means the Board of Directors of the Company, or any authorized committee of the Board of Directors.

"Broker-Dealer" has the meaning set forth in the Registration Rights Agreement.

"Business Day" means any day other than a Legal Holiday.

"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 (i) in the case of a corporation, corporate stock, (ii) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock, (iii) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited) and (iv) 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.

"Cash Equivalents" means (i) United States dollars, (ii) 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, (iii) 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, (iv) repurchase obligations with a term of not more than seven days for underlying securities of the types described in clauses (ii) and (iii) above entered into with any financial institution meeting the qualifications specified in clause (iii) above, (v) 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, (vi) investment funds investing 95% of their assets in securities of the types described in clauses (i)-(v) above, and (vii) 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: (i) 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), (ii) the adoption of a plan relating to the liquidation or dissolution of the Company, (iii) 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 (iv) the first day on which a majority of the members of the Board of Directors of the Company are not Continuing Directors.

"Clearstream" means Clearstream Banking, societe anonyme (formerly Cedelbank).

4

"Consolidated Cash Flow" means, with respect to any Person for any period, the Consolidated Net Income of such Person for such period plus (i) 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 (ii) 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 (iii) 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 (iv) 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 (v) 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 (i) 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, (ii) 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, (iii) 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, (iv) the cumulative effect of a change in accounting principles shall be excluded, (v) the Net Income of any Unrestricted Subsidiary shall be excluded, whether or not distributed to the Company or one of its Restricted Subsidiaries, and (vi) the Net Income of any Restricted Subsidiary shall be calculated after deducting preferred stock dividends payable by such Restricted Subsidiary to Persons other than the Company and its other Restricted Subsidiaries.

"Consolidated Tangible Assets" means, with respect to the Company, the total consolidated assets of the Company and its Restricted Subsidiaries, less the total intangible assets of the Company and its Restricted Subsidiaries, as shown on the most recent internal

5

consolidated balance sheet of the Company and such Restricted Subsidiaries calculated on a consolidated basis in accordance with GAAP.

"Continuing Directors" means, as of any date of determination, any member of the Board of Directors of the Company who (i) was a member of such Board of Directors on the date of this Indenture or (ii) 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.

"Corporate Trust Office of the Trustee" shall be at the address of the Trustee specified in Section 12.02 hereof or such other address as to which the Trustee may give notice to the Company.

"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, among 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.

"Definitive Note" means a certificated Note registered in the name of the Holder thereof and issued in accordance with Article 2 hereof, substantially in the form of Exhibit A hereto, except that such Note shall not bear the Global Note Legend and shall not have the "Schedule of Exchanges of Interests in the Global Note" attached thereto.

"Depositary" means, with respect to the Notes issuable or issued in whole or in part in global form, the Person specified in Section 2.03 hereof as the Depositary with respect to the Notes, until a successor shall have been appointed and become such pursuant to the applicable provision of this Indenture, and, thereafter, "Depositary" shall mean or include such successor.

"Designated Senior Debt" means (i) any Indebtedness outstanding under the Senior Credit Facilities and (ii) any other Senior Debt permitted under the Indenture the principal

6

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 Section 4.07 hereof; 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.

"Euroclear" means Morgan Guaranty Trust Company of New York, Brussels office, as operator of the Euroclear system.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Exchange Notes" means the Notes issued in the Exchange Offer pursuant to Section 2.06(f).

"Exchange Offer" has the meaning set forth in the Registration Rights Agreement.

"Exchange Offer Registration Statement" has the meaning set forth in the Registration Rights Agreement.

"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 (i) 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

7

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) and (ii) the consolidated interest of such Person and its Restricted Subsidiaries that was capitalized during such period, and (iii) 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 (iv) 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, (i) 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 (iii) of the proviso set forth in the definition of Consolidated Net Income, (ii) 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 (iii) 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 that has not guaranteed or otherwise provided direct credit support for any Indebtedness of the Company.

"GAAP" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified

8

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.

"Global Notes" means, individually and collectively, each of the Restricted Global Notes and the Unrestricted Global Notes, substantially in the form of Exhibit A hereto issued in accordance with Article 2 hereof.

"Global Note Legend" means the legend set forth in Section 2.06(g) (ii) to be placed on all Global Notes issued under this Indenture.

"Government Securities" means direct obligations of, or obligations guaranteed by, the United States of America for the payment of which guarantee or obligations the full faith and credit of the United States is pledged.

"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 Person listed in the preamble to the Indenture and 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 (i) currency exchange or interest rate swap agreements, interest rate cap agreements and currency exchange or interest rate collar agreements and (ii) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange rates or interest rates.

"Holder" means a Person in whose name a Note is registered.

"Holdings" means L-3 Communications Holdings, Inc., a Delaware corporation.

"IAI Global Note" means the global Note in the form of Exhibit A hereto bearing the Global Note Legend and the Private Placement Legend and deposited with and registered in the name of the Depositary or its nominee that will be issued in a denomination equal to the outstanding principal amount of the Notes sold to Institutional Accredited Investors.

"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 (i) the accreted value thereof, in the case of any Indebtedness that does not require current payments of interest, and (ii) the principal amount thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Indebtedness.

"Indenture" means this Indenture, as amended or supplemented from time to time.

"Indirect Participant" means a Person who holds a beneficial interest in a Global Note through a Participant.

"Initial Notes" means \$400.0 million in aggregate principal amount of Notes issued under this Indenture on the date hereof.

"Institutional Accredited Investor" means an institution that is an "accredited investor" as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act.

"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 contained in Section 4.07.

"Legal Holiday" means a Saturday, a Sunday or a day on which banking institutions in The City of New York or at a place of payment are authorized by law, regulation or executive order to remain closed. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

"Lehman Investor" means Lehman Brothers Holdings Inc. and any of its Affiliates.

"Letter of Transmittal" means the letter of transmittal to be prepared by the Company and sent to all Holders of the Series A Notes for use by such Holders in connection with the Exchange Offer.

"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 perfected under applicable law (including any conditional sale or other

10

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 (i) traded on The New York Stock Exchange, the American Stock Exchange or the Nasdaq National Market; and (ii) 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, among The Bank of New York, as trustee, the Company and the guarantors party thereto, 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.

"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, (i) 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 (ii) any extraordinary gain or loss, together with any related provision for taxes on such extraordinary gain or loss and (iii) 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 (i) as to which neither the Company nor any of its Restricted Subsidiaries (A) provides credit support of any kind (including any undertaking, agreement or instrument that would constitute Indebtedness), (B) is directly or

11

indirectly liable (as a guarantor or otherwise), or (C) constitutes the lender; and (ii) 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 (iii) 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.

"Non-U.S. Person" means a person who is not a U.S. Person.

"Note Custodian" means the Trustee, as custodian with respect to the Notes in global form, or any successor entity thereto.

"Notes" has the meaning assigned to it in the preamble to this Indenture. The Initial Notes and the Additional Notes shall be treated as a single class for all purposes under this Indenture, and unless the context otherwise requires, all references to the Notes shall include the Initial Notes and any Additional Notes.

"Obligations" means any principal, premium and 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.

"Offering" means the offering of the Notes by the Company.

"Officer" means, with respect to any Person, the Chairman of the Board, the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer, the Treasurer, any Assistant Treasurer, the Controller, the Secretary, any Assistant Secretary or any Vice-President of such Person.

"Officers' Certificate" means a certificate signed on behalf of the Company by two Officers of the Company, one of whom must be the principal executive officer, the principal financial officer, the treasurer or the principal accounting officer of the Company, that meets the requirements of Section 12.05 hereof.

"Opinion of Counsel" means an opinion from legal counsel who is reasonably acceptable to the Trustee, that meets the requirements of Section 12.05 hereof. The counsel may be an employee of or counsel to the Company, any Subsidiary of the Company or the Trustee.

"Participant" means, with respect to DTC, Euroclear or Clearstream, a Person who has an account with DTC, Euroclear or Clearstream, respectively (and, with respect to DTC, shall include Euroclear and Clearstream).

"Permitted Investment" means (i) any Investment in the Company or in a Restricted Subsidiary of the Company that is a Guarantor; (ii) any Investment in cash or Cash

12

Equivalents; (iii) 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; (iv) 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 Section 4.10 or any disposition of assets not constituting an Asset sale; (v) any acquisition of assets solely in exchange for the issuance of Equity Interests (other than Disqualified Stock) of the Company; (vi) advances to employees not to exceed \$2.5 million at any one time outstanding; (vii) any Investment acquired in connection with or as a result of a workout or bankruptcy of a customer or supplier; (viii) Hedging Obligations permitted to be incurred under Section 4.09; (ix) 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 (ix) (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 (x) 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 (x) that are at the time outstanding, not to exceed \$30.0 million.

"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 (i) 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 (ii) 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 pursuant to Article 11 of this Indenture.

"Permitted Liens" means (i) Liens securing Senior Debt of the Company or any Guarantor that was permitted by the terms of this Indenture to be incurred; (ii) Liens in favor of the Company or any Guarantor; (iii) 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; (iv) 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; (v) Liens to secure the performance of statutory

13

obligations, surety or appeal bonds, performance bonds or other obligations of a like nature incurred in the ordinary course of business; (vi) Liens to secure Indebtedness (including Capital Lease Obligations) permitted by clause (iv) of the second paragraph of Section 4.09 covering only the assets acquired with such Indebtedness; (vii) Liens existing on the date of this Indenture; (viii) 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; (ix) 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; (x) Liens on assets of Guarantors to secure Senior Debt of such Guarantors that was permitted by this Indenture to be incurred; (xi) 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; (xii) 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); (xiii) 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; (xiv) 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 (xv) 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: (i) 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); (ii) 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; (iii) 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 (iv) 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.

14

"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 (to the extent required by the terms of this Indenture).

"Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or

government or agency or political subdivision thereof (including any subdivision or ongoing business of any such entity or substantially all of the assets of any such entity, subdivision or business).

"Principals" means any Lehman Investor, Frank C. Lanza and Robert V. LaPenta.

"Private Placement Legend" means the legend set forth in Section 2.06(g)(i) to be placed on all Notes issued under this Indenture except as otherwise permitted by the provisions of this Indenture.

"Purchase Agreement" means the Purchase Agreement, dated as of December 16, 2003, among the Company, the Guarantors, Lehman Brothers Inc., Banc of America Securities LLC, Morgan Stanley & Co. Incorporated, SG Cowen Securities Corporation and Wachovia Securites, Inc, as representatives of the several initial purchasers named therein.

"QIB" means a "qualified institutional buyer" as defined in Rule 144A.

"Registration Rights Agreement" means the A/B Exchange Registration Rights Agreement, dated as of the date hereof, by and among the Company and the other parties named on the signature pages thereof, as such agreement may be amended, modified or supplemented from time to time and, with respect to any Additional Notes, one or more registration rights agreements between the Company and the other parties thereto, as such agreement(s) may be amended, modified or supplemented from time to time, relating to rights given by the Company to the purchasers of Additional Notes to register such Additional Notes under the Securities Act.

"Regulation S" means Regulation S promulgated under the Securities Act.

"Regulation S Global Note" means a global Note bearing the Private Placement Legend and deposited with and registered in the name of the Depositary or its nominee that will be issued in a denomination equal to the outstanding principal amount of the Notes sold in reliance on Regulation S.

"Related Party" with respect to any Principal means (i) any controlling stockholder, 50% (or more) owned Subsidiary, or spouse or immediate family member (in the case of an individual) of such Principal or (ii) 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 (i).

"Representative" means the indenture trustee or other trustee, agent or representative for any Senior Debt.

15

"Responsible Officer" when used with respect to the Trustee, means any officer within the Corporate Trust Administration of the Trustee (or any successor group of the Trustee) or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

"Restricted Definitive Note" means a Definitive Note bearing the Private Placement Legend.

"Restricted Global Notes" means the 144A Global Note, the IAI Global Note and the Regulation S Global Note, each of which shall bear the Private Placement Legend.

"Restricted Investment" means an Investment other than a Permitted Investment.

"Restricted Period" means the 40-day restricted period as defined in Regulation S.

"Restricted Subsidiary" means, with respect to any Person, each Subsidiary of such Person that is not an Unrestricted Subsidiary.

"Rule 144" means Rule 144 under the Securities Act.

"Rule 144A" means Rule 144A under the Securities Act.

"Rule 903" means Rule 903 under the Securities Act.

"Rule 904" means Rule 904 under the Securities Act.

"SEC" means the Securities and Exchange Commission.

"Securities Act" means the Securities Act of 1933, as amended.

"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 this Indenture, among the Company, the lenders party thereto, Bank 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 this Indenture among the Company, the lenders party thereto, Bank 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).

16

"Senior Debt" means (i) all Indebtedness of the Company or any of its Restricted Subsidiaries outstanding under Credit Facilities and all Hedging Obligations with respect thereto, (ii) 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 (iii) all Obligations with respect to the foregoing. Notwithstanding anything to the contrary in the foregoing, Senior Debt will not include (i) any liability for federal, state, local or other taxes owed or owing by the Company, (ii) any Indebtedness of the Company to any of its Subsidiaries or other Affiliates, (iii) any trade payables or (iv) any Indebtedness that is incurred in violation of the Indenture. The December 1998 Notes, the 2000 Convertible Notes, the 2001 CODES, the 2002 Notes and the May 2003 Notes shall be deemed to rank pari passu with the Notes and shall not constitute Senior Debt.

"Shelf Registration Statement" means the Shelf Registration Statement as defined in the Registration Rights Agreement.

"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 (i) the sale of defense products, electronics, communications systems, aerospace products, avionics products and/or communications products, (ii) any services related thereto, (iii) any business or activity that is reasonably similar thereto or a reasonable extension, development or expansion thereof or ancillary thereto, and (iv) 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 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, (i) 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 (ii) 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.

"TIA" means the Trust Indenture Act of 1939 (15 U.S.C. ss.ss. 77aaa-77bbbb) as in effect on the date on which this Indenture is qualified under TIA.

17

"Transaction Documents" means the Indenture, the Notes, the Purchase Agreement and the Registration Rights Agreement.

"Transfer Restricted Securities" means securities that bear or are required to bear the Private Placement Legend set forth in Section 2.06(g) (i) hereof.

"Trustee" means the party named as such above until a successor replaces it in accordance with the applicable provisions of this Indenture and thereafter means the successor serving hereunder.

"Unrestricted Global Note" means one or more Global Notes, in

the form of Exhibit A attached hereto, that do not and are not required to bear the Private Placement Legend and are deposited with and registered in the name of the Depositary or its nominee.

"Unrestricted Definitive Note" means one or more Definitive Notes that do not and are not required to bear the Private Placement Legend.

"Unrestricted Subsidiary" means any Subsidiary that is designated by the Board of Directors as an Unrestricted Subsidiary pursuant to a resolution of the Board of Directors, but only to the extent that such Subsidiary: (i) has no Indebtedness other than Non-Recourse Debt; (ii) 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; (iii) 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; (iv) has not guaranteed or otherwise directly or indirectly provided credit support for any Indebtedness of the Company or any of its Restricted Subsidiaries; and (v) 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 a resolution of the Board of Directors giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing conditions and was permitted by Section 4.07. 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 this 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 Section 4.09, 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 (i) such Indebtedness is permitted under Section 4.09, calculated on a pro forma basis as if such designation had occurred at the beginning of the four-quarter reference period, and (ii) no Default or Event of Default would be in existence following such designation.

18

"U.S. Person" means a U.S. person as defined in Rule 902(k) under the Securities Act.

"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 (i) 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 (ii) 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.

Section 1.02 Other Definitions.

Term	Defined in Section
"Affiliate Transaction".....	4.11
"Asset Sale Offer".....	3.09
"Change of Control Offer".....	4.15
"Change of Control Payment".....	4.15
"Change of Control Payment Date".....	4.15
"Covenant Defeasance".....	8.03
"DTC".....	2.03
"Event of Default".....	6.01
"Excess Proceeds".....	4.10
"Global Note Legend".....	2.06
"incur".....	4.09
"Legal Defeasance".....	8.02
"Offer Amount".....	3.09
"Offer Period".....	3.09
"Paying Agent".....	2.03
"Payment Blockage Notice" .....	11.03
"Permitted Debt" .....	4.09

"Purchase Date".....	3.09
"Registrar".....	2.03
"Restricted Payments".....	4.07

"Series A Notes".....preamble

#### Section 1.03 Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture.

The following TIA terms used in this Indenture have the following meanings:

"indenture securities" means the Notes;

"indenture security Holder" means a Holder of a Note;

"indenture to be qualified" means this Indenture;

"indenture trustee" or "institutional trustee" means the

Trustee;

"obligor" on the Notes means the Company and any successor obligor upon the Notes.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA have the meanings so assigned to them.

#### Section 1.04 Rules of Construction.

Unless the context otherwise requires:

(1) a term has the meaning assigned to it;

(2) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;

(3) "or" is not exclusive;

(4) words in the singular include the plural, and in the plural include the singular;

(5) provisions apply to successive events and transactions; and

(6) references to sections of or rules under the Securities Act shall be deemed to include substitute, replacement of successor sections or rules adopted by the SEC from time to time.

### ARTICLE 2 THE NOTES

#### Section 2.01 Form and Dating.

The Notes and the Trustee's certificate of authentication shall be substantially in the form of Exhibit A hereto. The Notes may be issued in the form of Definitive Notes or Global Notes, as specified by the Company. The Notes may have notations, legends or endorsements required by law, stock exchange rule or usage. Each Note shall be dated the date of its authentication. The Notes shall be in denominations of \$1,000 and integral multiples thereof.

The terms and provisions contained in the Notes shall constitute, and are hereby expressly made, a part of this Indenture and the Company and the Trustee, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and to be bound thereby. However, to the extent any provision of any Note conflicts with the express provisions of this Indenture, the provisions of this Indenture shall govern and be controlling.

Notes issued in global form shall be substantially in the form of Exhibit A attached hereto (including the Global Note Legend and the "Schedule of Exchanges in the Global Note" attached thereto). Notes issued in definitive form shall be substantially in the form of Exhibit A attached hereto (but without the Global Note Legend and without the "Schedule of Exchanges of Interests in the Global Note" attached thereto). Each Global Note shall represent such of the outstanding Notes as shall be specified therein and each shall provide that it shall represent the aggregate principal amount of outstanding Notes from time to time endorsed thereon and that the aggregate principal amount of outstanding Notes represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges and redemptions. Any endorsement of a Global Note to reflect the amount of any increase or decrease in the aggregate principal amount of outstanding Notes represented

thereby shall be made by the Trustee or the Note Custodian, at the direction of the Trustee, in accordance with instructions given by the Holder thereof as required by Section 2.06 hereof.

The provisions of the "Operating Procedures of the Euroclear System" and "Terms and Conditions Governing Use of Euroclear" and the "General Terms and Conditions of Clearstream Banking" and "Customer Handbook" of Clearstream shall be applicable to interests in the Regulation S Global Notes that are held by the Agent Members through Euroclear or Clearstream.

#### Section 2.02 Execution and Authentication.

Two Officers shall sign the Notes for the Company by manual or facsimile signature.

If an Officer whose signature is on a Note no longer holds that office at the time a Note is authenticated, the Note shall nevertheless be valid.

A Note shall not be valid until authenticated by the manual signature of the Trustee. The signature shall be conclusive evidence that the Note has been authenticated under this Indenture.

### 21

The Trustee shall, upon a written order of the Company signed by two Officers, authenticate the Initial Notes for original issue up to \$400.0 million in aggregate principal amount and, upon receipt of an authentication order in accordance with this Section 2.02, at any time and from time to time thereafter, the Trustee shall authenticate Additional Notes and Exchange Notes for original issue in an aggregate principal amount specified in such authentication order.

The Trustee may appoint an authenticating agent acceptable to the Company to authenticate Notes. An authenticating agent may authenticate Notes whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with Holders or an Affiliate of the Company.

#### Section 2.03 Registrar and Paying Agent.

The Company shall maintain an office or agency where Notes may be presented for registration of transfer or for exchange ("Registrar") and an office or agency where Notes may be presented for payment ("Paying Agent"). The Registrar shall keep a register of the Notes and of their transfer and exchange. The Company may appoint one or more co-registrars and one or more additional paying agents. The term "Registrar" includes any co-registrar and the term "Paying Agent" includes any additional paying agent. The Company may change any Paying Agent or Registrar without notice to any Holder. The Company shall notify the Trustee in writing of the name and address of any Agent not a party to this Indenture. If the Company fails to appoint or maintain another entity as Registrar or Paying Agent, the Trustee shall act as such. The Company or any of its Subsidiaries may act as Paying Agent or Registrar.

The Company initially appoints The Depository Trust Company ("DTC") to act as Depository with respect to the Global Notes.

The Company initially appoints the Trustee to act as the Registrar and Paying Agent and to act as Note Custodian with respect to the Global Notes.

#### Section 2.04 Paying Agent To Hold Money In Trust.

The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Holders or the Trustee all money held by the Paying Agent for the payment of principal, premium or Additional Interest, if any, or interest on the Notes, and will notify the Trustee of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary) shall have no further liability for the money. If the Company or a Subsidiary acts as Paying Agent, it shall segregate and hold in a separate trust fund for the benefit of the Holders all money held by it as Paying Agent. Upon any bankruptcy or reorganization proceedings relating to the Company, the Trustee shall serve as Paying Agent for the Notes.

### 22

#### Section 2.05 Holder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and

addresses of all Holders and shall otherwise comply with TIA ss. 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least five Business Days before each interest payment date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Holders of Notes and the Company shall otherwise comply with TIA ss. 312(a).

## Section 2.06 Transfer and Exchange.

(a) Transfer and Exchange of Global Notes. A Global Note may not be transferred as a whole except by the Depositary to a nominee of the Depositary, by a nominee of the Depositary to the Depositary or to another nominee of the Depositary, or by the Depositary or any such nominee to a successor Depositary or a nominee of such successor Depositary. All Global Notes will be exchanged by the Company for Definitive Notes if (i) the Company delivers to the Trustee notice from the Depositary that it is unwilling or unable to continue to act as Depositary or that it is no longer a clearing agency registered under the Exchange Act and, in either case, a successor Depositary is not appointed by the Company within 120 days after the date of such notice from the Depositary or (ii) the Company in its sole discretion determines that the Global Notes (in whole but not in part) should be exchanged for Definitive Notes and delivers a written notice to such effect to the Trustee. Upon the occurrence of either of the preceding events in (i) or (ii) above, Definitive Notes shall be issued in such names as the Depositary shall instruct the Trustee. Global Notes also may be exchanged or replaced, in whole or in part, as provided in Sections 2.07 and 2.11 hereof. Every Note authenticated and made available for delivery in exchange for, or in lieu of, a Global Note or any portion thereof, pursuant to Section 2.07 or 2.11 hereof, shall be authenticated and made available for delivery in the form of, and shall be, a Global Note. A Global Note may not be exchanged for another Note other than as provided in this Section 2.06(a), however beneficial interests in a Global Note may be transferred and exchanged as provided in Section 2.06(b), (c) or (f) hereof.

(b) Transfer and Exchange of Beneficial Interests in the Global Notes. The transfer and exchange of beneficial interests in the Global Notes shall be effected through the Depositary, in accordance with the provisions of this Indenture and the procedures of the Depositary therefor. Beneficial interests in the Restricted Global Notes shall be subject to restrictions on transfer comparable to those set forth herein to the extent required by the Securities Act. The Trustee shall have no obligation to ascertain the Depositary's compliance with any such restrictions on transfer. Transfers of beneficial interests in the Global Notes also shall require compliance with either subparagraph (i) or (ii) below, as applicable, as well as one or more of the other following subparagraphs as applicable:

(i) Transfer of Beneficial Interests in the Same Global Note. Beneficial interests in any Restricted Global Note may be transferred to Persons who take delivery thereof in the form of a beneficial interest in the same Restricted Global Note in accordance with the transfer restrictions set forth in the Private Placement Legend; provided, however, that prior to the expiration of the Restricted Period transfers of

beneficial interests in the Regulation S Global Note may not be made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). Beneficial interests in any Unrestricted Global Note may be transferred only to Persons who take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note. No written orders or instructions shall be required to be delivered to the Registrar to effect the transfers described in this Section 2.06(b) (i).

(ii) All Other Transfers and Exchanges of Beneficial Interests in Global Notes. In connection with all transfers and exchanges of beneficial interests (other than transfers of beneficial interests in a Global Note to Persons who take delivery thereof in the form of a beneficial interest in the same Global Note), the transferor of such beneficial interest must deliver to the Registrar either (A) (1) a written order from a Participant or an Indirect Participant given to the Depositary in accordance with the Applicable Procedures directing the Depositary to credit or cause to be credited a beneficial interest in the specified Global Note in an amount equal to the beneficial interest to be transferred or exchanged and (2) instructions given in accordance with the Applicable Procedures containing information regarding the Participant account to be credited with such increase or (B) (1) a written order from a Participant or an Indirect Participant given to the Depositary in accordance with the Applicable Procedures directing the Depositary to cause to be issued a Definitive Note in an amount equal to the beneficial interest to be transferred or exchanged and (2) instructions given by the Depositary to the Registrar containing information regarding the Person in whose name such Definitive Note shall be registered to effect the transfer or exchange referred to in (1) above. Upon an Exchange Offer by the Company in accordance with Section 2.06(f) hereof, the requirements of this Section 2.06(b) (ii) shall be deemed to have been satisfied upon receipt by the Registrar of the instructions contained in the Letter of Transmittal delivered by the Holder of such beneficial interests in the Restricted Global Notes. Upon satisfaction of all of the requirements for transfer or exchange of beneficial interests in Global Notes

contained in this Indenture, the Notes and otherwise applicable under the Securities Act, the Trustee shall adjust the principal amount of the relevant Global Note(s) pursuant to Section 2.06(h) hereof.

(iii) Transfer of Beneficial Interests to Another Restricted Global Note. Beneficial interests in any Restricted Global Note may be transferred to Persons who take delivery thereof in the form of a beneficial interest in another Restricted Global Note if the Registrar receives the following:

(A) if the transferee will take delivery in the form of a beneficial interest in the 144A Global Note, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (1) thereof;

(B) if the transferee will take delivery in the form of a beneficial interest in the Regulation S Global Note, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (2) thereof; and

24

(C) if the transferee will take delivery in the form of a beneficial interest in the IAI Global Note, then the transferor must deliver (x) a certificate in the form of Exhibit B hereto, including the certifications in item (3) thereof, (y) to the extent required by item 3(d) of Exhibit B hereto, an Opinion of Counsel in form reasonably acceptable to the Company to the effect that such transfer is in compliance with the Securities Act and such beneficial interest is being transferred in compliance with any applicable blue sky securities laws of any State of the United States and (z) if the transfer is being made to an Institutional Accredited Investor and effected pursuant to an exemption from the registration requirements of the Securities Act other than Rule 144A under the Securities Act, Rule 144 under the Securities Act or Rule 904 under the Securities Act, a certificate from the transferee in the form of Exhibit D hereto.

(iv) Transfer and Exchange of Beneficial Interests in a Restricted Global Note for Beneficial Interests in the Unrestricted Global Note. Beneficial interests in any Restricted Global Note may be exchanged by any holder thereof for a beneficial interest in the Unrestricted Global Note or transferred to Persons who take delivery thereof in the form of a beneficial interest in the Unrestricted Global Note if:

(A) such exchange or transfer is effected pursuant to the Exchange Offer in accordance with the Registration Rights Agreement and the holder, in the case of an exchange, or the transferee, in the case of a transfer, is not (1) a broker-dealer, (2) a Person participating in the distribution of the Exchange Notes or (3) a Person who is an affiliate (as defined in Rule 144) of the Company;

(B) any such transfer is effected pursuant to the Shelf Registration Statement in accordance with the Registration Rights Agreement;

(C) any such transfer is effected by a Broker-Dealer pursuant to the Exchange Offer Registration Statement in accordance with the Registration Rights Agreement; or

(D) the Registrar receives the following:

(1) if the holder of such beneficial interest in a Restricted Global Note proposes to exchange such beneficial interest for a beneficial interest in the Unrestricted Global Note, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (1)(a) thereof;

(2) if the holder of such beneficial interest in a Restricted Global Note proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of a beneficial interest in the Unrestricted Global Note, a certificate from such holder in the form of Exhibit B hereto, including the certifications in item (4) thereof;

(3) in each such case set forth in this subparagraph (D), an Opinion of Counsel in form reasonably acceptable to the Registrar to the

effect that such exchange or transfer is in compliance with the Securities Act, that the restrictions on transfer contained herein and in the Private Placement Legend are not required in order to maintain compliance with the Securities Act, and such beneficial interest is being exchanged or transferred in compliance with any applicable blue sky securities laws of any State of the United States.

If any such transfer is effected pursuant to subparagraph (B) or (D) above at a time when an Unrestricted Global Note has not yet been issued, the Company shall issue and, upon receipt of an authentication order in accordance with Section 2.02 hereof, the Trustee shall authenticate one or more Unrestricted Global Notes in an aggregate principal amount equal to the principal amount of beneficial interests transferred pursuant to subparagraph (B) or (D) above.

Beneficial interests in an Unrestricted Global Note cannot be exchanged for, or transferred to Persons who take delivery thereof in the form of, a beneficial interest in any Restricted Global Note.

(c) Transfer or Exchange of Beneficial Interests for Definitive Notes.

(i) If any holder of a beneficial interest in a Restricted Global Note proposes to exchange such beneficial interest for a Definitive Note or to transfer such beneficial interest to a Person who takes delivery thereof in the form of a Definitive Note, then, upon receipt by the Registrar of the following documentation (all of which may be submitted by facsimile):

(A) if the holder of such beneficial interest in a Restricted Global Note proposes to exchange such beneficial interest for a Definitive Note, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (2)(a) thereof;

(B) if such beneficial interest is being transferred to a QIB in accordance with Rule 144A under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (1) thereof;

(C) if such beneficial interest is being transferred to a Non-U.S. Person in an offshore transaction in accordance with Rule 904 under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (2) thereof;

(D) if such beneficial interest is being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(a) thereof;

(E) if such beneficial interest is being transferred to an Institutional Accredited Investor in reliance on an exemption from the registration requirements of the Securities Act other than those listed in subparagraphs (B) through (D) above, a certificate to the effect set forth in Exhibit B hereto,

including the certifications in item (3)(d) thereof, a certificate from the transferee to the effect set forth in Exhibit D hereof and, to the extent required by item 3(d) of Exhibit B, an Opinion of Counsel from the transferee or the transferor reasonably acceptable to the Company to the effect that such transfer is in compliance with the Securities Act and such beneficial interest is being transferred in compliance with any applicable blue sky securities laws of any State of the United States;

(F) if such beneficial interest is being transferred to the Company or any of its Subsidiaries, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(b) thereof; or

(G) if such beneficial interest is being transferred pursuant to an effective registration statement under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(c) thereof, the Trustee shall cause the aggregate principal amount of the applicable Global Note to be reduced accordingly pursuant to Section 2.06(h) hereof, and the Company shall execute and the Trustee shall authenticate and deliver to the

Person designated in the instructions a Definitive Note in the appropriate principal amount. Definitive Notes issued in exchange for beneficial interests in a Restricted Global Note pursuant to this Section 2.06(c) shall be registered in such names and in such authorized denominations as the holder shall instruct the Registrar through instructions from the Depositary and the Participant or Indirect Participant. The Trustee shall deliver such Definitive Notes to the Persons in whose names such Notes are so registered. Definitive Notes issued in exchange for a beneficial interest in a Restricted Global Note pursuant to this Section 2.06(c)(i) shall bear the Private Placement Legend and shall be subject to all restrictions on transfer contained therein.

(ii) Notwithstanding 2.06(c)(i), a holder of a beneficial interest in a Restricted Global Note may exchange such beneficial interest for an Unrestricted Definitive Note or may transfer such beneficial interest to a Person who takes delivery thereof in the form of an Unrestricted Definitive Note only if:

(A) such exchange or transfer is effected pursuant to the Exchange Offer in accordance with the Registration Rights Agreement and the holder, in the case of an exchange, or the transferee, in the case of a transfer, is not (1) a broker-dealer, (2) a Person participating in the distribution of the Exchange Notes or (3) a Person who is an affiliate (as defined in Rule 144) of the Company;

(B) any such transfer is effected pursuant to the Shelf Registration Statement in accordance with the Registration Rights Agreement;

(C) any such transfer is effected by a Broker-Dealer pursuant to the Exchange Offer Registration Statement in accordance with the Registration Rights Agreement; or

27

(D) the Registrar receives the following:

(1) if the holder of such beneficial interest in a Restricted Global Note proposes to exchange such beneficial interest for a Definitive Note that does not bear the Private Placement Legend, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (1)(b) thereof;

(2) if the holder of such beneficial interest in a Restricted Global Note proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of a Definitive Note that does not bear the Private Placement Legend, a certificate from such holder in the form of Exhibit B hereto, including the certifications in item (4) thereof; and

(3) in each such case set forth in this subparagraph (D), an Opinion of Counsel in form reasonably acceptable to the Company, to the effect that such exchange or transfer is in compliance with the Securities Act, that the restrictions on transfer contained herein and in the Private Placement Legend are not required in order to maintain compliance with the Securities Act, and such beneficial interest in a Restricted Global Note is being exchanged or transferred in compliance with any applicable blue sky securities laws of any State of the United States.

(iii) If any holder of a beneficial interest in an Unrestricted Global Note proposes to exchange such beneficial interest for a Definitive Note or to transfer such beneficial interest to a Person who takes delivery thereof in the form of a Definitive Note, then, upon satisfaction of the conditions set forth in Section 2.06(b)(ii), the Trustee shall cause the aggregate principal amount of the applicable Global Note to be reduced accordingly pursuant to Section 2.06(h) hereof, and the Company shall execute and the Trustee shall authenticate and deliver to the Person designated in the instructions a Definitive Note in the appropriate principal amount. Definitive Notes issued in exchange for a beneficial interest pursuant to this Section 2.06(c)(iii) shall be registered in such names and in such authorized denominations as the holder shall instruct the Registrar through instructions from the Depositary and the Participant or Indirect Participant. The Trustee shall deliver such Definitive Notes to the Persons in whose names such Notes are so registered. Definitive Notes issued in exchange for a beneficial interest pursuant to this section 2.06(c)(iii) shall not bear the Private Placement Legend. Beneficial interests in an Unrestricted Global Note cannot be exchanged for a Definitive Note bearing the Private Placement Legend or transferred to a Person who takes delivery thereof in the form of a Definitive Note bearing the Private Placement Legend.

(d) Transfer or Exchange of Definitive Notes for Beneficial Interests.

(i) If any Holder of Restricted Definitive Notes proposes to exchange such Notes for a beneficial interest in a Restricted Global Note or to transfer such Definitive Notes to a Person who takes delivery thereof in the form of a beneficial interest in a

28

Restricted Global Note, then, upon receipt by the Registrar of the following documentation (all of which may be submitted by facsimile):

(A) if the Holder of such Restricted Definitive Notes proposes to exchange such Notes for a beneficial interest in a Restricted Global Note, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (2)(b) thereof;

(B) if such Definitive Notes are being transferred to a QIB in accordance with Rule 144A under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (1) thereof;

(C) if such Definitive Notes are being transferred to a Non-U.S. Person in an offshore transaction in accordance with Rule 904 under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (2) thereof;

(D) if such Definitive Notes are being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(a) thereof;

(E) if such Definitive Notes are being transferred to an Institutional Accredited Investor in reliance on an exemption from the registration requirements of the Securities Act other than those listed in subparagraphs (B) through (D) above, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(d) thereof, a certificate from the transferee to the effect set forth in Exhibit D hereof and, to the extent required by item 3(d) of Exhibit B, an Opinion of Counsel from the transferee or the transferor reasonably acceptable to the Company to the effect that such transfer is in compliance with the Securities Act and such Definitive Notes are being transferred in compliance with any applicable blue sky securities laws of any State of the United States;

(F) if such Definitive Notes are being transferred to the Company or any of its Subsidiaries, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(b) thereof; or

(G) if such Definitive Notes are being transferred pursuant to an effective registration statement under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(c) thereof,

the Trustee shall cancel the Definitive Notes, increase or cause to be increased the aggregate principal amount of, in the case of clause (A) above, the appropriate Restricted Global Note, in the case of clause (B) above, the 144A Global Note, in the case of clause (C) above, the Regulation S Global Note, and in all other cases, the IAI Global Note.

29

(ii) A Holder of Restricted Definitive Notes may exchange such Notes for a beneficial interest in the Unrestricted Global Note or transfer such Restricted Definitive Notes to a Person who takes delivery thereof in the form of a beneficial interest in the Unrestricted Global Note only if:

(A) such exchange or transfer is effected pursuant to the Exchange Offer in accordance with the Registration Rights Agreement and the Holder, in the case of an exchange, or the transferee, in the case of a transfer, is not (1) a broker-dealer, (2) a Person participating in the distribution of the Exchange Notes or (3) a Person who is an affiliate (as defined in Rule 144) of the Company;

(B) any such transfer is effected pursuant to the Shelf Registration Statement in accordance with the Registration Rights Agreement;

(C) any such transfer is effected by a Broker-Dealer pursuant to the Exchange Offer Registration Statement in accordance with the Registration Rights Agreement; or

(D) the Registrar receives the following:

(1) if the Holder of such Definitive Notes proposes to exchange such Notes for a beneficial interest in the Unrestricted Global Note, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (1)(c) thereof;

(2) if the Holder of such Definitive Notes proposes to transfer such Notes to a Person who shall take delivery thereof in the form of a beneficial interest in the Unrestricted Global Note, a certificate from such Holder in the form of Exhibit B hereto, including the certifications in item (4) thereof; and

(3) in each such case set forth in this subparagraph (D), an Opinion of Counsel in form reasonably acceptable to the Company to the effect that such exchange or transfer is in compliance with the Securities Act, that the restrictions on transfer contained herein and in the Private Placement Legend are not required in order to maintain compliance with the Securities Act, and such Definitive Notes are being exchanged or transferred in compliance with any applicable blue sky securities laws of any State of the United States.

Upon satisfaction of the conditions of any of the subparagraphs in this Section 2.06(d)(ii), the Trustee shall cancel the Definitive Notes and increase or cause to be increased the aggregate principal amount of the Unrestricted Global Note.

(iii) A Holder of Unrestricted Definitive Notes may exchange such Notes for a beneficial interest in the Unrestricted Global Note or transfer such Definitive Notes to a Person who takes delivery thereof in the form of a beneficial interest in the Unrestricted Global Note. Upon receipt of a request for such an exchange or transfer, the Trustee shall

30

cancel the Unrestricted Definitive Notes and increase or cause to be increased the aggregate principal amount of the Unrestricted Global Note.

If any such exchange or transfer from a Definitive Note to a beneficial interest is effected pursuant to subparagraphs (ii)(B), (ii)(D) or (iii) above at a time when an Unrestricted Global Note has not yet been issued, the Company shall issue and, upon receipt of an authentication order in accordance with Section 2.02 hereof, the Trustee shall authenticate one or more Unrestricted Global Notes in an aggregate principal amount equal to the principal amount of beneficial interests transferred pursuant to subparagraphs (ii)(B), (ii)(D) or (iii) above.

(e) Transfer and Exchange of Definitive Notes. Upon request by a Holder of Definitive Notes and such Holder's compliance with the provisions of this Section 2.06(e), the Registrar shall register the transfer or exchange of Definitive Notes. Prior to such registration of transfer or exchange, the requesting Holder shall present or surrender to the Registrar the Definitive Notes duly endorsed or accompanied by a written instruction of transfer in form satisfactory to the Registrar duly executed by such Holder or by his attorney, duly authorized in writing. In addition, the requesting Holder shall provide any additional certifications, documents and information, as applicable, pursuant to the provisions of this Section 2.06(e).

(i) Restricted Definitive Notes may be transferred to and registered in the name of Persons who take delivery thereof if the Registrar receives the following:

(A) if the transfer will be made pursuant to Rule 144A under the Securities Act, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (1) thereof;

(B) if the transfer will be made pursuant to Rule 904, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (2) thereof; and

(C) if the transfer will be made pursuant to any

other exemption from the registration requirements of the Securities Act, then the transferor must deliver (x) a certificate in the form of Exhibit B hereto, including the certifications in item (3) thereof, (y) to the extent required by item 3(d) of Exhibit B hereto, an Opinion of Counsel in form reasonably acceptable to the Company to the effect that such transfer is in compliance with the Securities Act and such beneficial interest is being transferred in compliance with any applicable blue sky securities laws of any State of the United States and (z) if the transfer is being made to an Institutional Accredited Investor and effected pursuant to an exemption from the registration requirements of the Securities Act other than Rule 144A under the Securities Act, Rule 144 under the Securities Act or Rule 904 under the Securities Act, a certificate from the transferee in the form of Exhibit D hereto.

(ii) Restricted Definitive Notes may be exchanged by any Holder thereof for an Unrestricted Definitive Note or transferred to Persons who take delivery thereof in the form of an Unrestricted Definitive Note if:

31

(A) such exchange or transfer is effected pursuant to the Exchange Offer in accordance with the Registration Rights Agreement and the holder, in the case of an exchange, or the transferee, in the case of a transfer, is not (1) a broker-dealer, (2) a Person participating in the distribution of the Exchange Notes or (3) a Person who is an affiliate (as defined in Rule 144) of the Company;

(B) any such transfer is effected pursuant to the Shelf Registration Statement in accordance with the Registration Rights Agreement;

(C) any such transfer is effected by a Broker-Dealer pursuant to the Exchange Offer Registration Statement in accordance with the Registration Rights Agreement; or

(D) the Registrar receives the following:

(1) if the Holder of such Restricted Definitive Notes proposes to exchange such Notes for an Unrestricted Definitive Note, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (1)(a) thereof;

(2) if the Holder of such Restricted Definitive Notes proposes to transfer such Notes to a Person who shall take delivery thereof in the form of an Unrestricted Definitive Note, a certificate from such Holder in the form of Exhibit B hereto, including the certifications in item (4) thereof; and

(3) in each such case set forth in this subparagraph (D), an Opinion of Counsel in form reasonably acceptable to the Company to the effect that such exchange or transfer is in compliance with the Securities Act, that the restrictions on transfer contained herein and in the Private Placement Legend are not required in order to maintain compliance with the Securities Act, and such Restricted Definitive Note is being exchanged or transferred in compliance with any applicable blue sky securities laws of any State of the United States.

(iii) A Holder of Unrestricted Definitive Notes may transfer such Notes to a Person who takes delivery thereof in the form of an Unrestricted Definitive Note. Upon receipt of a request for such a transfer, the Registrar shall register the Unrestricted Definitive Notes pursuant to the instructions from the Holder thereof. Unrestricted Definitive Notes cannot be exchanged for or transferred to Persons who take delivery thereof in the form of a Restricted Definitive Note.

(f) Exchange Offer. Upon the occurrence of the Exchange Offer in accordance with the Registration Rights Agreement, the Company shall issue and, upon receipt of an authentication order in accordance with Section 2.02, the Trustee shall authenticate (i) one or more Unrestricted Global Notes in an aggregate principal amount equal to the principal amount of the beneficial interests in the Restricted Global Notes tendered for acceptance by persons that are not (x) broker-dealers, (y) Persons participating in the distribution of the

32

Exchange Notes or (z) Persons who are affiliates (as defined in Rule 144) of the Company and accepted for exchange in the exchange Offer and (ii) Definitive Notes in an aggregate principal amount equal to the principal amount of the

Restricted Definitive Notes accepted for exchange in the Exchange Offer. Concurrent with the issuance of such Notes, the Trustee shall cause the aggregate principal amount of the applicable Restricted Global Notes to be reduced accordingly, and the Company shall execute and the Trustee shall authenticate and make available for delivery to the Persons designated by the Holders of Definitive Notes so accepted Definitive Notes in the appropriate principal amount.

(g) Legends. The following legends shall appear on the face of all Global Notes and Definitive Notes issued under this Indenture unless specifically stated otherwise in the applicable provisions of this Indenture.

(i) Private Placement Legend.

(A) Except as permitted by subparagraph (B) below, each Global Note and each Definitive Note (and all Notes issued in exchange therefor or substitution thereof) shall bear the legend in substantially the following form:

"THE SECURITY (OR ITS PREDECESSOR) EVIDENCED HEREBY WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER SECTION 5 OF THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND THE SECURITY EVIDENCED HEREBY MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THE SECURITY EVIDENCED HEREBY IS HEREBY NOTIFIED THAT THE SELLER MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER. THE HOLDER OF THE SECURITY EVIDENCED HEREBY AGREES FOR THE BENEFIT OF L-3 COMMUNICATIONS CORPORATION THAT (A) SUCH SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED, ONLY (1) (a) TO A PERSON WHO THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (b) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144 UNDER THE SECURITIES ACT, (c) OUTSIDE THE UNITED STATES TO A FOREIGN PERSON IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 904 UNDER THE SECURITIES ACT OR (d) IN ACCORDANCE WITH ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT (AND BASED UPON AN OPINION OF COUNSEL IF L-3 COMMUNICATIONS CORPORATION SO REQUESTS), (2) TO L-3 COMMUNICATIONS CORPORATION OR (3) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT AND, IN EACH CASE, IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR ANY OTHER APPLICABLE JURISDICTION AND (B) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER FROM IT

33

OF THE SECURITY EVIDENCED HEREBY OF THE RESALE RESTRICTIONS SET FORTH IN (A) ABOVE."

(B) Notwithstanding the foregoing, any Global Note or Definitive Note issued pursuant to subparagraphs (b)(iv), (c)(ii), (c)(iii), (d)(ii), (d)(iii), (e)(ii), (e)(iii) or (f) to this Section 2.06 (and all Notes issued in exchange therefor or substitution thereof) shall not bear the Private Placement Legend.

(ii) Global Note Legend. Each Global Note shall bear a legend in substantially the following form:

"THIS GLOBAL NOTE IS HELD BY THE DEPOSITARY (AS DEFINED IN THE INDENTURE GOVERNING THIS NOTE) OR ITS NOMINEE IN CUSTODY FOR THE BENEFIT OF THE BENEFICIAL OWNERS HEREOF, AND IS NOT TRANSFERABLE TO ANY PERSON UNDER ANY CIRCUMSTANCES EXCEPT THAT (I) THE TRUSTEE MAY MAKE SUCH NOTATIONS HEREON AS MAY BE REQUIRED PURSUANT TO SECTION 2.07 OF THE INDENTURE, (II) THIS GLOBAL NOTE MAY BE EXCHANGED IN WHOLE BUT NOT IN PART PURSUANT TO SECTION 2.06(a) OF THE INDENTURE, (III) THIS GLOBAL NOTE MAY BE DELIVERED TO THE TRUSTEE FOR CANCELLATION PURSUANT TO SECTION 2.11 OF THE INDENTURE AND (IV) THIS GLOBAL NOTE MAY BE TRANSFERRED TO A SUCCESSOR DEPOSITARY WITH THE PRIOR WRITTEN CONSENT OF THE COMPANY."

(h) Cancellation and/or Adjustment of Global Notes. At such time as all beneficial interests in a particular Global Note have been exchanged for Definitive Notes or a particular Global Note has been redeemed, repurchased or canceled in whole and not in part, each such Global Note shall be returned to or retained and canceled by the Trustee in accordance with Section 2.11 hereof. At any time prior to such cancellation, if any beneficial interest in a Global Note is exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note or for Definitive Notes, the principal amount of Notes represented by such Global Note shall be reduced accordingly and an endorsement shall be made on such Global Note, by the Trustee or by the Depositary at the direction of the Trustee, to reflect such reduction; and if the beneficial interest is being exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note, such other Global Note shall be increased accordingly and an endorsement shall be made on such Global Note, by the Trustee or by the Depositary at the direction of the Trustee, to reflect such increase.

(i) General Provisions Relating to Transfers and Exchanges.

(i) To permit registrations of transfers and exchanges, the

Company shall execute and the Trustee shall authenticate Global Notes and Definitive Notes upon the Company's order or at the Registrar's request.

(ii) No service charge shall be made to a holder of a beneficial interest in a Global Note or to a Holder of a Definitive Note for any registration of transfer or

34

exchange, but the Company may require payment of a sum sufficient to cover any transfer tax or similar governmental charge payable in connection therewith (other than any such transfer taxes or similar governmental charge payable upon exchange or transfer pursuant to Sections 2.10, 3.06, 4.10, 4.15 and 9.05 hereof).

(iii) The Registrar shall not be required to register the transfer of or exchange any Note selected for redemption in whole or in part, except the unredeemed portion of any Note being redeemed in part.

(iv) All Global Notes and Definitive Notes issued upon any registration of transfer or exchange of Global Notes or Definitive Notes shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Global Notes or Definitive Notes surrendered upon such registration of transfer or exchange.

(v) The Company shall not be required (A) to issue, to register the transfer of or to exchange Notes during a period beginning at the opening of business 15 days before the day of any selection of Notes for redemption under Section 3.02 hereof and ending at the close of business on the day of selection, (B) to register the transfer of or to exchange any Note so selected for redemption in whole or in part, except the unredeemed portion of any Note being redeemed in part or (C) to register the transfer of or to exchange a Note between a record date and the next succeeding interest payment date.

(vi) Prior to due presentment for the registration of a transfer of any Note, the Trustee, any Agent and the Company may deem and treat the Person in whose name any Note is registered as the absolute owner of such Note for the purpose of receiving payment of principal of and interest on such Notes and for all other purposes, and none of the Trustee, any Agent or the Company shall be affected by notice to the contrary.

(vii) The Trustee shall authenticate Global Notes and Definitive Notes in accordance with the provisions of Section 2.02 hereof.

#### Section 2.07 Replacement Notes.

If any mutilated Note is surrendered to the Trustee, or the Company and the Trustee receives evidence to its satisfaction of the destruction, loss or theft of any Note, the Company shall issue and the Trustee, upon the written order of the Company signed by two Officers of the Company, shall authenticate a replacement Note if the Trustee's requirements are met. If required by the Trustee or the Company, an indemnity bond must be supplied by the Holder that is sufficient in the judgment of the Trustee and the Company to protect the Company, the Trustee, any Agent and any authenticating agent from any loss that any of them may suffer if a Note is replaced. The Company may charge for its expenses in replacing a Note.

Every replacement Note is an additional obligation of the Company and shall be entitled to all of the benefits of this Indenture equally and proportionately with all other Notes duly issued hereunder.

35

#### Section 2.08 Outstanding Notes.

The Notes outstanding at any time are all the Notes authenticated by the Trustee except for those canceled by it, those delivered to it for cancellation, those reductions in the interest in a Global Note effected by the Trustee in accordance with the provisions hereof, and those described in this Section as not outstanding. Except as set forth in Section 2.09 hereof, a Note does not cease to be outstanding because the Company or an Affiliate of the Company holds the Note.

If a Note is replaced pursuant to Section 2.07 hereof, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Note is held by a bona fide purchaser.

If the principal amount of any Note is considered paid under Section 4.01 hereof, it ceases to be outstanding and interest on it ceases to accrue.

If the Paying Agent (other than the Company, a Subsidiary or an Affiliate of any thereof) holds, on a redemption date or maturity date, money sufficient to pay Notes payable on that date, then on and after that date such Notes shall be deemed to be no longer outstanding and shall cease to accrue interest.

#### Section 2.09 Treasury Notes.

In determining whether the Holders of the required principal amount of Notes have concurred in any direction, waiver or consent, Notes owned by the Company, or by any Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company, shall be considered as though not outstanding, except that for the purposes of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent, only Notes that a Trustee knows are so owned shall be so disregarded.

#### Section 2.10 Temporary Notes.

Until Definitive Notes are ready for delivery, the Company may prepare and the Trustee shall authenticate temporary Notes upon a written order of the Company signed by two Officers of the Company. Temporary Notes shall be substantially in the form of Definitive Notes but may have variations that the Company considers appropriate for temporary Notes and as shall be reasonably acceptable to the Trustee. Without unreasonable delay, the Company shall prepare and the Trustee shall authenticate Definitive Notes in exchange for temporary Notes.

Holders of temporary Notes shall be entitled to all of the benefits of this Indenture.

#### Section 2.11 Cancellation.

The Company at any time may deliver Notes to the Trustee for cancellation. The Registrar and Paying Agent shall forward to the Trustee any Notes surrendered to them for registration of transfer, exchange or payment. The Trustee and no one else shall cancel all Notes surrendered for registration of transfer, exchange, payment, replacement or cancellation and shall

36

destroy canceled Notes (subject to the record retention requirement of the Exchange Act). Certification of the destruction of all canceled Notes shall be delivered to the Company. The Company may not issue new Notes to replace Notes that it has paid or that have been delivered to the Trustee for cancellation.

#### Section 2.12 Defaulted Interest.

If the Company defaults in a payment of interest on the Notes, it shall pay the defaulted interest in any lawful manner plus, to the extent lawful, interest payable on the defaulted interest, to the Persons who are Holders on a subsequent special record date, in each case at the rate provided in the Notes and in Section 4.01 hereof. The Company shall notify the Trustee in writing of the amount of defaulted interest proposed to be paid on each Note and the date of the proposed payment. The Company shall fix or cause to be fixed each such special record date and payment date, provided that no such special record date shall be less than 10 days prior to the related payment date for such defaulted interest. At least 15 days before the special record date, the Company (or, upon the written request of the Company, the Trustee in the name and at the expense of the Company) shall mail or cause to be mailed to Holders a notice that states the special record date, the related payment date and the amount of such interest to be paid.

#### Section 2.13 CUSIP Numbers.

The Company in issuing the Notes may use CUSIP numbers (if then generally in use), and, if so, the Trustee shall use CUSIP numbers in notices of redemption as a convenience to Holders; provided that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Notes or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Notes, and any such redemption shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee of any change in the CUSIP numbers.

### ARTICLE 3. REDEMPTION AND PREPAYMENT

#### Section 3.01 Notices to Trustee.

If the Company elects to redeem Notes pursuant to the optional redemption provisions of Section 3.07 hereof, it shall furnish to the Trustee, at least 30 days but not more than 60 days before a redemption date, an Officers' Certificate setting forth (i) the clause of this Indenture pursuant to which the redemption shall occur, (ii) the redemption date, (iii) the principal amount of Notes to be redeemed and (iv) the redemption price.

#### Section 3.02 Selection of Notes to Be Redeemed.

If less than all of the Notes are to be redeemed at any time,

selection of Notes for redemption shall be made by the Trustee in compliance with the requirements of the principal national securities exchange, if any, on which the Notes are listed, or, 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; provided that 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 shall 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.

The Trustee shall promptly notify the Company in writing of the Notes selected for redemption and, in the case of any Note selected for partial redemption, the principal amount thereof to be redeemed. Notes and portions of Notes selected shall be in amounts of \$1,000 or whole multiples of \$1,000; except that if all of the Notes of a Holder are to be redeemed, the entire outstanding amount of Notes held by such Holder, even if not a multiple of \$1,000, shall be redeemed. Except as provided in the preceding sentence, provisions of this Indenture that apply to Notes called for redemption also apply to portions of Notes called for redemption.

Section 3.03 Notice Of Redemption.

Subject to the provisions of Section 3.09 hereof, at least 30 days but not more than 60 days before a redemption date, the Company shall mail or cause to be mailed, by first class mail, a notice of redemption to each Holder whose Notes are to be redeemed at its registered address.

The notice shall identify the Notes to be redeemed (including CUSIP Numbers, if any) and shall state:

(a) the redemption date;

(b) the redemption price;

(c) if any Note is being redeemed in part, the portion of the principal amount of such Note to be redeemed and that, after the redemption date upon surrender of such Note, a new Note or Notes in principal amount equal to the unredeemed portion shall be issued upon cancellation of the original Note;

(d) the name and address of the Paying Agent;

(e) that Notes called for redemption must be surrendered to the Paying Agent to collect the redemption price;

(f) that, unless the Company defaults in making such redemption payment, interest on Notes called for redemption ceases to accrue on and after the redemption date;

(g) the paragraph of the Notes and/or Section of this Indenture pursuant to which the Notes called for redemption are being redeemed; and

(h) that no representation is made as to the correctness or accuracy of the CUSIP number, if any, listed in such notice or printed on the Notes.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at its expense; provided, however, that the Company shall have delivered to the Trustee, at least 45 days prior to the redemption date, an Officers' Certificate requesting that the Trustee give such notice and setting forth the information to be stated in such notice as provided in the preceding paragraph.

Section 3.04 Effect Of Notice Of Redemption.

Once notice of redemption is mailed in accordance with Section 3.03 hereof, Notes called for redemption become irrevocably due and payable on the redemption date at the redemption price. A notice of redemption may not be conditional.

Section 3.05 Deposit Of Redemption Price.

Prior to 11:00 a.m. on the Business Day prior to the

redemption date, the Company shall deposit with the Trustee or with the Paying Agent money sufficient to pay the redemption price of and accrued interest on all Notes to be redeemed on that date. The Trustee or the Paying Agent shall promptly return to the Company any money deposited with the Trustee or the Paying Agent by the Company in excess of the amounts necessary to pay the redemption price of, and accrued interest on, all Notes to be redeemed.

If the Company complies with the provisions of the preceding paragraph, on and after the redemption date, interest shall cease to accrue on the Notes or the portions of Notes called for redemption. If a Note is redeemed on or after an interest record date but on or prior to the related interest payment date, then any accrued and unpaid interest shall be paid to the Person in whose name such Note was registered at the close of business on such record date. If any Note called for redemption shall not be so paid upon surrender for redemption because of the failure of the Company to comply with the preceding paragraph, interest shall be paid on the unpaid principal, from the redemption date until such principal is paid, and to the extent lawful on any interest not paid on such unpaid principal, in each case at the rate provided in the Notes and in Section 4.01 hereof.

#### Section 3.06 Notes Redeemed In Part.

Upon surrender of a Note that is redeemed in part, the Company shall issue and, upon the Company's written request, the Trustee shall authenticate for the Holder at the expense of the Company a new Note equal in principal amount to the unredeemed portion of the Note surrendered.

#### Section 3.07 Optional Redemption.

(a) Except as set forth in clause (b) of this Section 3.7, the Notes shall not be redeemable at the Company's option prior to January 15, 2009. Thereafter, the Notes shall 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

39

principal amount) set forth below plus accrued and unpaid interest and Additional Interest thereon, 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%

(b) Notwithstanding the foregoing clause (a), 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 thereon, 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.

#### Section 3.08 Mandatory Redemption.

Except as set forth under Sections 4.10 and 4.15, the Company is not required to make mandatory redemption or sinking fund payments with respect to the Notes.

#### Section 3.09 Offer To Purchase By Application Of Excess Proceeds.

In the event that, pursuant to Section 4.10 hereof, the Company shall be required to commence an offer to all Holders to purchase Notes (an "Asset Sale Offer"), it shall follow the procedures specified below.

The Asset Sale Offer shall remain open for a period of 20 Business Days following its commencement and no longer, except to the extent that a longer period is required by applicable law (the "Offer Period"). No later than five Business Days after the termination of the Offer Period (the "Purchase Date"), the Company shall purchase the principal amount of Notes required to be purchased pursuant to Section 4.10 hereof (the "Offer Amount") or, if less than the Offer Amount has been tendered, all Notes tendered in response to the Asset Sale Offer. Payment for any Notes so purchased shall be made in the same manner as interest payments are made.

If the Purchase Date is on or after an interest record date and on or before the related interest payment date, any accrued and unpaid interest shall be paid to the Person in whose name a Note is registered at the close of business on such record date, and no additional interest shall be payable to Holders who tender Notes pursuant to the Asset Sale Offer.

Upon the commencement of an Asset Sale Offer, the Company shall send, by first class mail, a notice to the Trustee and each of the Holders, with a copy to the Trustee. The notice

shall contain all instructions and materials necessary to enable such Holders to tender Notes pursuant to the Asset Sale Offer. The Asset Sale Offer shall be made to all Holders. The notice, which shall govern the terms of the Asset Sale Offer, shall state:

- (a) that the Asset Sale Offer is being made pursuant to this Section 3.09 and Section 4.10 hereof and the length of time the Asset Sale Offer shall remain open;
- (b) the Offer Amount, the purchase price and the Purchase Date;
- (c) that any Note not tendered or accepted for payment shall continue to accrete or accrue interest;
- (d) that, unless the Company defaults in making such payment, any Note accepted for payment pursuant to the Asset Sale Offer shall cease to accrete or accrue interest after the Purchase Date;
- (e) that Holders electing to have a Note purchased pursuant to an Asset Sale Offer may only elect to have all of such Note purchased and may not elect to have only a portion of such Note purchased;
- (f) that Holders electing to have a Note purchased pursuant to any Asset Sale Offer shall be required to surrender the Note, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the Note completed, or transfer by book-entry transfer, to the Company, a depository, if appointed by the Company, or a Paying Agent at the address specified in the notice at least three days before the Purchase Date;
- (g) that Holders shall be entitled to withdraw their election if the Company, the Depository or the Paying Agent, as the case may be, receives, not later than the expiration of the Offer Period, a facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Note the Holder delivered for purchase and a statement that such Holder is withdrawing his election to have such Note purchased;
- (h) that, if the aggregate principal amount of Notes surrendered by Holders exceeds the Offer Amount, the Company shall select the Notes to be purchased on a pro rata basis (with such adjustments as may be deemed appropriate by the Company so that only Notes in denominations of \$1,000, or integral multiples thereof, shall be purchased); and
- (i) that Holders whose Notes were purchased only in part shall be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered (or transferred by book-entry transfer).

On or before the Purchase Date, the Company shall, to the extent lawful, accept for payment, on a pro rata basis to the extent necessary, the Offer Amount of Notes or portions thereof tendered pursuant to the Asset Sale Offer, or if less than the Offer Amount has been tendered, all Notes tendered, and shall deliver to the Trustee an Officers' Certificate stating that such Notes or portions thereof were accepted for payment by the Company in accordance with the terms of this Section 3.09. The Company, the Depository or the Paying Agent, as the case

may be, shall promptly (but in any case not later than five days after the Purchase Date) mail or deliver to each tendering Holder an amount equal to the purchase price of the Notes tendered by such Holder and accepted by the Company for purchase, and the Company shall promptly issue a new Note, and the Trustee, upon written request from the Company shall authenticate and mail or deliver such new Note to such Holder, in a principal amount equal to any unpurchased portion of the Note surrendered. Any Note not so accepted shall be promptly mailed or delivered by the Company to the Holder thereof. The Company shall publicly announce the results of the Asset Sale Offer on the Purchase Date.

Other than as specifically provided in this Section 3.09, any purchase pursuant to this Section 3.09 shall be made pursuant to the provisions of Sections 3.01 through 3.06 hereof.

#### ARTICLE 4. COVENANTS

##### Section 4.01 Payment Of Notes.

The Company shall pay or cause to be paid the principal of, premium, if any, and interest on the Notes on the dates and in the manner provided in the Notes. Principal, premium, if any, and interest shall be

considered paid on the date due if the Paying Agent, if other than the Company or a Subsidiary thereof, holds as of 10:00 a.m. Eastern Time on the due date money deposited by the Company in immediately available funds and designated for and sufficient to pay all principal, premium, if any, and interest then due. The Company shall pay all Additional Interest, if any, in the same manner on the dates and in the amounts set forth in the Registration Rights Agreement.

The Company shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal at the rate equal to 1.0% per annum in excess of the then applicable interest rate on the Notes to the extent lawful; it shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest and Additional Interest (without regard to any applicable grace period) at the same rate to the extent lawful.

#### Section 4.02 Maintenance Of Office Or Agency.

The Company shall maintain in the Borough of Manhattan, The City of New York, an office or agency (which may be an office of the Trustee or an affiliate of the Trustee, Registrar or co-registrar) where Notes may be surrendered for registration of transfer or for exchange and where notices and demands to or upon the Company in respect of the Notes and this Indenture may be served. The Company shall give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee.

The Company may also from time to time designate one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided, however, that no such designation or

42

rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in the Borough of Manhattan, The City of New York for such purposes. The Company shall give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

The Company hereby designates the Corporate Trust Office of the Trustee as one such office or agency of the Company in accordance with Section 2.03.

#### Section 4.03 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 Company shall file with the SEC (and provide the Trustee and Holders with copies thereof), without cost to each Holder, within 15 days after it files them with the SEC:

(a) 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);

(b) 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);

(c) 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

(d) any other information, documents and other reports which the Company would be required to file with the SEC 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 SEC if the SEC 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 SEC, if it were subject to Sections 13 or 15(d) of the Exchange Act.

Subject to the provisions of Article 7, delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

#### Section 4.04 Compliance Certificate.

(a) The Company shall deliver to the Trustee, within 90 days after the end of each fiscal year, an Officers' Certificate stating that a review of the activities of the Company

43

and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officers with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to each such Officer signing such certificate, that to the best of his or her knowledge the Company has kept, observed, performed and fulfilled each and every covenant contained in this Indenture and is not in default in the performance or observance of any of the terms, provisions and conditions of this Indenture (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which he or she may have knowledge and what action the Company is taking or proposes to take with respect thereto) and that to the best of his or her knowledge no event has occurred and remains in existence by reason of which payments on account of the principal of or interest, if any, on the Notes is prohibited or if such event has occurred, a description of the event and what action the Company is taking or proposes to take with respect thereto.

(b) So long as not contrary to the then current recommendations of the American Institute of Certified Public Accountants, the year-end financial statements delivered pursuant to Section 4.03(a) above shall be accompanied by a written statement of the Company's independent public accountants (who shall be a firm of established national reputation) that in making the examination necessary for certification of such financial statements, nothing has come to their attention that would lead them to believe that the Company has violated any provisions of Article 4 or Article 5 hereof or, if any such violation has occurred, specifying the nature and period of existence thereof, it being understood that such accountants shall not be liable directly or indirectly to any Person for any failure to obtain knowledge of any such violation.

(c) The Company shall, so long as any of the Notes are outstanding, deliver to the Trustee, as soon as possible and in any event within five Business Days after any Officer becoming aware of any Default or Event of Default, an Officers' Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

#### Section 4.05 Taxes.

The Company shall pay, and shall cause each of its Subsidiaries to pay, prior to delinquency, all material taxes, assessments, and governmental levies except such as are contested in good faith and by appropriate proceedings or where the failure to effect such payment is not adverse in any material respect to the Holders of the Notes.

#### Section 4.06 Stay, Extension and Usury Laws

The Company and each of the Guarantors covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, that may affect the covenants or the performance of this Indenture; and, to the extent that it may lawfully do so, the Company and each of the Guarantors hereby expressly waives all benefit or advantage of any such law, and covenants that it will not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the

44

Trustee, but will suffer and permit the execution of every such power as though no such law has been enacted.

#### Section 4.07 Restricted Payments.

The Company shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly: (i) 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); (ii) 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; (iii) 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 (iv) make any Restricted Investment (all such payments and other actions set forth in clauses (i) through (iv) above being collectively referred to as "Restricted Payments"), unless, at the time of and after giving effect to such Restricted Payment:

(a) no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof; and

(b) 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 Section 4.09; and

(c) 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 (ii) through (viii) of the next succeeding paragraph or of the kind contemplated by such clauses that were made prior to the date of this Indenture), is less than the sum of (i) 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 (ii) 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

45

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 (iii) 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 (iv) 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.

The foregoing provisions shall not prohibit: (i) 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 this Indenture; (ii) 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) 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 (c)(ii) of the preceding paragraph; (iii) 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; (iv) 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 (iv) 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 shall not be deemed to constitute a Restricted Payment for purposes of this covenant or any other provision of this Indenture; (v) 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; (vi) 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; (vii) 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 (viii) 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 shall be deemed to be Restricted Payments at the time of such designation and shall reduce the amount available for Restricted Payments under the first paragraph of this covenant. All such outstanding Investments shall 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 shall 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 Section 4.07 were computed.

#### Section 4.08 Dividend And Other Payment Restrictions Affecting Restricted Subsidiaries.

The Company shall not, and shall 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 (i) (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, (ii) make loans or advances to the Company or any of its Restricted Subsidiaries, or (iii) 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 (A) the provisions of security agreements that restrict the transfer of assets that are subject to a Lien created by such security agreements, (B) the provisions of agreements governing Indebtedness incurred pursuant to clause (v) of the second paragraph of Section 4.09, (C) the Senior Credit Facilities, this Indenture, the Notes, the Exchange Notes, the December 1998 Indenture, the December 1998 Notes, the 2002 Notes, the 2002 Indenture, the May 2003 Notes and the May 2003 Indenture, (D) applicable law, (E) 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 this Indenture to be incurred, (F) by reason of customary non-assignment provisions in leases entered into in the ordinary course of business

and consistent with past practices, (G) purchase money obligations for property acquired in the ordinary course of business that impose restrictions of the nature described in this clause (iii) of the preceding paragraph, (H) 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, (I) 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, (J) agreements relating to secured Indebtedness otherwise permitted to be incurred pursuant to 4.09 and 4.12 that limit the right of the debtor to dispose of the assets securing such Indebtedness, (K) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business, or (L) customary provisions in joint venture agreements and other similar agreements entered into in the ordinary course of business.

#### Section 4.09 Incurrence of Indebtedness and Issuance Of Preferred Stock.

The Company shall not, and shall 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 shall not issue any Disqualified Stock and shall 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 provisions of the first paragraph of this Section 4.09 shall not apply to the incurrence of any of the following items of Indebtedness (collectively, "Permitted Debt"):

(i) 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 (i) 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 (i), 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 Section 4.10;

(ii) the incurrence by the Company and its Restricted Subsidiaries of the Existing Indebtedness;

48

(iii) the incurrence by the Company and the Guarantors of \$400.0 million in aggregate principal amount of each of the Notes and the Exchange Notes and the Subsidiary Guarantees thereof;

(iv) 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 (iv), not to exceed \$100.0 million at any time outstanding;

(v) 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 (v), does not exceed \$50.0 million;

(vi) 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 this Indenture to be incurred (other than intercompany Indebtedness or Indebtedness incurred pursuant to clause (i) above);

(vii) 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;

(viii) 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 shall not be deemed to be reflected on such balance sheet for purposes of this clause (A)) and

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;

(ix) 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;

(x) 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 this Indenture to be outstanding or (B) protecting the Company and its Restricted Subsidiaries against changes in currency exchange rates;

(xi) 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 Section 4.09;

(xii) 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 (xii), and the issuance of preferred stock by Unrestricted Subsidiaries;

(xiii) 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

(xiv) 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 (xiv), not to exceed \$100.0 million.

For purposes of determining compliance with this Section 4.09, in the event that an item of Indebtedness meets the criteria of more than one of the categories of Permitted Debt described in clauses (i) through (xiv) above or is entitled to be incurred pursuant to the first paragraph of this Section 4.09, 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 shall not be deemed to be an incurrence of Indebtedness for purposes of this Section 4.09.

#### Section 4.10 Asset Sales.

The Company shall not, and shall not permit any of its Restricted Subsidiaries to, consummate an Asset Sale unless (i) 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 (ii) 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, (i) to repay Indebtedness under a Credit Facility, (ii) to the acquisition of Permitted Securities, (iii) to the acquisition of all or substantially all of the assets of one or more Similar Businesses, (iv) to the making of a capital expenditure or (v) 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 this Indenture. Any Net Proceeds from Asset Sales that are not applied or invested as provided in the first sentence of this paragraph shall 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 2002 Notes and the May 2003 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 this 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.

#### Section 4.11 Transactions With Affiliates.

The Company shall not, and shall 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 (i) 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 (ii) 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 (i) 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 shall not prohibit: (i) any employment agreement entered into by the Company or any of its Restricted Subsidiaries in the ordinary course of business; (ii) any transaction with a Lehman Investor; (iii) any transaction between or among the Company and/or its Restricted Subsidiaries; (iv) 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 (iv) 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 (B) in the case of any such transaction or series of related transactions pursuant to this clause (iv) 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; (v) any transaction pursuant to and in accordance with the provisions of the Transaction Documents as the same are in effect on the date of this Indenture; and (vi) any Restricted Payment that is permitted by the provisions of Section 4.07.

#### Section 4.12 Liens.

The Company shall not, and shall 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 this 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.

#### Section 4.13 Future Subsidiary Guarantees.

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 date of this Indenture, then such Subsidiary shall execute a Subsidiary Guarantee, in the form of the Supplemental Indenture attached hereto as Exhibit E, and the Form of Notation on Senior Subordinated Note, attached hereto as Exhibit F, and deliver an opinion of counsel as to the validity of such Subsidiary Guarantee, in accordance with the terms of this Indenture. 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. The obligations of each Guarantor under its Subsidiary Guarantee will be limited so as not to constitute a fraudulent conveyance under applicable law.

Notwithstanding the foregoing paragraph, for so long as certain covenants are suspended pursuant to Section 4.18 hereof, no newly acquired or created Subsidiary will be required to execute a Subsidiary Guarantee or the related Notation on Senior Subordinated Note 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 pursuant to Section 4.18 hereof, 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 this Indenture.

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 (i) 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 this Indenture; (ii) immediately after giving effect to such transaction, no Default or Event of Default exists; and (iii) 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 Section 4.09 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 (iii), (i) 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 (ii) 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.

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 Section 4.10.

#### Section 4.14 Corporate Existence.

Subject to Article 5 hereof, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect (i) its corporate existence, and the corporate, partnership or other existence of each of its Restricted Subsidiaries, in accordance with the respective organizational documents (as the same may be amended from time to time) of the Company or any such Restricted Subsidiary and (ii) the rights (charter and statutory), licenses and franchises of the Company and its Restricted Subsidiaries; provided, however, that the Company shall not be required to preserve any such right, license or franchise, or the corporate, partnership or other existence of any of its Restricted Subsidiaries, if the Board of Directors shall determine that the preservation thereof is no longer desirable in the

conduct of the business of the Company and its Restricted Subsidiaries, taken as a whole, and that the loss thereof is not adverse in any material respect to the Holders of the Notes.

#### Section 4.15 Offer To Repurchase Upon Change Of Control.

(a) Upon the occurrence of a Change of Control, each Holder of Notes shall 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 thereon, if any, to the date of purchase (the "Change of Control Payment"). Within ten days following any Change of Control, the Company shall 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"). Such notice, which shall govern the terms of the Change of Control offer, shall state: (i) that the Change of Control Offer is being made pursuant to this Section 4.15 and that all Notes tendered will be accepted for payment; (ii) the purchase price and the purchase date; (iii) that any Note not tendered will continue to accrue interest; (iv) that, unless the Company defaults in the payment of the Change of Control Payment, all Notes accepted for payment pursuant to the Change of Control Offer shall cease to accrue interest after the Change of Control Payment Date; (v) that Holders electing to have any Notes purchased pursuant to a Change of Control Offer will be required to surrender the Notes, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the Notes completed, to the Paying Agent at the address specified in the notice prior to the close of

54

business on the third Business Day preceding the Change of Control Payment Date; (vi) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the close of business on the second Business Day preceding the Change of Control Payment Date, a telegram, telex, facsimile transmission or letter setting forth the name of the Holder, the principal amount of Notes delivered for purchase, and a statement that such Holder is withdrawing his election to have the Notes purchased; and (vii) that Holders whose Notes are being purchased only in part will be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered, which unpurchased portion must be equal to \$1,000 in principal amount or an integral multiple thereof. The Company shall 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 Notes in connection with a Change of Control.

(b) On the Change of Control Payment Date, the Company shall, to the extent lawful, (i) accept for payment all Notes or portions thereof properly tendered pursuant to the Change of Control Offer, (ii) 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 (iii) 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 shall promptly mail to each Holder of Notes so tendered the Change of Control Payment for such Notes, and the Trustee shall 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 shall be in a principal amount of \$1,000 or an integral multiple thereof. Prior to mailing a Change of Control Offer, but in any event within 90 days following a Change of Control, the Company shall 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 Section 4.15. The Company shall publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date.

#### Section 4.16 No Senior Subordinated Debt.

The Company shall 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. No Guarantor shall 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.

#### Section 4.17 Payments For Consent.

Neither the Company nor any of its Subsidiaries shall, 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 this Indenture or the Notes unless such consideration is offered to be paid or is paid

55

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.

Section 4.18 Changes in Covenants when Notes Rated Investment Grade.

If on any date following the date of this Indenture: (i) 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 (ii) 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 contained in Sections 4.07, 4.08, 4.09, 4.10, 4.11 and 4.17 hereof, clauses (iii)(A) and (B) of the third paragraph of Section 4.13 hereof and clauses (iv)(A) and (B) of the first paragraph of Section 5.01 hereof will be suspended.

In addition, following the achievement of such investment grade ratings, (i) 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; provided that 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 in the following paragraph, then such Restricted Subsidiary will Guarantee the Notes on the terms and conditions set forth in this Indenture and (ii) as described in Section 4.13 hereof, 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 to the Notes 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 subparagraphs (i) through (iv) of Section 4.07(c) hereof, the covenant contained in Section 4.07 hereof will be interpreted as if it had been in effect since the date of this Indenture. However, no default will be deemed to have occurred as a result of the provisions and covenants contained in Sections 4.07, 4.08, 4.09, 4.10, 4.11 and 4.17 hereof, clauses (iii)(A) and (B) of the third paragraph of Section 4.13 hereof and clauses (iv)(A) and (B) of the first paragraph of Section 5.01 hereof while those provisions and covenants were suspended.

ARTICLE 5.  
SUCCESSORS

Section 5.01 Merger, Consolidation, Or Sale Of Assets.

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 (i) 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; (ii) 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 this Indenture pursuant to a supplemental indenture in a form reasonably satisfactory to the Trustee; (iii) immediately after such transaction no Default or Event of Default exists; and (iv) except in the case of a merger of the Company with or into a Wholly Owned Restricted Subsidiary of the Company, the Company or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made, after giving pro forma effect to such transaction as if such transaction had occurred at the beginning of the most recently ended four full fiscal quarters for which internal financial statements are available immediately preceding such transaction either: (A) would be permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of Section 4.09 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 clause (iv) in the immediately foregoing paragraph, (i) any Restricted Subsidiary may consolidate with, merge into or transfer all or part of its properties and assets to the Company; and (ii) 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.

Section 5.02            Successor Corporation Substituted.

Upon any consolidation or merger, or any sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of the assets of the Company in accordance with Section 5.01 hereof, the successor corporation formed by such consolidation or into or with which the Company is merged or to which such sale, assignment, transfer, lease, conveyance or other disposition is made shall succeed to, be substituted for (so that from and after the date of such consolidation, merger, sale, lease, conveyance or other disposition, the provisions of this Indenture referring to the "Company" shall refer instead to the successor corporation and not to the Company), and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein; provided, however, that the predecessor Company shall not be relieved from the obligation to pay the principal of and interest on the Notes except in the case of a sale of all of the Company's assets that meets the requirements of Section 5.01 hereof.

ARTICLE 6.  
DEFAULTS AND REMEDIES

Section 6.01            Events of Default.

An "Event of Default" occurs if:

(a) the Company defaults in the payment when due of interest on, or Additional Interest, if any, with respect to, the Notes and such default continues for a period of 30 days (whether or not prohibited by the subordination provisions of this Indenture);

(b) the Company defaults in the payment when due of the principal of or premium, if any, on the Notes (whether or not prohibited by the subordination provisions of this Indenture);

(c) the Company fails to comply with any of the provisions of Section 4.10, 4.15, or 5.01 hereof;

(d) the Company fails to observe or perform any other covenant or other agreement in this Indenture or the Notes for 60 days after notice to the Company by the Trustee or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding;

(e) a default occurs 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 date of this Indenture, which default results in the acceleration of such Indebtedness prior to its express maturity and, in each case, the principal amount of 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;

(f) the Company or any of its Restricted Subsidiaries is subject to a final judgments aggregating in excess of \$25.0 million, which judgments are not paid, discharged or stayed for a period of 60 days;

(g) the Company or any of its Significant Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary pursuant to or within the meaning of Bankruptcy Law:

(i) commences a voluntary case,

(ii) consents to the entry of an order for relief against it in an involuntary case,

(iii) consents to the appointment of a custodian of it or for all or substantially all of its property,

(iv) makes a general assignment for the benefit of its creditors, or

(v) generally is not paying its debts as they become

due;

(h) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(i) is for relief against the Company or any of its Significant Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary in an involuntary case;

(ii) appoints a custodian of the Company or any of its Significant Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary or for all or substantially all of the property of the Company or any of its Significant Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary; or

(iii) orders the liquidation of the Company or any of its Significant Subsidiaries or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary;

and the order or decree remains unstayed and in effect for 60 consecutive days; or

(i) except as permitted herein, any Subsidiary Guarantee shall be held in any judicial proceeding to be unenforceable or invalid.

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 this Indenture except a continuing Default or Event of Default in the payment of interest on, or the principal of, the Notes.

#### Section 6.02 Acceleration.

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 (i) the day which is five Business Days after receipt by the Representatives of Designated Senior Debt of such notice of acceleration or (ii) 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 this Indenture or the Notes except as provided in this Indenture. Subject to certain

59

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 this 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 below (expressed as a percentage of the principal amount of the Notes on the date of payment that would otherwise be due but for the provisions of this sentence) shall also become immediately due and payable to the extent permitted by law upon the acceleration of the Notes during the twelve-month period ending on January 15 of the years indicated below:

YEAR	PERCENTAGE
----	-----
2004.....	6.125%
2005.....	5.513%
2006.....	4.900%
2007.....	4.288%
2008.....	3.675%
2009.....	3.063%

#### Section 6.03 Other Remedies.

If an Event of Default occurs and is continuing, the Trustee

may pursue any available remedy to collect the payment of principal, premium, if any, and interest on the Notes or to enforce the performance of any provision of the Notes or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Notes or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Holder of a Note in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. All remedies are cumulative to the extent permitted by law.

#### Section 6.04 Waiver of Past Defaults.

Holders of not less than a majority in aggregate principal amount of the then outstanding Notes by notice to the Trustee may on behalf of the Holders of all of the Notes waive an existing Default or Event of Default and its consequences hereunder, except a continuing Default or Event of Default in the payment of the principal of, premium or Additional Interest, if

60

any, or interest on, the Notes including in connection with an offer to purchase; provided, however, that the Holders of a majority in aggregate principal amount at maturity of the then outstanding Notes may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration. Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

#### Section 6.05 Control By Majority.

Holders of a majority in principal amount of the then outstanding Notes may direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture or that the Trustee determines may be unduly prejudicial to the rights of other Holders of Notes or that may involve the Trustee in personal liability.

#### Section 6.06 Limitation On Suits.

A Holder of a Note may pursue a remedy with respect to this Indenture or the Notes only if:

(a) the Holder of a Note gives to the Trustee written notice of a continuing Event of Default;

(b) the Holders of at least 25% in principal amount of the then outstanding Notes make a written request to the Trustee to pursue the remedy;

(c) such Holder of a Note or Holders of Notes offer and, if requested, provide to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense;

(d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer and, if requested, the provision of indemnity; and

(e) during such 60-day period the Holders of a majority in principal amount of the then outstanding Notes do not give the Trustee a direction inconsistent with the request.

A Holder of a Note may not use this Indenture to prejudice the rights of another Holder of a Note or to obtain a preference or priority over another Holder of a Note.

#### Section 6.07 Rights of Holders of Notes to Receive Payment.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Note to receive payment of principal, premium and Additional Interest, if any, and interest on the Note, on or after the respective due dates expressed in the Note (including in connection with an offer to purchase), or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

61

#### Section 6.08 Collection Suit by Trustee.

If an Event of Default specified in Section 6.01(a) or (b) occurs and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Company for the whole amount of principal of, premium and Additional Interest, if any, and interest remaining unpaid on the Notes and interest on overdue principal and, to the extent lawful, interest and such further amount as shall be sufficient to cover

the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

Section 6.09 Trustee May File Proofs Of Claim.

The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Holders of the Notes allowed in any judicial proceedings relative to the Company (or any other obligor upon the Notes), its creditors or its property and shall be entitled and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07 hereof. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07 hereof out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a Lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties that the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Notes or the rights of any Holder, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

Section 6.10 Priorities.

If the Trustee collects any money pursuant to this Article, it shall pay out the money in the following order:

First: to the Trustee, its agents and attorneys for amounts due under Section 7.07 hereof, including payment of all compensation, expense and liabilities incurred, and all advances made, by the Trustee and the costs and expenses of collection;

Second: to Holders of Notes for amounts due and unpaid on the Notes for principal, premium and Additional Interest, if any, and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Notes for principal, premium and Additional Interest, if any, and interest, respectively; and

62

Third: to the Company or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders of Notes pursuant to this Section 6.10.

Section 6.11 Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as a Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by a Holder of a Note pursuant to Section 6.07 hereof, or a suit by Holders of more than 10% in principal amount of the then outstanding Notes.

ARTICLE 7.  
TRUSTEE

Section 7.01 Duties Of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's affairs.

(b) Except during the continuance of an Event of Default:

(i) the duties of the Trustee shall be determined solely by the express provisions of this Indenture and the Trustee need perform only those duties that are specifically set forth in this Indenture and no others, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(ii) in the absence of bad faith or negligence on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the

requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein).

(c) The Trustee may not be relieved from liabilities for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(i) this paragraph does not limit the effect of paragraph (b) of this Section;

63

(ii) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts; and

(iii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.05 hereof.

(d) Whether or not therein expressly so provided, every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b), and (c) of this Section.

(e) No provision of this Indenture shall require the Trustee to expend or risk its own funds or incur any liability. The Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holders, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(f) The Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Company. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

#### Section 7.02 Rights Of Trustee.

(a) The Trustee may conclusively rely upon any document believed by it to be genuine and to have been signed or presented by the proper Person. The Trustee need not investigate any fact or matter stated in such document.

(b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel or both. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on such Officers' Certificate or Opinion of Counsel. The Trustee may consult with counsel and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection from liability in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon.

(c) The Trustee may act through its attorneys and agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.

(d) The Trustee shall not be liable for any action it takes or omits to take in good faith that it believes to be authorized or within the rights or powers conferred upon it by this Indenture.

(e) Unless otherwise specifically provided in this Indenture, any demand, request, direction or notice from the Company shall be sufficient if signed by an Officer of the Company.

(f) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders unless such

64

Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction.

(g) The Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder.

(h) The Trustee shall not be deemed to have notice of any Default or Event of Default unless a Responsible Officer of the Trustee has

actual knowledge thereof or unless written notice of any event which is in fact such a default is received by the Trustee at the Corporate Trust Office of the Trustee, and such notice references the Notes and this Indenture.

(i) Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed in writing with the Company.

(j) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and to each agent, custodian and other Person employed to act hereunder.

(k) The Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered send not superseded.

#### Section 7.03 Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Notes and may otherwise deal with the Company or any Affiliate of the Company with the same rights it would have if it were not Trustee. However, in the event that the Trustee acquires any conflicting interest it must eliminate such conflict within 90 days, apply to the SEC for permission to continue as trustee or resign. Any Agent may do the same with like rights and duties. The Trustee is also subject to Sections 7.10 and 7.11 hereof.

#### Section 7.04 Trustee's Disclaimers.

The Trustee shall not be responsible for and makes no representation as to the validity or adequacy of this Indenture or the Notes, it shall not be accountable for the Company's use of the proceeds from the Notes or any money paid to the Company or upon the Company's direction under any provision of this Indenture, it shall not be responsible for the use or application of any money received by any Paying Agent other than the Trustee, and it shall not be responsible for any statement or recital herein or any statement in the Notes or any other document in connection with the sale of the Notes or pursuant to this Indenture other than its certificate of authentication.

65

#### Section 7.05 Notice of Defaults.

If a Default or Event of Default occurs and is continuing and if it is known to the Trustee, the Trustee shall mail to Holders of Notes a notice of the Default or Event of Default within 90 days after it occurs. Except in the case of a Default or Event of Default in payment of principal of, premium, if any, or interest on any Note, the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of the Holders of the Notes.

#### Section 7.06 Reports by Trustee to Holders of the Notes.

Within 60 days after each May 15 beginning with the May 15 following the date of this Indenture, and for so long as Notes remain outstanding, the Trustee shall mail to the Holders of the Notes a brief report dated as of such reporting date that complies with TIA ss. 313(a) (but if no event described in TIA ss. 313(a) has occurred within the twelve months preceding the reporting date, no report need be transmitted). The Trustee also shall comply with TIA ss. 313(b)(2). The Trustee shall also transmit by mail all reports as required by TIA ss. 313(c).

A copy of each report at the time of its mailing to the Holders of Notes shall be mailed to the Company and filed with the SEC and each stock exchange on which the Notes are listed in accordance with TIA ss. 313(d). The Company shall promptly notify the Trustee when the Notes are listed on any stock exchange.

#### Section 7.07 Compensation and Indemnity.

The Company shall pay to the Trustee from time to time such compensation as the Company and the Trustee shall from time to time agree in writing for its acceptance of this Indenture and services hereunder. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee promptly upon request for all reasonable disbursements, advances and expenses incurred or made by it in addition to the compensation for its services. Such expenses shall include the reasonable compensation, disbursements and expenses of the Trustee's agents and counsel.

The Company shall indemnify the Trustee or any predecessor Trustee against any and all losses, liabilities or expenses, including taxes (except for taxes based upon the income of the Trustee), incurred by it arising out of or in connection with the acceptance or administration of its duties under this Indenture, including the costs and expenses of enforcing this Indenture against the Company (including this Section 7.07) and defending itself against any claim (whether asserted by the Company or any Holder or any other

person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, except to the extent any such loss, liability or expense may be attributable to its negligence or bad faith. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Company shall not relieve the Company of its obligations hereunder. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld.

66

The obligations of the Company under this Section 7.07 shall survive the satisfaction and discharge of this Indenture and the resignation or removal of the Trustee.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.01(g) or (h) hereof occurs, the expenses and the compensation for the services (including the fees and expenses of its agents and counsel) are intended to constitute expenses of administration under any Bankruptcy Law.

The Trustee shall comply with the provisions of TIA ss. 313(b) (2) to the extent applicable.

Section 7.08 Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section.

The Trustee may resign in writing at any time and be discharged from the trust hereby created by so notifying the Company. The Holders of Notes of a majority in principal amount of the then outstanding Notes may remove the Trustee by so notifying the Trustee and the Company in writing. The Company may remove the Trustee if:

(a) the Trustee fails to comply with Section 7.10 hereof;

(b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;

(c) a custodian or public officer takes charge of the Trustee or its property; or

(d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in principal amount of the then outstanding Notes may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee (at the Company's expense), the Company, or the Holders of Notes of at least 10% in principal amount of the then outstanding Notes may petition any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee, after written request by any Holder of a Note who has been a Holder of a Note for at least six months, fails to comply with Section 7.10, such Holder of a Note may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

67

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Thereupon, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Holders of the Notes. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, provided all sums owing to the Trustee hereunder have been paid and subject to the Lien provided for in Section 7.07 hereof. Notwithstanding replacement of the Trustee pursuant to this Section 7.08, the Company's obligations under Section 7.07 hereof shall continue for the benefit of the retiring Trustee.

Section 7.09 Successor Trustee by Merger, Etc.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act shall be the

successor Trustee.

Section 7.10 Eligibility; Disqualification.

There shall at all times be a Trustee hereunder that is a corporation organized and doing business under the laws of the United States of America or of any state thereof that is authorized under such laws to exercise corporate trustee power, that is subject to supervision or examination by federal or state authorities and that has a combined capital and surplus of at least \$50 million as set forth in its most recent published annual report of condition.

This Indenture shall always have a Trustee who satisfies the requirements of TIA ss. 310(a)(1), (2) and (5). The Trustee is subject to TIA ss. 310(b).

Section 7.11 Preferential Collection of Claims Against Company.

The Trustee is subject to TIA ss. 311(a), excluding any creditor relationship listed in TIA ss. 311(b). A Trustee who has resigned or been removed shall be subject to TIA ss. 311(a) to the extent indicated therein.

ARTICLE 8.

LEGAL DEFEASANCE AND COVENANT DEFEASANCE

Section 8.01 Option to Effect Legal Defeasance or Covenant Defeasance.

The Company may, at the option of its Board of Directors evidenced by a resolution set forth in an Officers' Certificate, at any time, elect to have either Section 8.02 or 8.03 hereof be applied to all outstanding Notes upon compliance with the conditions set forth below in this Article 8.

Section 8.02 Legal Defeasance and Discharge.

Upon the Company's exercise under Section 8.01 hereof of the option applicable to this Section 8.02, the Company shall, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, be deemed to have been discharged from its obligations with respect to all

outstanding Notes on the date the conditions set forth below are satisfied (hereinafter, "Legal Defeasance"). For this purpose, Legal Defeasance means that the Company shall be deemed to have paid and discharged the entire Indebtedness represented by the outstanding Notes, which shall thereafter be deemed to be "outstanding" only for the purposes of Section 8.05 hereof and the other Sections of this Indenture referred to in (a) and (b) below, and to have satisfied all its other obligations under such Notes and this Indenture (and the Trustee, on demand of and at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following provisions which shall survive until otherwise terminated or discharged hereunder: (a) the rights of Holders of outstanding Notes to receive solely from the trust fund described in Section 8.04 hereof, and as more fully set forth in such Section, payments in respect of the principal of, premium and Additional Interest, if any, and interest on such Notes when such payments are due, (b) the Company's obligations with respect to such Notes under Sections 2.06, 2.07, 2.10 and 4.02 hereof, (c) the rights, powers, trusts, duties and immunities of the Trustee hereunder and the Company's obligations in connection therewith and (d) this Article 8. Subject to compliance with this Article 8, the Company may exercise its option under this Section 8.02 notwithstanding the prior exercise of its option under Section 8.03 hereof.

Section 8.03 Covenant defeasance.

Upon the Company's exercise under Section 8.01 hereof of the option applicable to this Section 8.03, the Company shall, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, be released from its obligations under Sections 4.03, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 4.15 and 4.16 and Article 5 hereof with respect to the outstanding Notes on and after the date the conditions set forth below are satisfied (hereinafter, "Covenant Defeasance"), and the Notes shall thereafter be deemed not "outstanding" for the purposes of any direction, waiver, consent or declaration or act of Holders (and the consequences of any thereof) in connection with such covenants, but shall continue to be deemed "outstanding" for all other purposes hereunder (it being understood that such Notes shall not be deemed outstanding for accounting purposes). For this purpose, Covenant Defeasance means that, with respect to the outstanding Notes, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not constitute a Default or an Event of Default under Section 6.01 hereof, but, except as specified above, the remainder of this Indenture and such Notes shall be unaffected thereby. In addition, upon the Company's exercise under Section 8.01 hereof of the option applicable to this Section 8.03 hereof, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, Sections 6.01(d) through 6.01(f) hereof shall not constitute Events of Default.

The following shall be the conditions to the application of either Section 8.02 or 8.03 hereof to the outstanding Notes:

In order to exercise either Legal Defeasance or Covenant Defeasance:

69

(a) the Company must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders, cash in United States 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 date for payment thereof 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;

(b) in the case of an election under Section 8.02 hereof, the Company shall have delivered to the Trustee an Opinion of Counsel in the United States reasonably acceptable to the Trustee confirming that (A) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (B) since the date of this Indenture, 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;

(c) in the case of an election under Section 8.03 hereof, 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;

(d) 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 incurrence of Indebtedness all or a portion of the proceeds of which will be used to defease the Notes pursuant to this Article 8 concurrently with such incurrence) or insofar as Sections 6.01(g) or 6.01(h) hereof is concerned, at any time in the period ending on the 91st day after the date of deposit;

(e) such Legal Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than this 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;

(f) the Company shall have delivered to the Trustee an opinion of counsel to the effect that on 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;

(g) the Company shall have delivered to the Trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the

70

Holders over any other creditors of the Company or with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(h) the Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for or relating to the Legal Defeasance or the Covenant Defeasance have been complied with.

Subject to Section 8.06 hereof, all money and non-callable Government Securities (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section

8.05, the "Trustee") pursuant to Section 8.04 hereof in respect of the outstanding Notes shall be held in trust and applied by the Trustee, in accordance with the provisions of such Notes and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as Paying Agent) as the Trustee may determine, to the Holders of such Notes of all sums due and to become due thereon in respect of principal, premium and Additional Interest, if any, and interest, but such money need not be segregated from other funds except to the extent required by law.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the cash or non-callable Government Securities deposited pursuant to Section 8.04 hereof or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of the outstanding Notes.

Anything in this Article 8 to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon the request of the Company any money or non-callable Government Securities held by it as provided in Section 8.04 hereof which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee (which may be the opinion delivered under Section 8.04(a) hereof), are in excess of the amount thereof that would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance.

#### Section 8.06          Repayment to Company.

Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of, premium and Additional Interest, if any, or interest on any Note and remaining unclaimed for two years after such principal, premium and Additional Interest, if any, or interest has become due and payable shall be paid to the Company on its request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Note shall thereafter, as a secured creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in The New York Times and The Wall Street Journal (national edition), notice that such money remains unclaimed

71

and that, after a date specified therein, which shall not be less than 30 days from the date of such notification or publication, any unclaimed balance of such money then remaining will be repaid to the Company.

#### Section 8.07          Reinstatement.

If the Trustee or Paying Agent is unable to apply any United States dollars or non-callable Government Securities in accordance with Section 8.02 or 8.03 hereof, as the case may be, by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the Company's obligations under this Indenture and the Notes shall be revived and reinstated as though no deposit had occurred pursuant to Section 8.02 or 8.03 hereof until such time as the Trustee or Paying Agent is permitted to apply all such money in accordance with Section 8.02 or 8.03 hereof, as the case may be; provided, however, that, if the Company makes any payment of principal of, premium, if any, or interest on any Note following the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Notes to receive such payment from the money held by the Trustee or Paying Agent.

### ARTICLE 9. AMENDMENT, SUPPLEMENT AND WAIVER

#### Section 9.01          Without Consent of Holders of Notes.

Notwithstanding Section 9.02 of this Indenture, the Company and the Trustee may amend or supplement this Indenture or the Notes without the consent of any Holder of a Note:

(a) to cure any ambiguity, defect or inconsistency;

(b) to provide for uncertificated Notes in addition to or in place of certificated Notes;

(c) to provide for the assumption of the Company's obligations to the Holders of the Notes in the case of a merger or consolidation pursuant to Article 5 hereof;

(d) to make any change that would provide any additional rights or benefits to the Holders of the Notes or that does not adversely affect the legal rights hereunder of any Holder of the Note;

(e) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA; or

(f) to conform the text of this Indenture or the Notes to any provision of the "Description of the Notes" section of the Company's Offering Memorandum, dated December 16, 2003, related to the initial

offering of the Notes, to the extent that such provision in that "Description of the Notes" section was intended to be a verbatim recitation of a provision of this Indenture, the Subsidiary Guarantees or the Notes.

72

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon receipt by the Trustee of the documents described in Section 7.02 hereof, the Trustee shall join with the Company in the execution of any amended or supplemental Indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into such amended or supplemental Indenture that affects its own rights, duties or immunities under this Indenture or otherwise.

#### Section 9.02 With Consent of Holders of Notes.

Except as provided below in this Section 9.02, the Company and the Trustee may amend or supplement this Indenture (including Section 3.09, 4.10 and 4.15 hereof) and 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 consents obtained in connection with a tender offer or exchange offer for the Notes), and, subject to Sections 6.04 and 6.07 hereof, any existing Default or Event of Default (other than a Default or Event of Default in the payment of the principal of, premium, if any, or interest on the Notes, except a payment default resulting from an acceleration that has been rescinded) or compliance with any provision of this 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 the Notes).

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee of the consent of the Holders of Notes as aforesaid, and upon receipt by the Trustee of the documents described in Section 7.02 hereof, the Trustee shall join with the Company in the execution of such amended or supplemental Indenture unless such amended or supplemental Indenture affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such amended or supplemental Indenture.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Persons entitled to consent to any indenture supplemental hereto. If a record date is fixed, the Holders on such record date, or their duly designated proxies, and only such Persons, shall be entitled to consent to such supplemental indenture, whether or not such Holders remain Holders after such record date; provided, that unless such consent shall have become effective by virtue of the requisite percentage having been obtained prior to the date which is 180 days after such record date, any such consent previously given shall automatically and without further action by any Holder be canceled and of no further effect.

It shall not be necessary for the consent of the Holders of Notes under this Section 9.02 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

73

After an amendment, supplement or waiver under this Section becomes effective, the Company shall mail to the Holders of Notes affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amended or supplemental Indenture or waiver. Subject to Sections 6.04 and 6.07 hereof, the Holders of a majority in aggregate principal amount of the Notes then outstanding may waive compliance in a particular instance by the Company with any provision of this Indenture or the Notes. However, without the consent of each Holder affected, an amendment or waiver may not (with respect to any Notes held by a non-consenting Holder):

(a) reduce the principal amount of Notes whose Holders must consent to an amendment, supplement or waiver;

(b) reduce the principal of or change the fixed maturity of any Note or alter or waive any of the provisions with respect to the redemption of the Notes except as provided above with respect to Sections 4.10 and 4.15 hereof;

(c) reduce the rate of or change the time for payment of interest, including default interest, on any Note;

(d) 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 then outstanding Notes and a waiver of the payment default that resulted from such acceleration);

(e) make any Note payable in money other than that stated in the Notes;

(f) make any change in the provisions of this 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;

(g) waive a redemption payment with respect to any Note (other than a payment required by Sections 3.09, 4.10 and 4.15 hereof); or

(h) make any change in Section 6.04 or 6.07 hereof or in the foregoing amendment and waiver provisions.

#### Section 9.03 Compliance with Trust Indenture Act.

Every amendment or supplement to this Indenture or the Notes shall be set forth in a amended or supplemental Indenture that complies with the TIA as then in effect.

#### Section 9.04 Revocation and Effect of Consents.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Note is a continuing consent by the Holder of a Note and every subsequent Holder of a Note or portion of a Note that evidences the same debt as the consenting Holder's Note, even if

74

notation of the consent is not made on any Note. However, any such Holder of a Note or subsequent Holder of a Note may revoke the consent as to its Note if the Trustee receives written notice of revocation before the date the waiver, supplement or amendment becomes effective. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder.

#### Section 9.05 Notation on or Exchange of Notes.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Note thereafter authenticated. The Company in exchange for all Notes may issue and the Trustee shall authenticate new Notes that reflect the amendment, supplement or waiver.

Failure to make the appropriate notation or issue a new Note shall not affect the validity and effect of such amendment, supplement or waiver.

#### Section 9.06 Trustee to Sign Amendments, Etc.

The Trustee shall sign any amended or supplemental Indenture authorized pursuant to this Article 9 if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee. The Company may not sign an amendment or supplemental indenture until the Board of Directors approves it. In executing any amended or supplemental indenture, the Trustee shall be entitled to receive and (subject to Section 7.01) shall be fully protected in relying upon, an Officers' Certificate and an Opinion of Counsel stating that the execution of such amended or supplemental indenture is authorized or permitted by this Indenture.

### ARTICLE 10. SUBSIDIARY GUARANTEES

#### Section 10.01 Agreement to Guarantee.

Each of the Guarantors hereby agrees as follows:

(a) Such Guarantor, jointly and severally with all other Guarantors, unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee its successors and assigns, regardless of the validity and enforceability of this Indenture, the Notes or the Obligations of the Company under this Indenture or the Notes, that:

(i) the principal of, premium, interest and Additional Interest, if any, on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption or otherwise, and interest on the overdue principal of, premium, interest and Additional Interest, if any, on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under this Indenture will be promptly paid in full, all in accordance with the terms thereof; and

(ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in

accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

(b) Notwithstanding the foregoing, in the event that this Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of the Guarantors under this Indenture shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

#### Section 10.02 Execution and Delivery of Subsidiary Guarantees.

(a) To evidence its Subsidiary Guarantees set forth in this Indenture, each Guarantor hereby agrees that a notation of such Guarantee substantially in the form attached as Exhibit F to this Indenture shall be endorsed by an Officer of such Guarantor on each Note authenticated and delivered by the Trustee on or after the date hereof.

(b) Notwithstanding the foregoing, each Guarantor hereby agrees that its Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Guarantee.

(c) If an Officer whose signature is on this Indenture no longer holds that office at the time the Trustee authenticates the Note on which a Guarantee is endorsed, the Guarantee shall be valid nevertheless.

(d) The delivery of any Note by the Trustee, after the authentication thereof under this Indenture, shall constitute due delivery of the Guarantee set forth in this Indenture on behalf of each Guarantor.

(e) Each Guarantor hereby agrees that its obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or this Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

(f) Each Guarantor hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Guarantee made pursuant to this Indenture will not be discharged except by complete performance of the obligations contained in the Notes and this Indenture.

(g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guarantor, or any custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guarantor, any amount paid by either to the Trustee or such Holder, the Guarantee made pursuant to this Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.

(h) Each Guarantor agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any obligations guaranteed hereby until payment in full of all obligations guaranteed hereby. Each Guarantor further agrees that, as between such Guarantor, on the one hand, and the Holders and the Trustee, on the other hand:

(i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 6 of this Indenture for the purposes of the Guarantee made pursuant to this Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed hereby; and

(ii) in the event of any declaration of acceleration of such Obligations as provided in Article 6 of this Indenture, such Obligations (whether or not due and payable) shall forthwith become due and payable by such Guarantor for the purpose of the Guarantee made pursuant to this Indenture.

(i) Each Guarantor shall have the right to seek contribution from any other non-paying Guarantor so long as the exercise of such right does not impair the rights of the Holders or the Trustee under the Guarantee made pursuant to this Indenture.

#### Section 10.03 Guarantors May Consolidate, Etc. on Certain Terms.

(a) Except as set forth in Articles 4 and 5 of this Indenture, nothing contained in this Indenture or in the Notes shall prevent any consolidation or merger of any Guarantor with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guarantor as an entirety or substantially as an entirety, to the Company or any other Guarantor.

(b) Except as set forth in Articles 4 and 5 of this Indenture, nothing contained in this Indenture or in the Notes shall prevent any consolidation or merger of any Guarantor with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guarantor), or successive consolidations or mergers in which a Guarantor or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guarantor as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guarantor) authorized to acquire and operate the same; provided, however, that each Guarantor hereby covenants and agrees that (i) subject to this Indenture, upon any such consolidation, merger, sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of this Indenture to be performed by such Guarantor, shall be expressly assumed (in the event that such Guarantor is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guarantor shall have been merged, or by the corporation which shall have acquired such property and (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.

(c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered

77

to the Trustee and satisfactory in form to the Trustee, of the Guarantee made pursuant to this Indenture and the due and punctual performance of all of the covenants and conditions of this Indenture to be performed by such Guarantor, such successor corporation shall succeed to and be substituted for such Guarantor with the same effect as if it had been named herein as one of the Guarantors. Such successor corporation thereupon may cause to be signed any or all of the Guarantees to be endorsed upon the Notes issuable under this Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Guarantees so issued shall in all respects have the same legal rank and benefit under this Indenture as the Guarantees theretofore and thereafter issued in accordance with the terms of this Indenture as though all of such Guarantees had been issued at the date of the execution hereof.

#### Section 10.04 Releases.

(a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guarantor), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of this Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guarantor or all of the Capital Stock of a Guarantor, then the Guarantor (in the event of a sale or other disposition of all of the Capital Stock of such Guarantor) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guarantor) shall be released from and relieved of its obligations under this Indenture and its Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of this Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guarantor, as the case may be, in accordance with the provisions of this Indenture, including, without limitation, Section 4.10 of this Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guarantor from its obligations under this Indenture and its Guarantee made pursuant hereto. If the Guarantor is not released from its obligations under its Guarantee, it shall remain liable for the full amount of principal of and interest and Additional Interest, if any, on the Notes and for the other obligations of such Guarantor under this Indenture.

(b) Upon the designation of a Guarantors as an Unrestricted Subsidiary in accordance with the terms of this Indenture, such Guarantor shall be released and relieved of its obligations under this Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guarantor as an Unrestricted Subsidiary was made by the Company in accordance with the provisions of this Indenture, including without limitation Section 4.07 hereof, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guarantor from its obligations under its Guarantee. Any Guarantor not released from its obligations under its Guarantee shall remain liable for the full amount of principal of and interest on the Notes and for the other obligations of any Guarantor under this Indenture as provided in this Article 10.

(c) Each Guarantor shall be released and relieved of its obligations under this Indenture in accordance with, and subject to, Section 4.18 hereof.

#### Section 10.05 No Recourse Against Others.

No past, present or future director, officer, employee, incorporator, stockholder or agent of 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, any Guarantees, this Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the 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 Securities and Exchange Commission that such a waiver is against public policy.

#### Section 10.06 Subordination of Subsidiary Guarantees

The Guarantee of each Guarantor shall be subordinated to the prior payment in full of all Senior Debt of that Guarantor (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

### ARTICLE 11. SUBORDINATION

#### Section 11.01 Agreement to Subordinate.

The Company agrees, and each Holder by accepting a Note agrees, that the Indebtedness evidenced by the Notes is subordinated in right of payment, to the extent and in the manner provided in this Article 11, to the prior payment in full in cash of all Senior Debt (whether outstanding on the date hereof or hereafter created, incurred, assumed or guaranteed), and that the subordination is for the benefit of the holders of Senior Debt.

#### Section 11.02 Liquidation; Dissolution; Bankruptcy.

Upon any distribution to creditors of the Company in a liquidation or dissolution of the Company, in a bankruptcy, reorganization, insolvency, receivership or similar proceeding relating to the Company or its property, in an assignment for the benefit of creditors or in any marshalling of the Company's assets and liabilities, the holders of Senior Debt shall 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 Article 8).

#### Section 11.03 Default on Designated Senior Debt.

The Company may not make any payment or distribution to the Trustee or any Holder in respect of Obligations with respect to the Notes and may not acquire from the Trustee or any Holder any Notes for cash or property (other than (i) securities that are subordinated to at

least the same extent as the Notes to (a) Senior Debt and (b) any securities issued in exchange for Senior Debt and (ii) payments and other distributions made from any defeasance trust created pursuant to Section 8.01 hereof) until all principal and other Obligations with respect to the Senior Debt have been paid in full if:

(i) a default in the payment of any principal or other Obligations with respect to Designated Senior Debt occurs and is continuing; or

(ii) a default, other than a payment default, on Designated Senior Debt occurs and is continuing that then 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 the default (a "Payment Blockage Notice") from the Company or a Representative with respect to such Designated Senior Debt. If the Trustee receives any such Payment Blockage Notice, no subsequent Payment Blockage Notice shall be effective for purposes of this Section unless and until (i) at least 360 days shall have elapsed since the effectiveness of the immediately prior Payment Blockage Notice and (ii) 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 waived or cured for a period of not less than 90 days.

The Company may and shall resume payments on and distributions in respect of the Notes and may acquire them upon the earlier of:

(i) the date upon which the default is cured or waived, or

(ii) in the case of a default referred to in Section 11.03(ii) hereof, 179 days pass after the date on which the applicable Payment Blockage Notice is received if the maturity of such Designated Senior Debt has not been accelerated,

if this Article otherwise permits the payment, distribution or acquisition at the time of such payment or acquisition.

Section 11.04      Acceleration of Securities.

If payment of the Securities is accelerated because of an Event of Default, the Company shall promptly notify holders of Senior Debt of the acceleration.

Section 11.05      When Distribution Must Be Paid Over.

In the event that the Trustee or any Holder receives any payment of any Obligations with respect to the Notes at a time when the Trustee or such Holder, as applicable, has actual knowledge that such payment is prohibited by Article 11 hereof, such payment shall be held by the Trustee or such Holder, in trust for the benefit of, and shall be paid forthwith over and delivered, upon written request, to, the holders of Senior Debt as their interests may appear

80

or their Representative under the indenture or other agreement (if any) pursuant to which Senior Debt may have been issued, as their respective interests may appear, for application to the payment of all Obligations with respect to Senior Debt remaining unpaid to the extent necessary to pay such Obligations in full in accordance with their terms, after giving effect to any concurrent payment or distribution to or for the holders of Senior Debt.

With respect to the holders of Senior Debt, the Trustee undertakes to perform only such obligations on the part of the Trustee as are specifically set forth in this Article 11, and no implied covenants or obligations with respect to the holders of Senior Debt shall be read into this Indenture against the Trustee. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Debt, and shall not be liable to any such holders if the Trustee shall pay over or distribute to or on behalf of Holders or the Company or any other Person money or assets to which any holders of Senior Debt shall be entitled by virtue of this Article 11, except if such payment is made as a result of the willful misconduct or negligence of the Trustee.

Section 11.06      Notice by Company

The Company shall promptly notify the Trustee and the Paying Agent of any facts known to the Company that would cause a payment of any Obligations with respect to the Notes to violate this Article 11, but failure to give such notice shall not affect the subordination of the Notes to the Senior Debt as provided in this Article 11.

The Trustee shall be entitled to rely on the delivery to it of a written notice by a person representing himself to be a holder of Senior Debt (or a trustee or agent on behalf of such holder) to establish that such notice has been given by a holder of Senior Debt (or a trustee or agent on behalf of any such holder). In the event that the Trustee determines in good faith that further evidence is required with respect to the right of any person as holder of Senior Debt to participate in any payment or distribution pursuant to this Article 11, the Trustee may request such person to furnish evidence to the reasonable satisfaction of the Trustee as to the amount of Senior Debt held by such person, the extent to which such person is entitled to participate in such evidence is not furnish, the Trustee may defer any payment which it may be required to make for the benefit of such person pursuant to the terms of this Indenture pending judicial determination as to the rights of such person to receive such payment.

Section 11.07      Subrogation.

After all Senior Debt is paid in full in cash and until the Notes are paid in full, Holders of Notes shall be subrogated (equally and ratably with all other Indebtedness *pari passu* with the Notes) to the rights of holders of Senior Debt to receive distributions applicable to Senior Debt to the extent that distributions otherwise payable to the Holders of Notes have been applied to the payment of Senior Debt. A distribution made under this Article 11 to holders of Senior Debt that otherwise would have been made to Holders of Notes is not, as between the Company and Holders, a payment by the Company on the Notes.

Section 11.08      Relative Rights.

This Article 11 defines the relative rights of Holders of Notes and holders of Senior Debt. Nothing in this Indenture shall:

(i) impair, as between the Company and Holders of Notes, the obligation of the Company, which is absolute and unconditional, to pay principal of and interest on the Notes in accordance with their terms;

(ii) affect the relative rights of Holders of Notes and creditors of the Company other than their rights in relation to holders of Senior Debt; or

(iii) prevent the Trustee or any Holder of Notes from exercising its available remedies upon a Default or Event of Default, subject to the rights of holders and owners of Senior Debt to receive distributions and payments otherwise payable to Holders of Notes.

If the Company fails because of this Article 11 to pay principal of or interest on a Note on the due date, the failure is still a Default or Event of Default.

#### Section 11.09 Subordination May Not Be Impaired by Company.

No right of any holder of Senior Debt to enforce the subordination of the Indebtedness evidenced by the Notes shall be impaired by any act or failure to act by the Company or any Holder or by the failure of the Company or any Holder to comply with this Indenture.

#### Section 11.10 Distribution or Notice to Representative.

Whenever a distribution is to be made or a notice given to holders of Senior Debt, the distribution may be made and the notice given to their Representative.

Upon any payment or distribution of assets of the Company referred to in this Article 11, the Trustee and the Holders of Notes shall be entitled to rely upon any order or decree made by any court of competent jurisdiction or upon any certificate of such Representative or of the liquidating trustee or agent or other Person making any distribution to the Trustee or to the Holders of Notes for the purpose of ascertaining the Persons entitled to participate in such distribution, the holders of the Senior Debt and other Indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article 11.

#### Section 11.11 Rights of Trustee and Paying Agent.

Notwithstanding the provisions of this Article 11 or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts that would prohibit the making of any payment or distribution by the Trustee, and the Trustee and the Paying Agent may continue to make payments on the Notes, unless the Trustee shall have received at its Corporate Trust Office at least three Business Days prior to the date of such payment written notice of facts that would cause the payment of any Obligations with respect to the Notes to violate this Article 11. Only the Company or a Representative may give the notice. Nothing in this Article 11 shall impair the claims of, or payments to, the Trustee under or pursuant to Section 7.07 hereof.

The Trustee in its individual or any other capacity may hold Senior Debt with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights.

#### Section 11.12 Authorization to Effect Subordination.

Each Holder of Notes, by the Holder's acceptance thereof, authorizes and directs the Trustee on such Holder's behalf to take such action as may be necessary or appropriate to effectuate the subordination as provided in this Article 11, and appoints the Trustee to act as such Holder's attorney-in-fact for any and all such purposes. If the Trustee does not file a proper proof of claim or proof of debt in the form required in any proceeding referred to in Section 6.09 hereof at least 30 days before the expiration of the time to file such claim, the credit agents are hereby authorized to file an appropriate claim for and on behalf of the Holders of the Notes.

#### Section 11.13 Amendments.

The provisions of this Article 11 shall not be amended or modified without the written 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.

Section 12.01 Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies or conflicts with the duties imposed by TIA ss. 318(c), the imposed duties shall control.

Section 12.02 Notices.

Any notice or communication by the Company or the Trustee to the others is duly given if in writing and delivered in Person or mailed by first class mail (registered or certified, return receipt requested), telecopier or overnight air courier guaranteeing next day delivery, to the others' address:

If to the Company or any Guarantor:

L-3 Communications Corporation  
600 Third Avenue, 34th Floor,  
New York, New York 10016  
Attention: Senior Vice President-Finance (Fax: 212-805-5440)

With a copy to:

Simpson Thacher & Bartlett LLP  
425 Lexington Avenue  
New York, New York 10017  
Attention: Vincent Pagano, Jr. (Fax: 212-455-2502)

83

If to the Trustee:

The Bank of New York  
101 Barclay Street  
New York, New York 10286  
Attention: Corporate Trust Administration (Fax: 212-815-5704)

The Company or the Trustee, by notice to the others may designate additional or different addresses for subsequent notices or communications.

All notices and communications (other than those sent to Holders) shall be deemed to have been duly given, at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when receipt acknowledged, if telecopied; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next day delivery.

Any notice or communication to a Holder shall be mailed by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery to its address shown on the register kept by the Registrar. Any notice or communication shall also be so mailed to any Person described in TIA ss. 313(c), to the extent required by the TIA. Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Company mails a notice or communication to Holders, it shall mail a copy to the Trustee and each Agent at the same time.

Section 12.03 Communications By Holders of Notes with Other Holders of Notes.

Holders may communicate pursuant to TIA ss. 312(b) with other Holders with respect to their rights under this Indenture or the Notes. The Company, the Trustee, the Registrar and anyone else shall have the protection of TIA ss. 312(c).

Section 12.04 Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

(a) an Officers' Certificate in form and substance reasonably satisfactory to the Trustee (which shall include the statements set forth in Section 12.05 hereof) stating that, in the opinion of the signers, all conditions precedent and covenants, if any, provided for in this Indenture relating to the proposed action have been satisfied; and

(b) an Opinion of Counsel in form and substance reasonably satisfactory to the Trustee (which shall include the statements set forth in Section 12.05 hereof) stating

84

that, in the opinion of such counsel, all such conditions precedent and covenants have been satisfied.

Section 12.05      Statements required in Certificate or Opinion.

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA ss. 314(a)(4)) shall comply with the provisions of TIA ss. 314(e) and shall include:

(a) a statement that the Person making such certificate or opinion has read such covenant or condition;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(c) a statement that, in the opinion of such Person, he or she has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been satisfied; and

(d) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been satisfied.

Section 12.06      Rule by Trustee and Agents.

The Trustee may make reasonable rules for action by or at a meeting of Holders. The Registrar or Paying Agent may make reasonable rules and set reasonable requirements for its functions.

Section 12.07      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 or the Subsidiary Guarantees and this 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 SEC that such a waiver is against public policy.

Section 12.08      Governing Law.

THIS INDENTURE, THE NOTES AND THE SUBSIDIARY GUARANTEES SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

85

Section 12.09      No Adverse Interpretation of other Agreements.

This Indenture may not be used to interpret any other indenture, loan or debt agreement of the Company or its Subsidiaries or of any other Person. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 12.10      Successors.

All agreements of the Company in this Indenture and the Notes shall bind its successors. All agreements of the Trustee in this Indenture shall bind its successors.

Section 12.11      Severability.

In case any provision in this Indenture or in the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 12.12      Counterpart Originals.

The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

Section 12.13      Table of Contents, Headings, Etc.

The Table of Contents, Cross-Reference Table and Headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part of this Indenture and shall in no way modify or restrict any of the terms or provisions hereof.

SIGNATURES

Dated as of December 22, 2003

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
 Name:  
 Title:

GUARANTORS:

APCOM, INC.  
 BROADCAST SPORTS INC.  
 ELECTRODYNAMICS, INC.  
 HENSCHEL INC.  
 HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
 INTERSTATE ELECTRONICS CORPORATION  
 KDI PRECISION PRODUCTS, INC.  
 L-3 COMMUNICATIONS AEROMET, INC.  
 L-3 COMMUNICATIONS AEROTECH LLC  
 L-3 COMMUNICATIONS AIS GP CORPORATION  
 L-3 COMMUNICATIONS ATLANTIC SCIENCE AND TECHNOLOGY CORPORATION  
 L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
 L-3 COMMUNICATIONS AYDIN CORPORATION  
 L-3 COMMUNICATIONS CSI, INC.  
 L-3 COMMUNICATIONS ESSCO, INC.  
 L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC  
 L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
 L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
 L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
 L-3 COMMUNICATIONS IMC CORPORATION  
 L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.  
 L-3 COMMUNICATIONS INVESTMENTS, INC.  
 L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
 L-3 COMMUNICATIONS MAS (US) CORPORATION  
 L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA L-3  
 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE L-3  
 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
 L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC  
 L-3 COMMUNICATIONS TMA CORPORATION  
 L-3 COMMUNICATIONS WESTWOOD CORPORATION  
 MCTI ACQUISITION CORPORATION  
 MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED  
 MICRODYNE CORPORATION  
 MICRODYNE OUTSOURCING INCORPORATED

S-1

MPRI, INC.  
 PAC ORD INC.  
 POWER PARAGON, INC.  
 SHIP ANALYTICS, INC.  
 SHIP ANALYTICS INTERNATIONAL, INC.  
 SHIP ANALYTICS USA, INC.  
 SPD ELECTRICAL SYSTEMS, INC.  
 SPD SWITCHGEAR INC.  
 SYCOLEMAN CORPORATION  
 TROLL TECHNOLOGY CORPORATION  
 WESCAM AIR OPS INC.  
 WESCAM AIR OPS LLC  
 WESCAM HOLDINGS (US) INC.  
 WESCAM INCORPORATED  
 WESCAM LLC  
 WESCAM SONOMA INC.  
 WOLF COACH, INC.  
 as Guarantors

By: \_\_\_\_\_  
 Name: Christopher C. Cambria  
 Title: Vice President and Secretary

L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.  
as Guarantor

By: L-3 COMMUNICATIONS AIS GP CORPORATION,  
as General Partner

By: \_\_\_\_\_  
Name:  
Title: Authorized Person

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

S-2

EXHIBIT A  
(Face of Note)

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CUSIP \_\_\_\_\_

6-1/8% Senior Subordinated Notes due 2014

No. \_\_\_\_\_ \$ \_\_\_\_\_

L-3 COMMUNICATIONS CORPORATION  
promises to pay to  
or registered assigns,  
the principal sum of  
Dollars on January 15, 2014.  
Interest Payment Dates: January 15 and July 15.  
Record Dates: January 1 and July 1.

Dated: December 22, 2003

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

This is one of the [Global]  
Notes referred to in the  
within-mentioned Indenture:

Dated: December 22, 2003

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

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A-1

(Back of Note)

THIS GLOBAL NOTE IS HELD BY THE DEPOSITARY (AS DEFINED IN THE INDENTURE GOVERNING THIS NOTE) OR ITS NOMINEE IN CUSTODY FOR THE BENEFIT OF THE BENEFICIAL OWNERS HEREOF, AND IS NOT TRANSFERABLE TO ANY PERSON UNDER ANY CIRCUMSTANCES EXCEPT THAT (I) THE TRUSTEE MAY MAKE SUCH NOTATIONS HEREON AS MAY BE REQUIRED PURSUANT TO SECTION 2.07 OF THE INDENTURE, (II) THIS GLOBAL NOTE MAY BE EXCHANGED IN WHOLE BUT NOT IN PART PURSUANT TO SECTION 2.06(a) OF THE INDENTURE, (III) THIS GLOBAL NOTE MAY BE DELIVERED TO THE TRUSTEE FOR CANCELLATION PURSUANT TO SECTION 2.11 OF THE INDENTURE AND (IV) THIS GLOBAL NOTE MAY BE TRANSFERRED TO A SUCCESSOR DEPOSITARY WITH THE PRIOR WRITTEN CONSENT OF L-3 COMMUNICATION CORPORATION.(1)

THE SECURITY (OR ITS PREDECESSOR) EVIDENCED HEREBY WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER SECTION 5 OF THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND THE SECURITY EVIDENCED HEREBY MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THE SECURITY EVIDENCED HEREBY IS HEREBY NOTIFIED THAT THE SELLER MAY BE RELYING ON THE EXEMPTION FROM THE PROVISION OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER. THE HOLDER OF THE SECURITY EVIDENCED HEREBY AGREES FOR THE BENEFIT OF L-3 COMMUNICATIONS CORPORATION THAT (A) SUCH SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED, ONLY (1) (a) TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (b) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144 UNDER THE SECURITIES ACT, (c) OUTSIDE THE UNITED STATES TO A FOREIGN PERSON IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 904 UNDER THE SECURITIES ACT OR (d) IN ACCORDANCE WITH ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT (AND BASED UPON AN OPINION OF COUNSEL IF THE COMPANY SO REQUESTS), (2) TO THE COMPANY OR (3) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT, IN EACH CASE, IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR ANY OTHER APPLICABLE JURISDICTION AND (B) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER FROM IT OF THE SECURITY EVIDENCED HEREBY OF THE RESALE RESTRICTIONS SET FORTH IN (A) ABOVE.

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(1) This paragraph should be included only if the Note is issued in global form.

A-2

Capitalized terms used herein shall have the meanings assigned to them in the Indenture referred to below unless otherwise indicated.

1. INTEREST. L-3 Communications Corporation, a Delaware corporation (the "Company"), promises to pay interest on the principal amount of this Note at 6-1/8% per annum from December 22, 2003 until maturity and shall pay the Additional Interest payable pursuant to Section 5 of the Registration Rights Agreement referred to below. The Company will pay interest and Additional Interest, if any, semi-annually on January 15 and July 15 of each year, or if any such day is not a Business Day, on the next succeeding Business Day (each an "Interest Payment Date"), with the same force and effect as if made on the date for such payment. 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 1:00 p.m. December 22, 2003; provided that if there is no existing Default in the payment of interest, and if this Note is authenticated between a record date referred to on the face hereof and the next succeeding Interest Payment Date, interest shall accrue from such next succeeding Interest Payment Date; provided, further, that the first Interest Payment Date shall be July 15, 2004. The Company shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal and premium, if any, from time to time on demand at a rate that is 1% per annum in excess of the rate then in effect; it shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest and Additional Interest (without regard to any applicable grace periods) from time to time on demand at the same rate to the extent lawful. Interest will be computed on the basis of a 360-day year of twelve 30-day months.

2. METHOD OF PAYMENT. The Company will pay interest on the Notes (except defaulted interest) and Additional Interest, if any, to the Persons who are registered Holders of Notes at the close of business on the January 1 and July 1 next (whether or not a Business Day) preceding the Interest Payment Date, even if such Notes are canceled after such record date and on or before such Interest Payment Date, except as provided in Section 2.12 of the Indenture with respect to defaulted interest. The Notes will be payable as to principal, premium and Additional Interest, if any, and interest 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 may be made by check mailed to the Holders at their addresses set forth in the register of Holders; provided that payment by wire transfer of immediately available funds will be required with respect to principal of and interest, premium and Additional Interest on, all Global Notes and all other Notes the Holders of which shall have provided wire transfer instructions to the Company or the Paying Agent if such Holders shall be registered Holders of at least \$250,000 in principal amount of the Notes. Such payment shall be in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts.

3. PAYING AGENT AND REGISTRAR. Initially, The Bank of New York, the Trustee under the Indenture, will act as Paying Agent and Registrar. The Company may change any Paying Agent or Registrar without notice to any Holder. The Company or any of its Subsidiaries may act in any such capacity.

4. INDENTURE. The Company issued the Notes under an Indenture dated as of December 22, 2003 ("Indenture") among the Company, the Guarantors named therein and the

A-3

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 (15 U.S. Code ss.ss. 77aaa-77bbbb). The Notes are subject to all such terms, and Holders are referred to the Indenture and such Act for a statement of such terms. To the extent any provision of this Note conflicts with the express provisions of the Indenture, the provisions of the Indenture shall govern and be controlling.

5. OPTIONAL REDEMPTION.

(a) Except as set forth in clause (b) of this paragraph 5, the Notes shall not be redeemable at the Company's option prior to January 15, 2009. Thereafter, the Notes shall 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 thereon, 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%

(b) 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 thereon, 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.

6. MANDATORY REDEMPTION.

Except as set forth in paragraph 7 below, the Company shall not be required to make mandatory redemption payments with respect to the Notes.

7. REPURCHASE AT OPTION OF HOLDER.

(a) If there is a Change of Control, the Company shall be required to make an offer (a "Change of Control Offer") to repurchase all or any part (equal to \$1,000 or an integral multiple thereof) of each Holder's Notes at a purchase price equal to 101% of aggregate principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase (the "Change of Control Payment"). Within 10 days following any Change of Control, the Company shall mail a notice to each Holder setting forth the procedures governing the Change of Control Offer as required by the Indenture.

A-4

(b) If the Company or a Subsidiary consummates any Asset Sales, within five Business Days of each date on which 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 the December 1998 Notes, the 2002 Notes and the May 2003 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. Holders of Notes that are the subject of an offer to purchase will receive an Asset Sale Offer from the Company prior to any related purchase date and may elect to have such Notes purchased by completing the form entitled "Option of Holder to Elect Purchase" on the reverse of the Notes.

8. NOTICE OF REDEMPTION. Notice of redemption will be mailed at least 30 days but not more than 60 days before the redemption date to each Holder whose Notes are to be redeemed at its registered address. Notes in denominations larger than \$1,000 may be redeemed in part but only in whole multiples of \$1,000, unless all of the Notes held by a Holder are to be redeemed. On and after the redemption date interest ceases to accrue on Notes or portions thereof called for redemption.

9. DENOMINATIONS, TRANSFER, EXCHANGE. The Notes are in registered form without coupons in denominations of \$1,000 and integral multiples of \$1,000. The transfer of Notes may be registered and Notes may be exchanged as provided in 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 need not exchange or register the transfer of any Note or portion of a Note selected for redemption, except for the unredeemed portion of any Note being redeemed in part. Also, it need not exchange or register the transfer of any Notes for a period of 15 days before a selection of Notes to be redeemed or during the period between a record date and the corresponding Interest Payment Date.

10. PERSONS DEEMED OWNERS. The registered Holder of a Note may be treated as its owner for all purposes.

11. AMENDMENT, SUPPLEMENT AND WAIVER. Subject to certain exceptions, 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 then outstanding 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. Without the consent of any Holder of a Note, the Indenture or the Notes may be amended or supplemented to cure

A-5

any ambiguity, defect or inconsistency, to provide for uncertificated Notes in addition to or in place of certificated Notes, to provide for the assumption of the Company's obligations to Holders of the Notes in case of a merger or consolidation, to make any change that would provide any additional rights or benefits to the Holders of the Notes or that does not adversely affect the legal rights under the Indenture of any such Holder, or to comply with the requirements of the SEC in order to effect or maintain the qualification of the Indenture under the Trust Indenture Act.

12. DEFAULTS AND REMEDIES. An "Event of Default" occurs if: (i) default for 30 days in the payment when due of interest on, or Additional Interest with respect to, the Notes (whether or not prohibited by the subordination provisions of the Indenture); (ii) 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); (iii) failure by the Company to comply with the covenants contained in sections 4.10, 4.15 or 5.01 of the Indenture; (iv) failure by the Company for 60 days after notice to comply with any of its other agreements in the Indenture or the Notes; (v) 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 date of the Indenture, 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; (vi) 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; (vii) 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 (viii) 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 (i) the day which is five Business Days after receipt by the Representatives of Designated Senior Debt of such notice of acceleration or (ii) 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.

A-6

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.

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.

13. SUBORDINATION. Payment of the principal of, premium and Additional Interest, if any, or interest on the Notes is subordinated to the prior payment of Senior Debt on the terms provided in the Indenture.

14. TRUSTEE DEALINGS WITH COMPANY. The Trustee, in its individual or any other capacity, may make loans to, accept deposits from, and perform services for the Company or its Affiliates, and may otherwise deal with the Company or its Affiliates, as if it were not the Trustee.

15. NO RECOURSE AGAINST OTHERS. A director, officer, employee, incorporator or stockholder, of the Company or any Subsidiary of the Company, as such, shall not have any liability for any obligations of the Company or any Subsidiary of the Company under the Notes, the Indenture or the Subsidiary Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for the issuance of the Notes.

16. AUTHENTICATION. This Note shall not be valid until authenticated by the manual signature of the Trustee or an authenticating agent.

17. ABBREVIATIONS. Customary abbreviations may be used in the name of a Holder or an assignee, such as: TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

18. ADDITIONAL RIGHTS OF HOLDERS OF TRANSFER RESTRICTED SECURITIES. In addition to the rights provided to Holders of Notes under the Indenture, Holders of Transferred Restricted Securities shall have all the rights set forth in the Registration Rights Agreement dated as of December 22, 2003, between the Company and the parties named on the signature pages thereof, or, with respect to any Additional Notes, Holders of Transfer Restricted Securities shall have all the rights set forth in one or more registration rights agreements between the Company

A-7

and the other parties thereto, relating to rights given by the Company to the purchasers of Additional Notes (collectively, the "Registration Rights Agreement").

19. CUSIP NUMBERS. Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the Notes and the Trustee may use CUSIP numbers in notices of redemption as a convenience to Holders. No representation is made as to the accuracy of such numbers either as printed on the Notes or as contained in any notice of redemption and reliance may be placed only on the other identification numbers placed thereon.

20. GOVERNING LAW. This Note shall be governed by, and construed in accordance with, the laws of the State of New York.

The Company will furnish to any Holder upon written request and without charge a copy of the Indenture and/or the Registration Rights Agreement. Requests may be made to:

A-8

ASSIGNMENT FORM

To assign this Note, fill in the form below: (I) or (we) assign and transfer this Note to

-----  
(Insert assignee's soc. sec. or tax I.D. no.)

-----  
(Print or type assignee's name, address and zip code)

and irrevocably appoint \_\_\_\_\_  
to transfer this Note on the books of the Company. The agent may substitute  
another to act for him.

Date: \_\_\_\_\_

Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on  
the face of this Note)

Signature Guarantee.

A-9

Option of Holder to Elect Purchase

If you want to elect to have this Note purchased by the Company pursuant to Section 4.10 or 4.15 of the Indenture, check the box below:

Section 4.10

Section 4.15

If you want to elect to have only part of the Note purchased by the Company pursuant to Section 4.10 or Section 4.15 of the Indenture, state the amount you elect to have purchased: \$ \_\_\_\_\_

Date: \_\_\_\_\_

Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on  
the Note)

Tax Identification No.: \_\_\_\_\_

Signature Guarantee.

## Schedule of Exchanges of Interests in the Global Note

The following exchanges of a part of this Global Note for an interest in another Global Note or for a Definitive Note, or exchanges of a part of another Global Note or Definitive Note for an interest in this Global Note, have been made:

Date of Exchange	Amount of decrease in Principal Amount of this Global Note	Amount of increase in Principal Amount of this Global Note	Principal Amount of this Global Note following such decrease (or increase)	Signature of authorized officer of Trustee or Note Custodian
-----	-----	-----	-----	-----

A-11

EXHIBIT B  
FORM OF CERTIFICATE OF TRANSFER

L-3 Communications Corporation  
600 Third Avenue, 34th Floor,  
New York, New York 10016

[Registrar address block]

Re: 6-1/8% Senior Subordinated Notes due 2014.

Reference is hereby made to the Indenture, dated as of December 22, 2003 (the "Indenture"), among L-3 Communications Corporation, as issuer (the "Company"), the Guarantors party thereto and The Bank of New York, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

\_\_\_\_\_, (the "Transferor") owns and proposes to transfer the Note[s] or interest in such Note[s] specified in Annex A hereto, in the principal amount of \$\_\_\_\_\_ in such Note[s] or interests (the "Transfer"), to \_\_\_\_\_ (the "Transferee"), as further specified in Annex A hereto. In connection with the Transfer, the Transferor hereby certifies that:

[CHECK ALL THAT APPLY]

1. ☐ CHECK IF TRANSFeree WILL TAKE DELIVERY OF BOOK-ENTRY INTERESTS IN THE 144A GLOBAL NOTE OR DEFINITIVE NOTES PURSUANT TO RULE 144A. The Transfer is being effected pursuant to and in accordance with Rule 144A under the United States Securities Act of 1933, as amended (the "Securities Act"), and, accordingly, the Transferor hereby further certifies that the Book-Entry Interests or Definitive Notes are being transferred to a Person that the Transferor reasonably believes is purchasing the Book-Entry Interests or Definitive Notes for its own account, or for one or more accounts with respect to which such Person exercises sole investment discretion, and such Person and each such account is a "qualified institutional buyer" within the meaning of Rule 144A in a transaction meeting the requirements of Rule 144A and such Transfer is in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interest or Definitive Note will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the 144A Global Note and/or the Definitive Note and in the Indenture and the Securities Act.

2. ☐ CHECK IF TRANSFEREE WILL TAKE DELIVERY OF BOOK-ENTRY INTERESTS IN THE TEMPORARY REGULATION S GLOBAL NOTE, THE REGULATION S GLOBAL NOTE OR DEFINITIVE NOTES PURSUANT TO REGULATION S. The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and, accordingly, the Transferor hereby further certifies that (i) the Transfer is not being made to a person in the United States and (x) at the time the buy order was originated, the Transferee was outside the United States or such Transferor and any Person acting on its behalf reasonably believed and believes that the Transferee was outside the United States or (y) the transaction was executed in, on or through the facilities of a designated offshore securities market and neither such Transferor nor any Person acting on its behalf knows that the

B-1

transaction was prearranged with a buyer in the United States, (ii) no directed selling efforts have been made in contravention of the requirements of Rule 903(b) or Rule 904(b) of Regulation S under the Securities Act and (iii) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act and (iv) if the proposed transfer is being made prior to the expiration of the Restricted Period, the transfer is not being made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). Upon consummation of the proposed transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interest or Definitive Note will be subject to the restrictions on Transfer enumerated in the Private Placement Legend printed on the Regulation S Global Note and/or the Definitive Note and in the Indenture and the Securities Act.

3. ☐ CHECK AND COMPLETE IF TRANSFEREE WILL TAKE DELIVERY OF BOOK-ENTRY INTERESTS IN THE IAI GLOBAL NOTE OR DEFINITIVE NOTES PURSUANT TO ANY PROVISION OF THE SECURITIES ACT OTHER THAN RULE 144A OR REGULATION S. The Transfer is being effected in compliance with the transfer restrictions applicable to Book-Entry Interests in Restricted Global Notes and Definitive Notes bearing the Private Placement Legend and pursuant to and in accordance with the Securities Act and any applicable blue sky securities laws of any State of the United States, and accordingly the Transferor hereby further certifies that (check one):

(a) ☐ such Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act;

OR

(b) ☐ such Transfer is being effected to the Company or a subsidiary thereof,

OR

(c) ☐ such Transfer is being effected pursuant to an effective registration statement under the Securities Act;

OR

(d) ☐ such Transfer is being effected to an Institutional Accredited Investor and pursuant to an exemption from the registration requirements of the Securities Act other than Rule 144A, Rule 144 or Rule 904, and the Transferor hereby further certifies that the Transfer complies with the transfer restrictions applicable to Book-Entry Interests in a Restricted Global Note or Definitive Notes bearing the Private Placement Legend and the requirements of the exemption claimed, which certification is supported by (x) if such Transfer is in respect of a principal amount of Notes at the time of Transfer of \$250,000 or more, a certificate executed by the Transferee in the form of Exhibit D to the Indenture, or (y) if such Transfer is in respect of a principal amount of Notes at the time of transfer of less than \$250,000, (1) a certificate executed by the Transferee in the form of Exhibit D to the Indenture and (2) an Opinion of Counsel provided by the Transferor or the Transferee (a copy of which the Transferor has attached to this certification), to the effect that (1) such Transfer is in compliance with the Securities Act and (2) such Transfer complies with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interest or Definitive Note will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the IAI Global Note and/or the Definitive Notes and in the Indenture and the Securities Act.

B-2

4. ☐ CHECK IF TRANSFEREE WILL TAKE DELIVERY OF BOOK-ENTRY INTERESTS IN THE UNRESTRICTED GLOBAL NOTE OR IN DEFINITIVE NOTES THAT DO NOT BEAR THE PRIVATE PLACEMENT LEGEND.

(a) ☐ CHECK IF TRANSFER IS PURSUANT TO RULE 144. (i) The Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture

and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interests or Definitive Notes will no longer be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes, on Definitive Notes bearing the Private Placement Legend and in the Indenture.

(b) ☐ CHECK IF TRANSFER IS PURSUANT TO REGULATION S. (i) The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interests or Definitive Notes will no longer be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes, on Definitive Notes bearing the Private Placement Legend and in the Indenture.

(c) ☐ CHECK IF TRANSFER IS PURSUANT TO OTHER EXEMPTION. (i) The Transfer is being effected pursuant to and in compliance with an exemption from the registration requirements of the Securities Act other than Rule 144, Rule 903 or Rule 904 and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any State of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred Book-Entry Interests or Definitive Notes will not be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes or Definitive Notes bearing the Private Placement Legend and in the Indenture.

This certificate and the statements contained herein are made for your benefit and the benefit of the Company.

-----  
[Insert Name of Transferor]

By: -----  
Name:  
Title:

Dated: \_\_\_\_\_, \_\_\_\_

B-3

ANNEX A TO CERTIFICATE OF TRANSFER

1. The Transferor owns and proposes to transfer the following:

[CHECK ONE OF (A) OR (B)]

- (a) ☐ Book-Entry Interests in the:
- (i) ☐ 144A Global Note (CUSIP \_\_\_\_\_), or
  - (ii) ☐ Regulation S Global Note (CUSIP \_\_\_\_\_), or
  - (iii) ☐ IAI Global Note (CUSIP \_\_\_\_\_); or
- (b) Restricted Definitive Notes.

2. After the Transfer the Transferee will hold:

[CHECK ONE]

- (a) ☐ Book-Entry Interests in the:
- (i) ☐ 144A Global Note (CUSIP \_\_\_\_\_), or
  - (ii) ☐ Regulation S Global Note (CUSIP \_\_\_\_\_), or
  - (iii) ☐ IAI Global Note (CUSIP \_\_\_\_\_); or
  - (iv) ☐ Unrestricted Global Note (CUSIP \_\_\_\_\_); or
- (b) ☐ Restricted Definitive Notes; or
- (c) ☐ Definitive Notes that do not bear the Private Placement Legend,
- in accordance with the terms of the Indenture.

EXHIBIT C

FORM OF CERTIFICATE OF EXCHANGE

L-3 Communications Corporation  
600 Third Avenue, 34th Floor,  
New York, New York 10016  
Attention: Senior Vice President-Finance (Fax: 212-805-5440)

Re: 6-1/8% Senior Subordinated Notes due 2014

(CUSIP [\_\_\_\_\_] )

Reference is hereby made to the Indenture, dated as of December 22, 2003 (the "Indenture"), among L-3 Communications Corporation, as issuer (the "Company"), the Guarantors party thereto and The Bank of New York, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

\_\_\_\_\_, (the "Holder") owns and proposes to exchange the Note[s] or interest in such Note[s] specified herein, in the principal amount of \$\_\_\_\_\_ in such Note[s] or interests (the "Exchange"). In connection with the Exchange, the Holder hereby certifies that:

1. EXCHANGE OF RESTRICTED DEFINITIVE NOTES OR RESTRICTED BOOK-ENTRY INTERESTS FOR DEFINITIVE NOTES THAT DO NOT BEAR THE PRIVATE PLACEMENT LEGEND OR UNRESTRICTED BOOK-ENTRY INTERESTS

(a) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED BOOK-ENTRY INTEREST TO UNRESTRICTED BOOK-ENTRY INTEREST. In connection with the Exchange of the Holder's Restricted Book-Entry Interest for Unrestricted Book-Entry Interests in an equal principal amount, the Holder hereby certifies (i) the Unrestricted Book-Entry Interests are being acquired for the Holder's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Global Notes and pursuant to and in accordance with the United States Securities Act of 1933, as amended (the "Securities Act"), (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Unrestricted Book-Entry Interests are being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(b) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED BOOK-ENTRY INTEREST TO DEFINITIVE NOTES THAT DO NOT BEAR THE PRIVATE PLACEMENT LEGEND. In connection with the Exchange of the Holder's Restricted Book-Entry Interests for Definitive Notes that do not bear the Private Placement Legend, the Holder hereby certifies (i) the Definitive Notes are being acquired for the Holder's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Global Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the

Securities Act and (iv) the Definitive Notes are being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(c) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED DEFINITIVE NOTES TO UNRESTRICTED BOOK-ENTRY INTERESTS. In connection with the Holder's Exchange of Restricted Definitive Notes for Unrestricted Book-Entry Interests, (i) the Unrestricted Book-Entry Interests are being acquired for the Holder's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Definitive Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Unrestricted Book-Entry Interests are being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(d) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED DEFINITIVE NOTES TO DEFINITIVE NOTES THAT DO NOT BEAR THE PRIVATE PLACEMENT LEGEND. In connection with the Holder's Exchange of a Restricted Definitive Note for Definitive Notes that do not bear the Private Placement Legend, the Holder hereby certifies (i) the Definitive Notes that do not bear the Private Placement Legend are being acquired for the Holder's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Definitive Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Notes are being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

2. EXCHANGE OF RESTRICTED DEFINITIVE NOTES OR RESTRICTED BOOK-ENTRY INTERESTS  
FOR RESTRICTED DEFINITIVE NOTES OR RESTRICTED BOOK-ENTRY INTERESTS

(a) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED BOOK-ENTRY INTERESTS TO RESTRICTED DEFINITIVE NOTE. In connection with the Exchange of the Holder's Restricted Book-Entry Interest for Restricted Definitive Notes with an equal principal amount, (i) the Restricted Definitive Notes are being acquired for the Holder's own account without transfer and (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Global Notes and pursuant to and in accordance with the Securities Act, and in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Exchange in accordance with the terms of the Indenture, the Restricted Definitive Notes issued will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Definitive Notes and in the Indenture and the Securities Act.

(b) [ ] CHECK IF EXCHANGE IS FROM RESTRICTED DEFINITIVE NOTES TO RESTRICTED BOOK-ENTRY INTERESTS. In connection with the Exchange of the Holder's Restricted Definitive Note for Restricted Book-Entry Interests in the [CHECK ONE] 144A Global Note, Regulation S Global Note, IAI Global Note with an equal principal amount, (i) the Definitive Notes are being acquired for the Holder's own account without transfer and (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Definitive Note and pursuant to and in accordance with the Securities Act, and in compliance with any applicable blue sky securities laws of any state of the United States. Upon

C-2

consummation of the proposed Exchange in accordance with the terms of the Indenture, the Book-Entry Interests issued will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the relevant Restricted Global Note and in the Indenture and the Securities Act.

This certificate and the statements contained herein are made for your benefit and the benefit of the Company.

-----  
[Insert Name of Transferor]

By: \_\_\_\_\_

Name:  
Title:

Dated: \_\_\_\_\_, \_\_\_\_

C-3

EXHIBIT D

FORM OF CERTIFICATE FROM  
ACQUIRING INSTITUTIONAL ACCREDITED INVESTOR

L-3 Communications Corporation  
600 Third Avenue, 34th Floor,  
New York, New York 10016  
Attention: Senior Vice President-Finance (Fax: 212-805-5440)

Re: 6-1/8% Senior Subordinated Notes due 2014

Reference is hereby made to the Indenture, dated as of December 22, 2003 (the "Indenture"), among L-3 Communications Corporation, as issuer (the "Company"), the Guarantors party thereto and The Bank of New York, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

In connection with our proposed purchase of \$\_\_\_\_\_ aggregate principal amount at maturity of:

(a) [ ] Book-Entry Interests, or

(b) [ ] Definitive Notes,

we confirm that:

1. We understand that any subsequent transfer of the Notes or any interest therein is subject to certain restrictions and conditions set forth in the Indenture and the undersigned agrees to be bound by, and not to resell, pledge or otherwise transfer the Notes or any interest therein except in compliance with, such restrictions and conditions and the United States Securities Act of 1933, as amended (the "Securities Act").

2. We understand that the offer and sale of the Notes have not been registered under the Securities Act, and that the Notes and any interest therein may not be offered or sold except as permitted in the following sentence. We agree, on our own behalf and on behalf of any accounts for which we are acting as hereinafter stated, that if we should sell the Notes or any interest therein, we will do so only (A) to the Company or any subsidiary thereof, (B) in accordance with Rule 144A under the Securities Act to a "qualified institutional buyer" (as defined therein), (C) to an institutional "accredited investor" (as defined below) that, prior to such transfer, furnishes (or has furnished on its behalf by a U.S. broker-dealer) to you and to the Company a signed letter substantially in the form of this letter and, if such transfer is in respect of a principal amount of Notes, at the time of transfer of less than \$250,000, an Opinion of Counsel in form reasonably acceptable to the Company to the effect that such transfer is in compliance with the Securities Act, (D) outside the United States in accordance with Rule 904 of Regulation S under the Securities Act, (E) pursuant to the provisions of Rule 144 under the Securities Act or (F) pursuant to an effective registration statement under the Securities Act, and we further agree to provide to any person purchasing the Definitive Notes or Book-Entry

D-1

Interests from us in a transaction meeting the requirements of clauses (A) through (E) of this paragraph a notice advising such purchaser that resales thereof are restricted as stated herein.

3. We understand that, on any proposed resale of the Notes or Book-Entry Interests, we will be required to furnish to you and the Company such certifications, legal opinions and other information as you and the Company may reasonably require to confirm that the proposed sale complies with the foregoing restrictions. We further understand that the Notes purchased by us will bear a legend to the foregoing effect. We further understand that any subsequent transfer by us of the Notes or Book-Entry Interests therein acquired by us must be effected through one of the Placement Agents.

4. We are an institutional "accredited investor" (as defined in Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act) and have such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of our investment in the Notes, and we and any accounts for which we are acting are each able to bear the economic risk of our or its investment.

5. We are acquiring the Notes or Book-Entry Interests purchased by us for our own account or for one or more accounts (each of which is an institutional "accredited investor") as to each of which we exercise sole investment discretion.

You and the Company are entitled to rely upon this letter and are irrevocably authorized to produce this letter or a copy hereof to any interested party in any administrative or legal proceedings or official inquiry with respect to the matters covered hereby.

-----  
[Insert Name of Accredited Investor]

By: -----  
Name:  
Title:

Dated: \_\_\_\_\_, \_\_\_\_

D-2

EXHIBIT E

FORM OF SUPPLEMENTAL INDENTURE TO BE DELIVERED  
BY GUARANTEEING SUBSIDIARY

SUPPLEMENTAL INDENTURE (this "Supplemental Indenture"), dated as of

\_\_\_\_\_, among \_\_\_\_\_ (the "Guaranteeing Subsidiaries"), each a direct or indirect subsidiary of L-3 Communications Corporation (or its permitted successor), a Delaware corporation (the "Company"), the Company and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

WITNESSETH

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as of December 22, 2003 providing for the issuance of an unlimited amount of 6-1/8% Senior Subordinated Notes due 2014 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Company's Obligations (as defined in the Indenture) under the Notes and the Indenture on the terms and conditions set forth herein (the "Subsidiary Guarantee"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees as follows:

(a) Such Guaranteeing Subsidiary, jointly and severally with all other current and future guarantors of the Notes (collectively, the "Guarantors" and each, a "Guarantor"), unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Notes or the Obligations of the Company under the Indenture or the Notes, that:

(i) the principal of, premium, interest and Additional Interest, if any, on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption or otherwise, and interest on

E-1

the overdue principal of, premium, interest and Additional Interest, if any, on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and

(ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

(b) Notwithstanding the foregoing, in the event that this Subsidiary Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of such Guaranteeing Subsidiary under this Supplemental Indenture and its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.

(a) To evidence its Subsidiary Guarantee set forth in this Supplemental Indenture, such Guaranteeing Subsidiary hereby agrees that a notation of such Subsidiary Guarantee substantially in the form of Exhibit F to the Indenture shall be endorsed by an officer of such Guaranteeing Subsidiary on each Note authenticated and delivered by the Trustee after the date hereof.

(b) Notwithstanding the foregoing, such Guaranteeing Subsidiary hereby agrees that its Subsidiary Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Subsidiary Guarantee.

(c) If an Officer whose signature is on this Supplemental Indenture or on the Subsidiary Guarantee no longer holds that

office at the time the Trustee authenticates the Note on which a Subsidiary Guarantee is endorsed, the Subsidiary Guarantee shall be valid nevertheless.

- (d) The delivery of any Note by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Subsidiary Guarantee set forth in this Supplemental Indenture on behalf of each Guaranteeing Subsidiary.
- (e) Each Guaranteeing Subsidiary hereby agrees that its Obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or the Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment

E-2

against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

- (f) Each Guaranteeing Subsidiary hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Subsidiary Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the Obligations contained in the Notes and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guaranteeing Subsidiary, or any custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guaranteeing Subsidiary, any amount paid by either to the Trustee or such Holder, the Subsidiary Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guaranteeing Subsidiary agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Obligations guaranteed hereby until payment in full of all Obligations guaranteed hereby. Each Guaranteeing Subsidiary further agrees that, as between such Guaranteeing Subsidiary, on the one hand, and the Holders and the Trustee, on the other hand:
  - (i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 6 of the Indenture for the purposes of the Subsidiary Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby; and
  - (ii) in the event of any declaration of acceleration of such Obligations as provided in Article 6 of the Indenture, such Obligations (whether or not due and payable) shall forthwith become due and payable by such Guaranteeing Subsidiary for the purpose of the Subsidiary Guarantee made pursuant to this Supplemental Indenture.
- (i) Each Guaranteeing Subsidiary shall have the right to seek contribution from any other non-paying Guaranteeing Subsidiary so long as the exercise of such right does not impair the rights of the Holders or the Trustee under the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

E-3

#### 4. GUARANTEEING SUBSIDIARY MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to the Company or any other Guarantor.

- (b) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary), or successive consolidations or mergers in which a Guaranteeing Subsidiary or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary) authorized to acquire and operate the same; provided, however, that each Guaranteeing Subsidiary hereby covenants and agrees that (i) subject to the Indenture, upon any such consolidation, merger, sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiaries, shall be expressly assumed (in the event that such Guaranteeing Subsidiary is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guaranteeing Subsidiary shall have been merged, or by the corporation which shall have acquired such property and (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.
- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Subsidiary Guarantee made pursuant to this Supplemental Indenture and the due and punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiary, such successor corporation shall succeed to and be substituted for such Guaranteeing Subsidiary with the same effect as if it had been named herein as the Guaranteeing Subsidiary. Such successor corporation thereupon may cause to be signed any or all of the Subsidiary Guarantees to be endorsed upon the Notes issuable under the Indenture which theretofore shall not have been signed

E-4

by the Company and delivered to the Trustee. All the Subsidiary Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Subsidiary Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Subsidiary Guarantees had been issued at the date of the execution hereof.

## 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guaranteeing Subsidiary), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guaranteeing Subsidiary or all of the Capital Stock of a Guaranteeing Subsidiary, then the Guaranteeing Subsidiary (in the event of a sale or other disposition of all of the Capital Stock of such Guaranteeing Subsidiary) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guaranteeing Subsidiary) shall be released from and relieved of its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guaranteeing Subsidiary, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, including without limitation, Section 4.10 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guaranteeing Subsidiary from its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto. If the Guaranteeing Subsidiary is not released from its Obligations under its Subsidiary Guarantee, it shall remain liable for the full

amount of principal of and interest on the Notes and for the other Obligations of such Guaranteeing Subsidiary under the Indenture as provided in this Supplemental Indenture.

- (b) Upon the designation of a Guaranteeing Subsidiary as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Guaranteeing Subsidiary shall be released and relieved of its Obligations under its Subsidiary Guarantee and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guaranteeing Subsidiary as an Unrestricted Subsidiary was made by the

E-5

Company in accordance with the provisions of the Indenture, including without limitation Section 4.07 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guaranteeing Subsidiary from its Obligations under its Subsidiary Guarantee. Any Guaranteeing Subsidiary not released from its Obligations under its Subsidiary Guarantee shall remain liable for the full amount of principal of and interest on the Notes and for the other Obligations of any Guaranteeing Subsidiary under the Indenture as provided herein.

- (c) Each Guaranteeing Subsidiary shall be released and relieved of its obligations under this Supplemental Indenture in accordance with, and subject to, Section 4.18 of the Indenture.

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of 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, any Subsidiary Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such Obligations or their creation. Each Holder of the 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 SEC that such a waiver is against public policy.

7. ANTI-LAYERING; SUBORDINATION OF SUBSIDIARY GUARANTEES. No Guaranteeing Subsidiary shall 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 Guaranteeing Subsidiary and senior in any respect in right of payment to any of the Subsidiary Guarantees. Notwithstanding the foregoing sentence, the Subsidiary Guarantee of each Guaranteeing Subsidiary shall be subordinated to the prior payment in full of all Senior Debt of that Guaranteeing Subsidiary (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

8. NEW YORK LAW TO GOVERN. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Company.

E-6

E-7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: \_\_\_\_\_, \_\_\_\_\_

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

GUARANTEEING SUBSIDIARIES:

[EXISTING GUARANTORS]  
[ADDITIONAL GUARANTORS]

Dated: \_\_\_\_\_, \_\_\_\_\_

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

E-8

EXHIBIT F

FORM OF NOTATION ON SENIOR SUBORDINATED NOTE RELATING TO SUBSIDIARY GUARANTEE

Pursuant to the Indenture (the "Indenture"), dated as of December 22, 2003, among L-3 Communications Corporation, the Guarantors party

thereto (each a "Guarantor" and collectively the "Guarantors") and The Bank of New York, as trustee (the "Trustee"), each Guarantor (i) has jointly and severally unconditionally guaranteed (a) the due and punctual payment of the principal of, and premium, interest and Additional Interest on the Notes, whether at maturity or an interest payment date, by acceleration, call for redemption or otherwise, (b) the due and punctual payment of interest on the overdue principal and premium of, and interest and Additional Interest on the Notes, and (c) in case of any extension of time of payment or renewal of any Notes or any of such other Obligations, the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise and (ii) has agreed to pay any and all costs and expenses (including reasonable attorneys' fees) incurred by the Trustee or any Holder in enforcing any rights under the Subsidiary Guarantee (as defined in the Supplemental Indenture). Notwithstanding the foregoing, the Subsidiary Guarantee of each Guarantor shall be subordinated to the prior payment in full of all Senior Debt (as defined in the Indenture) of that Guarantor (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

Notwithstanding the foregoing, in the event that the Subsidiary Guarantee of any Guarantor would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of such Guarantor under its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

No past, present or future director, officer, employee, agent, incorporator, stockholder or agent of 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, any Subsidiary Guarantee, the Indenture, any supplemental indenture delivered pursuant to the Indenture by such Guarantor, or for any claim based on, in respect of or by reason of such Obligations or their creation. Each Holder by accepting a Note waives and releases all such liability.

The Subsidiary Guarantee shall be binding upon each Guarantor and its successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of rights by any Holder or the Trustee, the rights and privileges herein conferred upon that party shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions hereof.

The Subsidiary Guarantee shall not be valid or obligatory for any purpose until the certificate of authentication on the Note upon which the Subsidiary Guarantee is noted has been executed by the Trustee under the Indenture by the manual signature of one of its

F-1

authorized officers. Capitalized terms used herein have the meaning assigned to them in the Indenture.

F-2

IN WITNESS WHEREOF, the Guarantors hereto have caused this Notation on Senior Subordinated Note to be duly executed, all as of the date first above written.

Dated: \_\_\_\_\_, \_\_\_\_\_

GUARANTEEING SUBSIDIARIES:

[EXISTING GUARANTORS]  
[ADDITIONAL GUARANTORS]



## L-3 COMMUNICATIONS CORPORATION

SECOND OMNIBUS AMENDMENT REGARDING  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT

This SECOND OMNIBUS AMENDMENT REGARDING THE THIRD AMENDED AND RESTATED CREDIT AGREEMENT (this "AMENDMENT") is dated as of January 23, 2004 and entered into by and among L-3 COMMUNICATIONS CORPORATION, a Delaware corporation (the "BORROWER"), which is wholly owned by L-3 COMMUNICATIONS HOLDINGS, INC., a Delaware corporation ("HOLDINGS"), the Lenders party to the Credit Agreement referred to below on the date hereof (the "LENDERS"), BANK OF AMERICA, N.A., ("BOA"), as administrative agent for the Agents (as defined below) and the Lenders (in such capacity, the "ADMINISTRATIVE AGENT"), LEHMAN COMMERCIAL PAPER, INC. ("LCPI") as syndication agent and documentation agent (in such capacity, the "SYNDICATION AGENT" and the "DOCUMENTATION AGENT") and certain financial institutions named as co-agents. All capitalized terms used herein without definition shall have the same meanings herein as set forth in the Credit Agreement (as defined below).

W I T N E S S E T H:  
- - - - -

WHEREAS, the Borrower, the Lenders, the Syndication Agent, the Documentation Agent, the Administrative Agent and certain other parties have entered into the Third Amended and Restated Credit Agreement dated as of May 16, 2001 (as amended, supplemented, restated or otherwise modified from time to time, the "CREDIT AGREEMENT"); and

WHEREAS, the Borrower desires that the Lenders to amend the Credit Agreement and the Parent Guarantee to permit the Borrower and Holdings to declare and pay up to \$25,000,000 of dividends in any fiscal quarter.

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

SECTION 1. Omnibus Amendment to CERTAIN CREDIT documents.  
Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 2 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Documents referenced below as follows:

1.1 The term "Permitted Stock Payments" in Subsection 1.1 of the Credit Agreement is hereby amended and restated as follows:

"Permitted Stock Payments": (A) dividends by the Borrower to Holdings in amounts equal to the amounts required for Holdings to (i) pay franchise taxes and other fees required to maintain its legal existence and (ii) provide for other operating costs of up to \$1,000,000 per fiscal year, (B) dividends by the Borrower to Holdings 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 Borrower would be required to pay in respect of the income of the Borrower and its Subsidiaries if the Borrower were a stand alone entity that was not owned by Holdings, (C) from and after January 1, 2004, dividends by the Borrower to Holdings in an aggregate amount not to exceed \$25,000,000 in any fiscal quarter of the Borrower so long as at the time of declaring and paying any such dividend no Default or Event of Default shall have occurred and be continuing and (D) dividends by the Borrower to Holdings to fund interest expense or dividends in respect of the Permitted Convertible Securities issued by Holdings, provided that such dividends under this clause (D) shall not, in any fiscal year, exceed an amount equal to the interest or dividends actually accruing on the outstanding principal amount of such Permitted Convertible Securities in such fiscal year less the sum of all intercompany advances funded pursuant to subsection 7.9(1) hereof by the Borrower to Holdings in respect of such Permitted Convertible Securities in such fiscal year."

1.2 The definition of "Permitted Parent Distributions" in Section 1.1(b) of the Parent Guarantee is hereby amended and restated to read as follows:

1.3 "Permitted Parent Distributions": (a) the issuance by Holdings of options or other equity securities of Holdings to outside directors, members of management or employees of Holdings in the ordinary course of business, (b) cash payments made in lieu of issuing fractional shares of Holdings' common stock or preferred stock, (c) from and after January 1, 2004, Parent Distributions funded solely with the proceeds of dividends received from the Borrower pursuant to clause (C) of the definition of Permitted Stock Payments in the Credit Agreements so long as at the time of declaring and paying any such Parent Distribution no Default or Event of Default shall have occurred and be continuing and (d) the application of up to \$2,000,000 of the proceeds of the sale of common stock of Holdings to the repurchase of common stock of

Holdings from management of Holdings or the Borrower."

SECTION 2. CONDITIONS TO EFFECTIVENESS OF SECTION 1. The provisions of Section 1 of this Amendment shall be deemed effective when each of the following conditions have been satisfied (such effective date occurring upon satisfaction of such conditions being referred to herein as the "AMENDMENT EFFECTIVE DATE"):

2.1 The Borrower shall have delivered to Administrative Agent executed copies of this Amendment and each of the other Credit Parties shall have delivered to the Administrative Agent executed copies of the Guarantors' Consent and Acknowledgment to this Amendment in the form attached hereto;

2.2 The Requisite Class Lenders party to the Credit Agreement, shall have delivered to the Administrative Agent an executed original or facsimile counterpart of its signature page to this Amendment;

2

2.3 The Administrative Agent shall have received a secretary's or assistant secretary's certificate of the Borrower certifying board resolutions authorizing the execution, delivery and performance of this Amendment by the Borrower;

2.4 The representations and warranties contained in Section 3 hereof shall be true and correct in all respects; and

2.5 All conditions to effectiveness set forth in Sections 2.1, 2.2, 2.3, and 2.4 in the Second Omnibus Amendment Regarding Second Amended and Restated 364 Day Credit Agreement of even date herewith shall have been satisfied.

SECTION 3. REPRESENTATIONS AND WARRANTIES. In order to induce Lenders to enter into this Amendment, the Borrower represents and warrants to each Lender that the following statements are true, correct and complete:

3.1 Authorization and Enforceability. (a) The Borrower has all requisite corporate power and authority to enter into this Amendment and to carry out the transactions contemplated by, and perform its obligations under, the Credit Agreement as modified by this Amendment (the "AGREEMENT"), (b) the execution and delivery of this Amendment has been duly authorized by all necessary corporate action on the part of the Borrower and (c) this Amendment and the Agreement have been duly executed and delivered by the Borrower and, when executed and delivered, will be the legally valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms, subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding, in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

3.2 Incorporation of Representations and Warranties From Credit Agreement. The representations and warranties contained in Section 4 of the Credit Agreement, after giving effect to the amendments contained in Section 1 of this Amendment, are and will be true, correct and complete in all material respects on and as of each of the Amendment Effective Date, to the same extent as though made on and as of such date, except to the extent such representations and warranties specifically relate to an earlier date, in which case they were true, correct and complete in all material respects on and as of such earlier date.

3.3 Absence of Default and Setoff. No event has occurred and is continuing or will result from the consummation of the transactions contemplated by this Amendment that constitutes a Default or an Event of Default and no defense, setoff or counterclaim of any kind, nature or description exists to the payment and performance of the obligations owing by the Borrower to the Agents and the Lenders.

SECTION 4. MISCELLANEOUS.

4.1 Effect on the Credit Agreement and the other Credit Documents. Except as specifically provided in this Amendment, the Credit Agreement and the other Credit Documents shall remain in full force and effect and are hereby ratified and confirmed. The execution, delivery and performance of this Amendment shall not, except as expressly provided herein,

3

constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of the Administrative Agent or any Lender under, the Credit Agreement or any of the other Credit Documents.

4.2 Fees and Expenses. The Borrower acknowledges that all costs, fees and expenses as described in Section 10.5 of the Credit Agreement incurred by Administrative Agent and its counsel with respect to this Amendment and the documents and transactions contemplated hereby shall be for the account of the Borrower.

4.3 GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

4.4 SUBMISSION TO JURISDICTION; WAIVERS; WAIVER OF JURY TRIAL; ACKNOWLEDGMENTS; CONFIDENTIALITY. Each of the terms and conditions set forth in Sections 10.12, 10.13, 10.14 and 10.15 of the Credit Agreement are hereby incorporated into this Amendment as if set forth fully herein except that each reference to "Agreement" therein shall be deemed to be a reference to "Amendment" herein.

4.5 Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

[SIGNATURE PAGES FOLLOW]

4

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Title:

L-3 COMMUNICATIONS HOLDINGS, INC.

By: \_\_\_\_\_  
Title:

BANK OF AMERICA, N.A.,  
as Administrative Agent and as a Lender

By: \_\_\_\_\_  
Title:

LEHMAN COMMERCIAL PAPER INC.,  
as Documentation Agent and Syndication Agent

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT  
REGARDING THE THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

#### Guarantors' Acknowledgment and Consent

Each of the undersigned hereby acknowledges receipt of the attached Amendment and consents to the execution and performance thereof by L-3 Communications Corporation. Each of the undersigned hereby also reaffirms that the guarantee and any applicable Pledge Agreement of such undersigned in favor of the Administrative Agent for the ratable benefit of the Lenders and the

Agents remains in full force and effect and acknowledges and agrees that there is no defense, setoff or counterclaim of any kind, nature or description to obligations arising under such guarantee or any applicable Pledge Agreement

Dated as of January 23, 2004

L-3 COMMUNICATIONS HOLDINGS, INC.

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Vice President, General Counsel and Secretary

L-3 COMMUNICATIONS AEROTECH LLC  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Authorized Person

WESCAM LLC  
WESCAM AIR OPS LLC

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Authorized Person

APCOM, INC.  
BROADCAST SPORTS INC.  
ELECTRODYNAMICS, INC.  
HENSCHEL, INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
INTERSTATE ELECTRONICS CORPORATION  
KDI PRECISION PRODUCTS, INC.

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT TO SECOND OMNIBUS AMENDMENT REGARDING THE THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

L-3 COMMUNICATIONS AEROMET, INC.  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS ATLANTIC SCIENCE AND TECHNOLOGY CORPORATION  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS DBS MICROWAVE, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS INVESTMENTS INC.  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
L-3 COMMUNICATIONS MAS (US) CORPORATION  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED  
MICRODYNE CORPORATION  
MICRODYNE OUTSOURCING INCORPORATED  
MPRI, INC.  
PAC ORD, INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR, INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION

WESCAM SONOMA INC.  
WESCAM AIR OPS INC.  
WESCAM INCORPORATED  
WESCAM HOLDINGS (US) INC.  
WOLF COACH, INC.

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT TO SECOND OMNIBUS  
AMENDMENT REGARDING THE THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE BANK OF NEW YORK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BANK ONE, N.A. (Main Office Chicago)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

FLEET NATIONAL BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CREDIT LYONNAIS NEW YORK BRANCH

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

WACHOVIA BANK NATIONAL ASSOCIATION  
(f/k/a First Union Commercial Corporation)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

HSBC BANK USA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE GOVERNOR AND COMPANY OF THE BANK OF IRELAND

By: \_\_\_\_\_  
Title:  
By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

COMERICA BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CREDIT INDUSTRIEL ET COMMERCIAL

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BARCLAYS BANK PLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

RZB FINANCE LLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

ERSTE BANK, NEW YORK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE MITSUBISHI TRUST AND  
BANKING CORPORATION

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

SOCIETE GENERALE

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

SUNTRUST BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

WEBSTER BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE BANK OF NOVA SCOTIA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CREDIT SUISSE FIRST BOSTON

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

GENERAL ELECTRIC CAPITAL  
CORPORATION

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

MIZUHO HOLDINGS, INC.  
(successor to The Fuji Bank, Limited, The  
Dai-Ichi Kanho Bank, Ltd. and The Industrial  
Bank of Japan, Limited)

By:

-----  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

FORTIS BANK

By: -----  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BANK OF TOKYO-MITSUBISHI TRUST COMPANY

By: -----  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

WESTLB AG, NEW YORK BRANCH

By: -----  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

## L-3 COMMUNICATIONS CORPORATION

SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT

This SECOND OMNIBUS AMENDMENT REGARDING THE SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT (this "AMENDMENT") is dated as of January 23, 2004 and entered into by and among L-3 COMMUNICATIONS CORPORATION, a Delaware corporation (the "BORROWER") which is wholly owned by L-3 COMMUNICATIONS HOLDINGS, INC., a Delaware corporation ("HOLDINGS"), the Lenders party to the Credit Agreement referred to below on the date hereof (the "LENDERS"), BANK OF AMERICA, N.A., ("BOA"), as administrative agent for the Agents (as defined below) and the Lenders (in such capacity, the "ADMINISTRATIVE AGENT"), LEHMAN COMMERCIAL PAPER, INC. ("LCPI") as syndication agent and documentation agent (in such capacity, the "SYNDICATION AGENT" and the "DOCUMENTATION AGENT") and certain financial institutions named as co-agents. All capitalized terms used herein without definition shall have the same meanings herein as set forth in the Credit Agreement (as defined below).

## W I T N E S S E T H:

- - - - -

WHEREAS, the Borrower, the Lenders, the Syndication Agent, the Documentation Agent, the Administrative Agent and certain other parties have entered into the Second Amended and Restated 364 Day Credit Agreement dated as of May 16, 2001 (as amended, supplemented, restated or otherwise modified from time to time, the "CREDIT AGREEMENT"); and

WHEREAS, the Borrower desires that the Lenders to amend the Credit Agreement and the Parent Guarantee to permit the Borrower and Holdings to declare and pay up to \$25,000,000 of dividends in any fiscal quarter.

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

## SECTION 1. OMNIBUS AMENDMENT TO CERTAIN CREDIT DOCUMENTS.

Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 2 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Documents referenced below as follows:

1.1 The term "Permitted Stock Payments" in Subsection 1.1 of the Credit Agreement is hereby amended and restated as follows:

"Permitted Stock Payments": (A) dividends by the Borrower to Holdings in amounts equal to the amounts required for Holdings to (i) pay franchise taxes and other

fees required to maintain its legal existence and (ii) provide for other operating costs of up to \$1,000,000 per fiscal year, (B) dividends by the Borrower to Holdings 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 Borrower would be required to pay in respect of the income of the Borrower and its Subsidiaries if the Borrower were a stand alone entity that was not owned by Holdings, (C) from and after January 1, 2004, dividends by the Borrower to Holdings in an aggregate amount not to exceed \$25,000,000 in any fiscal quarter of the Borrower so long as at the time of declaring and paying any such dividend no Default or Event of Default shall have occurred and be continuing and (D) dividends by the Borrower to Holdings to fund interest expense or dividends in respect of the Permitted Convertible Securities issued by Holdings, provided that such dividends under this clause (D) shall not, in any fiscal year, exceed an amount equal to the interest or dividends actually accruing on the outstanding principal amount of such Permitted Convertible Securities in such fiscal year less the sum of all intercompany advances funded pursuant to subsection 7.9(1) hereof by the Borrower to Holdings in respect of such Permitted Convertible Securities in such fiscal year."

1.2 The definition of "Permitted Parent Distributions" in Section 1.1(b) of the Parent Guarantee is hereby amended and restated to read as follows:

1.3 "Permitted Parent Distributions": (a) the issuance by Holdings of options or other equity securities of Holdings to outside directors, members of management or employees of Holdings in the ordinary course of business, (b) cash payments made in lieu of issuing fractional shares of Holdings' common stock or preferred stock, (c) from and after January 1, 2004, Parent Distributions funded solely with the proceeds of dividends received from the Borrower pursuant to clause (C) of the definition of Permitted Stock Payments in the Credit Agreements so long as at the time of declaring and paying

any such Parent Distribution no Default or Event of Default shall have occurred and be continuing and (d) the application of up to \$2,000,000 of the proceeds of the sale of common stock of Holdings to the repurchase of common stock of Holdings from management of Holdings or the Borrower."

SECTION 2. CONDITIONS TO EFFECTIVENESS OF SECTION 1. The provisions of Section 1 of this Amendment shall be deemed effective when each of the following conditions have been satisfied (such effective date occurring upon satisfaction of such conditions being referred to herein as the "AMENDMENT EFFECTIVE DATE"):

2.1 The Borrower shall have delivered to Administrative Agent executed copies of this Amendment and each of the other Credit Parties shall have delivered to the Administrative Agent executed copies of the Guarantors' Consent and Acknowledgment to this Amendment in the form attached hereto;

2.2 The Requisite Class Lenders party to the Credit Agreement, shall have delivered to the Administrative Agent an executed original or facsimile counterpart of its signature page to this Amendment;

2

2.3 The Administrative Agent shall have received a secretary's or assistant secretary's certificate of the Borrower certifying board resolutions authorizing the execution, delivery and performance of this Amendment by the Borrower;

2.4 The representations and warranties contained in Section 3 hereof shall be true and correct in all respects; and

2.5 All conditions to effectiveness set forth in Sections 2.1, 2.2, 2.3, and 2.4 in the Second Omnibus Amendment Regarding Third Amended and Restated Credit Agreement of even date herewith shall have been satisfied.

SECTION 3. REPRESENTATIONS AND WARRANTIES. In order to induce Lenders to enter into this Amendment, the Borrower represents and warrants to each Lender that the following statements are true, correct and complete:

3.1 Authorization and Enforceability. (a) The Borrower has all requisite corporate power and authority to enter into this Amendment and to carry out the transactions contemplated by, and perform its obligations under, the Credit Agreement as modified by this Amendment (the "AGREEMENT"), (b) the execution and delivery of this Amendment has been duly authorized by all necessary corporate action on the part of the Borrower and (c) this Amendment and the Agreement have been duly executed and delivered by the Borrower and, when executed and delivered, will be the legally valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms, subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding, in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

3.2 Incorporation of Representations and Warranties From Credit Agreement. The representations and warranties contained in Section 4 of the Credit Agreement, after giving effect to the amendments contained in Section 1 of this Amendment, are and will be true, correct and complete in all material respects on and as of each of the Amendment Effective Date, to the same extent as though made on and as of such date, except to the extent such representations and warranties specifically relate to an earlier date, in which case they were true, correct and complete in all material respects on and as of such earlier date.

3.3 Absence of Default and Setoff. No event has occurred and is continuing or will result from the consummation of the transactions contemplated by this Amendment that constitutes a Default or an Event of Default and no defense, setoff or counterclaim of any kind, nature or description exists to the payment and performance of the obligations owing by the Borrower to the Agents and the Lenders.

SECTION 4. MISCELLANEOUS.

4.1 Effect on the Credit Agreement and the other Credit Documents. Except as specifically provided in this Amendment, the Credit Agreement and the other Credit Documents shall remain in full force and effect and are hereby ratified and confirmed. The execution, delivery and performance of this Amendment shall not, except as expressly provided herein, constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of

3

the Administrative Agent or any Lender under, the Credit Agreement or any of the other Credit Documents.

4.2 Fees and Expenses. The Borrower acknowledges that all costs, fees and expenses as described in Section 10.5 of the Credit Agreement incurred by Administrative Agent and its counsel with respect to this Amendment and the

documents and transactions contemplated hereby shall be for the account of the Borrower.

4.3 GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

4.4 SUBMISSION TO JURISDICTION; WAIVERS; WAIVER OF JURY TRIAL; ACKNOWLEDGMENTS; CONFIDENTIALITY. Each of the terms and conditions set forth in Sections 10.12, 10.13, 10.14 and 10.15 of the Credit Agreement are hereby incorporated into this Amendment as if set forth fully herein except that each reference to "Agreement" therein shall be deemed to be a reference to "Amendment" herein.

4.5 Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Title:

L-3 COMMUNICATIONS HOLDINGS, INC.

By: \_\_\_\_\_  
Title:

BANK OF AMERICA, N.A.,  
as Administrative Agent and as a Lender

By: \_\_\_\_\_  
Title:

LEHMAN COMMERCIAL PAPER INC.,  
as Documentation Agent, Syndication Agent and  
as a Lender

By: \_\_\_\_\_  
Title:

Guarantors' Acknowledgment and Consent

Each of the undersigned hereby acknowledges receipt of the attached Amendment and consents to the execution and performance thereof by L-3 Communications Corporation. Each of the undersigned hereby also reaffirms that the guarantee and any applicable Pledge Agreement of such undersigned in favor of the Administrative Agent for the ratable benefit of the Lenders and the Agents remains in full force and effect and acknowledges and agrees that there is no defense, setoff or counterclaim of any kind, nature or description to obligations arising under such guarantee or any applicable Pledge Agreement.

Dated as of January 23, 2004

L-3 COMMUNICATIONS HOLDINGS, INC.

By:

Name: Christopher C. Cambria  
Title: Vice President, General Counsel  
and Secretary

L-3 COMMUNICATIONS AEROTECH LLC  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.

By:

Name: Christopher C. Cambria  
Title: Authorized Person

WESCAM LLC  
WESCAM AIR OPS LLC

By:

Name: Christopher C. Cambria  
Title: Authorized Person

APCOM, INC.  
BROADCAST SPORTS INC.  
ELECTRODYNAMICS, INC.  
HENSCHTEL, INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
INTERSTATE ELECTRONICS CORPORATION

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT TO SECOND OMNIBUS  
AMENDMENT REGARDING SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

KDI PRECISION PRODUCTS, INC.  
L-3 COMMUNICATIONS AEROMET, INC.  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS ATLANTIC SCIENCE AND  
TECHNOLOGY CORPORATION  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS DBS MICROWAVE, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS INVESTMENTS INC.  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
L-3 COMMUNICATIONS MAS (US) CORPORATION  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION CALIFORNIA  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION DELAWARE  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES  
INCORPORATED  
MICRODYNE CORPORATION  
MICRODYNE OUTSOURCING INCORPORATED

MPRI, INC.  
PAC ORD, INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR, INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION  
WESCAM SONOMA INC.  
WESCAM AIR OPS INC.  
WESCAM INCORPORATED  
WESCAM HOLDINGS (US) INC.  
WOLF COACH, INC.

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGEMENT AND CONSENT TO SECOND OMNIBUS  
AMENDMENT REGARDING SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

THE BANK OF NEW YORK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

BANK ONE, N.A. (Main Office Chicago)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

FLEET NATIONAL BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT LYONNAIS NEW YORK BRANCH

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

WACHOVIA BANK NATIONAL ASSOCIATION  
(f/k/a First Union Commercial Corporation)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

HSBC BANK USA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

THE GOVERNOR AND COMPANY OF THE BANK OF IRELAND

By: \_\_\_\_\_  
Title:  
By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

COMERICA BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT INDUSTRIEL ET COMMERCIAL

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

BARCLAYS BANK PLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

SOCIETE GENERALE

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

SUNTRUST BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

WEBSTER BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

THE BANK OF NOVA SCOTIA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT SUISSE FIRST BOSTON

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

## L-3 COMMUNICATIONS CORPORATION

CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT

This CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING THE SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT (this "AMENDMENT") is dated as of February 24, 2004 and entered into by and among L-3 COMMUNICATIONS CORPORATION, a Delaware corporation (the "BORROWER") which is wholly owned by L-3 COMMUNICATIONS HOLDINGS, INC., a Delaware corporation ("HOLDINGS"), the Lenders party to the Credit Agreement referred to below on the date hereof (the "LENDERS"), BANK OF AMERICA, N.A. ("BOA"), as administrative agent for the Agents (as defined below) and the Lenders (in such capacity, the "ADMINISTRATIVE AGENT"), LEHMAN COMMERCIAL PAPER, INC. ("LCPI") as syndication agent and documentation agent (in such capacity, the "SYNDICATION AGENT" and the "DOCUMENTATION AGENT") and certain financial institutions named as co-agents. All capitalized terms used herein without definition shall have the same meanings herein as set forth in the Credit Agreement (as defined below).

W I T N E S S E T H:  
- - - - -

WHEREAS, the Borrower, the Lenders, the Syndication Agent, the Documentation Agent, the Administrative Agent and certain other parties have entered into the Second Amended and Restated 364 Day Credit Agreement dated as of May 16, 2001 (as amended, supplemented, restated or otherwise modified from time to time, the "CREDIT AGREEMENT");

WHEREAS, the Borrower desires that the Lenders consent to an extension of the Revolving 364 Day Termination Date and provide a limited waiver of compliance with certain provisions in Subsection 2.5(a) of the Credit Agreement; and

WHEREAS, the Borrower has requested that certain amendments be made with respect to the Credit Agreement and certain of the other Credit Documents.

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

## SECTION 1. CONSENTS AND WAIVERS.

1.1 Extension of Revolving 364 Day Termination Date. The Borrower has requested that each Lender consent to the extension of the Revolving 364 Day Termination Date for an additional 364 day period commencing on the "Extension Effective Date" (as defined below) (the "REQUESTED EXTENSION"). The Borrower has also requested that each Lender waive the requirements in subsection 2.5(a) of the Credit Agreement that (i) the Borrower's request for the

proposed Requested Extension be made no earlier than 60 days and no later than 55 days prior to the scheduled Revolving 364 Day Termination Date (the "NOTICE LIMITATION"), (ii) each Lender shall advise the Administrative Agent and the Borrower whether such Lender consents to the Requested Extension not later than 30 days after receipt of notice of the proposed Requested Extension (the "RESPONSE PERIOD") and (iii) the Borrower provide the Administrative Agent with no less than 5 days' prior written notice (the "FIVE DAY PERIOD") of the Borrower's election to exercise the Extension Option with only those Lenders constituting Extending Lenders in accordance with subsection 2.5(a) of the Credit Agreement (the "EXERCISE NOTICE"). Subject to the satisfaction of the conditions precedent to this Amendment set forth in Section 4 hereof, each Lender executing this Amendment hereby (i) consents to the Requested Extension and agrees to waive the Notice Limitation and the Response Period and (ii) waives the delivery of the Exercise Notice in the Five Day Period, provided that such Exercise Notice shall be delivered to the Administrative Agent on or prior to the Extension Effective Date.

## SECTION 2. EXTENSION EFFECTIVE DATE ASSIGNMENTS.

2.1 On and as of the Extension Effective Date, each Lender selling interests of any type under this Section and each of the parties named on the signature pages hereto as a "Purchasing Lender" which, prior to the Extension Effective Date was not a Lender under the Credit Agreement (each such new Lender, a "PURCHASING LENDER") shall sell, assign and transfer, or purchase and assume, as the case may be, such interests in the Commitments and the Loan Exposure of the applicable Lenders immediately prior to the Extension Effective Date, as shall be necessary in order that, after giving effect to all such assignments and purchases, the Commitments and the Loan Exposure will be held by the Lenders and the Purchasing Lenders as set forth in Schedule I to this Amendment.

Each Purchasing Lender purchasing interests of any type under this Section shall be deemed to have purchased such interests from each Lender selling interests of such type ratably in accordance with the amounts of such interests sold by such Lenders as reflected by Schedule I to this Amendment. The assignments and purchases provided for in this Section shall be without recourse, warranty or representation, except that each Lender assigning any interests shall be deemed to have represented that it is the legal and beneficial owner of the interests assigned by it and that such interests are

free and clear of any adverse claim, and the purchase price for each such assignment and purchase shall equal the principal amount of the Loans purchased. All accrued but unpaid interest and fees due and owing thereon through but not including the Extension Effective Date shall be paid to such Lender by Borrower on or as of the Extension Effective Date.

2.2 On the Extension Effective Date, each Purchasing Lender that is purchasing interests in the Loan Exposure and Commitments pursuant to subsection 2.1 above shall pay the purchase price for the interests purchased by it pursuant to such subsection 2.1 by wire transfer of immediately available funds to the Administrative Agent not later than 1:00 p.m. (New York time), and (ii) the Administrative Agent shall pay to each Lender that is assigning interests in Loan Exposure and Commitments pursuant to subsection 2.1 above, out of the amounts received by the Administrative Agent from each Purchasing Lender pursuant to clause (i) of this subsection 2.2, the purchase price for the interests assigned by it pursuant to such subsection 2.1 by wire transfer of immediately available funds not later than 3:00 p.m. (New York time).

2

2.3 Each of the parties hereto hereby consents to the assignments and purchases provided for in subsections 2.1 and 2.2 above and effective upon the Extension Effective Date agrees that (i) each Purchasing Lender that is purchasing or accepting interests in the Commitments and the Loan Exposure pursuant to subsection 2.1 above are assignees of certain Lenders permitted under Section 10.6 of the Credit Agreement, (ii) each Purchasing Lender shall be a party to the Credit Agreement, (iii) each Purchasing Lender shall have all the rights and obligations of a Lender under the Credit Agreement and the other Credit Documents with respect to the interests purchased by it pursuant to such subsections. If requested by any Purchasing Lender, the Borrower shall execute and deliver to such Lender (and deliver a copy thereof to the Administrative Agent) one or more promissory notes evidencing the Loans and Commitments of such Lender in accordance with subsection 2.5(i) of the Credit Agreement.

2.4 Each Purchasing Lender (i) represents and warrants that it is legally authorized to enter into this Amendment; (ii) confirms that it has received a copy of the Credit Agreement together with copies of the financial statements delivered pursuant to Section 4.1 of the Credit Agreement and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Amendment; (iii) agrees that it will, independently and without reliance upon any Agent or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement, the other Credit Documents or any other instrument or document furnished pursuant hereto or thereto; (iv) appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers and discretion under the Credit Agreement, the other Credit Documents or any other instrument or document furnished pursuant hereto or thereto as are delegated to the Administrative Agent by the terms thereof, together with such powers as are incidental thereto; and (v) agrees that it will be bound by the provisions of the Credit Agreement and will perform in accordance with its terms all the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender including, if it is organized under the laws of a jurisdiction outside the United States, its obligation pursuant to clause (b) of subsection 2.15 of the Credit Agreement.

SECTION 3. AMENDMENTS TO CREDIT AGREEMENT. Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 6 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Agreement as follows:

3.1 Subsection 1.1 of the Credit Agreement is hereby amended by inserting the following defined terms in the proper alphabetical order:

"Consolidated Senior Debt": all Consolidated Total Debt other than Subordinated Debt.

"Consolidated Senior Debt Ratio": as of the last day of any period of four consecutive fiscal quarters, the ratio of (a) Consolidated Senior Debt on such day to (b) Consolidated EBITDA for such period.

3

"Designated Parent Repurchases": shall mean the sum of the Net Proceeds of the issuance of Permitted Convertible Securities and/or Capital Stock of Holdings from and after January 1, 2004 which are utilized to repurchase common stock of Holdings.

"Investments": as defined in subsection 7.9.

"Non-Wholly Owned Subsidiary": any Subsidiary of the Borrower that is not a Wholly Owned Subsidiary.

"Third Omnibus Amendment Fee Letter": shall mean that certain Third Omnibus Amendment Fee Letter between the Administrative Agent and the Borrower dated on or about January 30, 2004."

3.2 The following defined terms in subsection 1.1 of the Credit Agreement are hereby amended and restated as follows:

"Consolidated EBITDA": as of the last day of any fiscal quarter, Consolidated Net Income of the Borrower, its Subsidiaries and, without duplication, the Acquired Businesses (excluding, without duplication, (v)

impairment losses incurred on goodwill and other intangible assets or on debt or equity investments computed in accordance with Financial Accounting Standard No. 142 or other GAAP, (w) gains or losses incurred on the retirement of debt computed in accordance with Financial Accounting Standard No. 145, (x) extraordinary gains and losses in accordance with GAAP, (y) gains and losses in connection with asset dispositions whether or not constituting extraordinary gains and losses and (z) gains or losses on discontinued operations) for the four fiscal quarters ended on such date, plus (i) Consolidated Interest Expense of the Borrower and its Subsidiaries and all Consolidated Interest Expense of Holdings with respect to the Permitted Convertible Securities guaranteed by the Borrower or its Subsidiaries and, without duplication, the Acquired Businesses for such period, plus (ii) to the extent deducted in computing such Consolidated Net Income of the Borrower or its Subsidiaries and, without duplication, the Acquired Businesses, the sum of income taxes, depreciation and amortization for such period. For the purposes of calculating Consolidated EBITDA for any period of four consecutive fiscal quarters occurring after the AIS Acquisition (each, a "Reference Period") pursuant to any determination of the Debt Ratio, Consolidated EBITDA for such Reference Period shall be calculated after giving pro forma effect to (i) exclude from costs the positive difference, if any, between (A) the amount of annual corporate overhead costs attributed to the operations associated with the business comprising the AIS Acquisition by Raytheon Company prior to such acquisition by the Borrower and (B) the amount of annual corporate overhead costs that will be attributed by the Borrower to the operations associated with the business comprising the AIS Acquisition from and after such acquisition by the Borrower, (ii) exclude any losses or gains associated with any contract estimate at completion ("EAC"), unrecoverable inventories and uncollectable receivables adjustment included in the historical results of operations associated with the business comprising the AIS Acquisition within the 12 months prior to the effective date of the AIS Acquisition for accounting purposes, if such contract EAC, unrecoverable inventories or uncollectable receivable adjustments pertained to contracts or assets excluded from the business

4

comprising the AIS Acquisition, and (iii) exclude any losses or gains, up to a maximum amount of \$16,000,000, associated with any contract EAC, unrecoverable inventories and uncollectable receivables adjustment included in the historical results of operations associated with the Sea Sentinel contract within the 12 months prior to the effective date of the AIS Acquisition for accounting purposes; provided, however, that such adjustments to Consolidated EBITDA are demonstrated by appropriate footnotes to the audited financial statements of the business comprising the AIS Acquisition or appropriate schedules and other materials prepared and certified by the Borrower and delivered to the Administrative Agent no more than 15 days after the completion of the audit of the financial statements of the business comprising the AIS Acquisition for the fiscal year ended prior to the consummation of AIS Acquisition.

"Credit Documents": this Agreement, the Notes, the Applications, the Guarantees, the Fee Letter, the Lender Fee Letter, the Third Omnibus Amendment Fee Letter and the Pledge Agreements.

"GAAP" means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or such other principles as may be approved by a significant segment of the accounting profession in the United States, that are applicable to the circumstances as of the date of determination.

"Immaterial Subsidiary": any Subsidiary of the Borrower having assets not exceeding five percent (5%) of the Consolidated Total Assets; provided, however, that if any Subsidiary is a Non-Wholly Owned Subsidiary, the assets of such Subsidiary to be included in the above calculation shall be reduced by the minority interest for such Subsidiary as reported in the Borrower's consolidated balance sheet.

"Net Proceeds": the aggregate cash proceeds (including Cash Equivalents) received by Holdings or any of its Subsidiaries in respect of:

(a) any issuance by Holdings or any of its Subsidiaries of Indebtedness after the Closing Date and any issuance by Holdings of any Capital Stock after the Closing Date;

(b) any Asset Sale or other transaction permitted by subsection 7.5(c); and

(c) any cash payments received in respect of promissory notes or other evidences of indebtedness delivered to Holdings or such Subsidiary in respect of an Asset Sale;

in each case net of (without duplication) (i), (A) in the case of an Asset Sale or other transaction permitted by subsection 7.5(c), the amount required to repay any Indebtedness (other than the Loans) secured by a Lien on any assets of Holdings or a Subsidiary of Holdings that are sold or otherwise disposed of in connection with such Asset Sale or other transaction permitted by subsection 7.5(c) and (B) reasonable and

5

appropriate amounts established by Holdings or such Subsidiary, as the case may be, as a reserve against liabilities associated with such Asset Sale or

other transaction permitted by subsection 7.5(c) and retained by Holdings or such Subsidiary, (ii) the reasonable expenses (including legal fees and brokers' and underwriters' commissions, lenders fees, credit enhancement fees, accountants' fees, investment banking fees, survey costs, title insurance premiums and other customary fees, in any case, paid to third parties or, to the extent permitted hereby, Affiliates) incurred in effecting such issuance, sale or transaction and (iii) any taxes reasonably attributable to such sale or transaction and reasonably estimated by Holdings or such Subsidiary to be actually payable.

"Permitted Stock Payments": (A) dividends by the Borrower to Holdings in amounts equal to the amounts required for Holdings to (i) pay franchise taxes and other fees required to maintain its legal existence and (ii) provide for other operating costs of up to \$1,000,000 per fiscal year, (B) dividends by the Borrower to Holdings 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 Borrower would be required to pay in respect of the income of the Borrower and its Subsidiaries if the Borrower were a stand alone entity that was not owned by Holdings, (C) from and after January 1, 2004, dividends by the Borrower to Holdings in an aggregate amount not to exceed \$25,000,000 in any fiscal quarter of the Borrower so long as at the time of declaring and paying any such dividend no Default or Event of Default shall have occurred and be continuing, (D) dividends by the Borrower to Holdings to fund interest expense or dividends in respect of the Permitted Convertible Securities issued by Holdings, provided that such dividends under this clause (D) shall not, in any fiscal year, exceed an amount equal to the interest or dividends actually accruing on the outstanding principal amount of such Permitted Convertible Securities in such fiscal year less the sum of all intercompany advances funded pursuant to subsection 7.9(l) hereof by the Borrower to Holdings in respect of such Permitted Convertible Securities in such fiscal year, (E) from and after January 1, 2004, dividends by the Borrower to Holdings in an amount not to exceed \$200,000,000 less the Designated Parent Repurchases to permit Holdings to repurchase common stock of Holdings, so long as such dividends are paid from the Net Proceeds of the issuance of Additional Subordinated Indebtedness issued after January 1, 2004 and (F) from and after January 1, 2004, dividends by the Borrower to Holdings in an aggregate amount up to \$10,000,000 in any fiscal year of the Borrower to fund cash payments to repurchase common stock of Holdings held by any employee, director, officer, consultant or agent (a "Benefit Plan Beneficiary") of the Borrower, Holdings or their Subsidiaries pursuant to any restricted stock plan or to which any such Benefit Plan Beneficiary has a right under any option plan of the Borrower or Holdings (or to repurchase other common stock of Holdings held by any such Benefit Plan Beneficiary having a value not exceeding the amount of the exercise price of an option being exercised by such Benefit Plan Beneficiary and the amount of the obligations of such Benefit Plan Beneficiary under the Code with respect to the common stock underlying such option) in order to enable (i) the Borrower, Holdings or such Benefit Plan Beneficiary to comply with obligations under the Code, (ii) the Borrower or Holdings to issue cash to such Benefit Plan Beneficiary in lieu of fractional shares of

6

common stock or (iii) the payment of the exercise price of an option held by such Benefit Plan Beneficiary."

3.3 Section 1 of the Credit Agreement is hereby amended by (a) deleting the text appearing in subsection 1.2(b) and inserting "[INTENTIONALLY OMITTED]" in place thereof and (b) adding a new subsection 1.6 at the end thereof as follows:

"1.6 Accounting Terms.

(a) All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial covenants, financial ratios and other financial calculations contained in this Agreement shall be prepared in conformity with GAAP as in effect from time to time, applied consistently throughout the periods reflected therein, except as otherwise specifically prescribed herein.

(b) If at any time any change in GAAP after January 1, 2004 would affect the computation of any financial ratio or requirement set forth in any Credit Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) if a request for such an amendment has been made, the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP."

3.4 Subsection 2.1(a) (i) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

(i) Revolving 364 Day Loans. Subject to the terms and conditions hereof, each Revolving 364 Day Lender severally agrees to make revolving credit loans to the Borrower, from time to time during the Revolving 364 Day Commitment Period, in an aggregate principal amount at any one time outstanding which, when added to such Lender's Commitment Percentage with respect to Revolving 364 Day Loans of the then outstanding L/C Obligations,

does not exceed the amount of such Lender's Revolving 364 Day Commitment. During the Revolving 364 Day Commitment Period, the Borrower may use the Revolving 364 Day Commitments by borrowing, prepaying the Revolving 364 Day Loans, in whole or in part, and reborrowing, all in accordance with the terms and conditions hereof. At any time not less than thirty (30) days prior to the "Termination Date" (as defined in the Facility A Credit Agreement), the Borrower may increase the aggregate Commitments by (I) entering into a binding written agreement, substantially in the form of Exhibit G hereto, with any Lender to increase the Commitment of such Lender (an "Increased Commitment Agreement") which Increased Commitment Agreement shall be presented to the Agents for acknowledgment and acceptance (which shall not be withheld unless the effect thereof would be to exceed the

7

maximum permitted amount herein for all Commitments, Facility A Commitments and Facility C Commitments (if Facility C exists) in the aggregate) and/or (II) subject to the First Offer Requirement (as defined below) enter into a binding written agreement substantially in the form of Exhibit H hereto (a "Lender Addition Agreement") with any bank, financial institution, or Investment Fund to become a Lender under this Agreement by making a Commitment and causing such Person to take all other actions required to become a new Lender hereunder (a "New Lender"); provided that the sum of (i) the aggregate Commitments of all Lenders (including New Lenders), (ii) the aggregate Facility A Commitments of all Facility A Lenders and (iii) the aggregate Facility C Commitments (if Facility C exists) of all Facility C Lenders (if Facility C exists) may not exceed, as of the date all or any portion of the Indebtedness comprising the Incremental Facility (as defined below) is incurred, an aggregate amount that would cause the Consolidated Senior Debt Ratio for the Borrower's most recently ended four full fiscal quarters for which internal financial statements are available to be greater than 2.0 to 1.0 (determined on a pro forma basis, assuming for purposes of this subsection 2.1(a)(i) only, all of the proposed additional commitments had been incurred at the beginning of such four-quarter period and all Commitments of all Lenders, all Facility A Commitments of all Facility A Lenders and all Facility C Commitments (if Facility C exists) of all Facility C Lenders (if Facility C exists) that are outstanding immediately prior to giving effect to the incurrence of such proposed additional commitments have been drawn in full, but taking into account any payment or prepayment of any Term Loans or term loans under Facility C (if Facility C exists)) (such new or increased commitments, the "Incremental Facility"); and provided, further that, no consent of any Lender shall be required for such Incremental Facility except for the consents described under clauses (I) and (II) above. In order to become a New Lender, a party must execute a Lender Addition Agreement and deliver the same to the Administrative Agent, the Syndication Agent and the Borrower for counter-execution. On the Eurodollar Loans Maturity Date (or, subject to compliance with subsection 2.16, on any Business Day) occurring on or immediately following the date that (i) the Agents have acknowledged their acceptance of any Increased Commitment Agreement delivered pursuant to clause (I) above or (ii) any Lender Addition Agreement has been executed by all necessary parties and delivered to the Agents, the increase in any such Lender's Commitment contemplated thereby shall become effective and/or the New Lender shall become a party to this Agreement, as applicable. Promptly thereafter, the Administrative Agent shall amend Schedule I hereto to accurately reflect the Commitments of the Lenders then in existence, whereupon such amended Schedule I shall be substituted for the pre-existing Schedule I, be deemed a part of this Agreement without any further action or consent of any party and be promptly distributed to each Lender and the Borrower by the Administrative Agent. The Incremental Facility shall have such economic terms (i.e., pricing, amount, tenor, amortization) as shall be agreed at the time with the lenders participating therein, and shall, otherwise, be on the same terms as this Agreement; provided that without the written consent of Required Class Lenders for each Class, (i) the applicable interest rate margin under the Incremental Facility shall not exceed the Applicable Margin under this Agreement or the "Applicable Margin" under and as defined in the Facility A Credit Agreement by more than fifty basis points and (ii) the maturity date of the Incremental Facility shall be equal to or occurring after the scheduled Termination Date under this

8

Agreement or the "Termination Date" under and as defined in the Facility A Credit Agreement; provided, further, that if the Borrower chooses to implement the Incremental Facility pursuant to clause (I) or (II) above, the Incremental Facility shall have the same economic terms (i.e. pricing, tenor, amortization) as this Agreement. In the alternative, without the consent of any Lender, Borrower may cause the Incremental Facility to be implemented and separately documented as Facility C, which shall have BOA as the administrative agent and provide for a ratable sharing of all Collateral and Guarantee Obligations under the Guarantees among and between the Lenders, the Facility A Lenders and the Facility C Lenders. In any case, the Administrative Agent shall have the right to execute, on behalf of the Lenders, any amendments and/or other documents necessary to implement the Incremental Facility; provided that such amendments and/or other documents do not affect any of the rights or obligations of any Lender for which the written consent of such Lender is necessary under subsection 10.1 unless the written consent of such Lender is received by the Administrative Agent. When the Incremental Facility is not implemented and separately documented as Facility C, the Borrower shall send the Administrative Agent (for distribution to each Lender) a written offer to participate in the Incremental Facility pursuant to clause (I) above, and each such Lender shall have the right, but no obligation, to commit to a ratable portion of the Incremental Facility, provided that no later than

fourteen (14) days after receipt of such written request, each such Lender shall advise the Administrative Agent and the Borrower whether it intends to participate in the Incremental Facility and the amount of its proposed commitment (the "First Offer Requirement"). Only after satisfying the First Offer Requirement and allocating requested commitments to Lenders requesting participation in such Incremental Facility shall Borrower be permitted to offer participation in any remaining commitments for the Incremental Facility to any proposed New Lender pursuant to clause (II) above."

3.5 Subsection 2.12(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(a) Each borrowing by the Borrower from the Revolving 364 Day Lenders hereunder, each payment by the Borrower on account of any commitment fee hereunder and any reduction of the Revolving 364 Day Commitments of Revolving 364 Day Lenders shall be made pro rata according to the respective Commitment Percentages of the Revolving 364 Day Lenders. Except during any period in which an Event of Default has occurred and is continuing, each payment (including each prepayment) by the Borrower on account of principal of and interest on any Term Loans and/or the Revolving 364 Day Loans, and any application by the Administrative Agent of the proceeds of any Collateral, shall be made pro rata according to the respective outstanding principal amounts of such Loans then held by the Lenders. All payments (including prepayments) to be made by the Borrower hereunder in respect of any Loan, whether on account of principal, interest, Reimbursement Obligations (whether in respect of Domestic L/Cs or Foreign L/Cs), fees, expenses or otherwise, shall be made without set off or counterclaim and shall be made prior to 11:00 A.M., New York City time, on the due date thereof to the Administrative Agent, for the account of the Lenders with respect to such Loans, at the Administrative Agent's office specified in subsection 10.2, in Dollars and in immediately available funds; provided, that with respect to any

9

Reimbursement Obligations of the Borrower arising from the presentment to the Issuing Lender of a draft under a Foreign L/C, the Borrower may make payment in the applicable Alternative Currency if such payment is received by the Issuing Lender on the date such draft is paid by the Issuing Lender.

At any time that an Event of Default has occurred and is continuing, all payments (including prepayments) made by the Borrower hereunder and any application by the Administrative Agent of the proceeds of any Collateral and/or payment under any Guarantee shall be applied in the following order: (1) to the ratable payment of all amounts due and owing by the Borrower pursuant to subsection 10.5 of this Agreement, subsection 10.5 of the Facility A Credit Agreement or subsection 10.5 of the Facility C Credit Agreement (if Facility C exists) to the Agents, the Facility A Agents and/or the Facility C Agents (if Facility C exists) and, after payment in full thereof, to any other Lender, Facility A Lender or Facility C Lender (if Facility C exists); (2) to the ratable payment of all interest, fees and commissions due and owing under this Agreement, the Facility A Credit Agreement or the Facility C Credit Agreement (if Facility C exists) or to the Agents, the Facility A Agents, the Facility C Agents (if Facility C exists), the Swing Line Lender, any Lender, any Facility A Lender or any Facility C Lender (if Facility C exists); and (3) to the ratable payment (or cash collateralization) of all other obligations of the Borrower to the Agents, the Facility A Agents, the Facility C Agents (if Facility C exists), the Swing Line Lender, any Lender, any Facility A Lender or any Facility C Lender (if Facility C exists) under any Credit Document, Facility A Credit Document, Facility C Credit Document (if Facility C exists) or Interest Rate Agreement with any Lender, any Facility A Lender or any Facility C Lender (if Facility C exists), including, without limitation the aggregate outstanding principal amount of Loans, Facility A Loans and Facility C Loans (if Facility C exists), the aggregate L/C Obligations, Facility A L/C Obligations and Facility C L/C Obligations (if Facility C exists) and the aggregate outstanding amount of Interest Rate Agreement Obligations to any Lender, any Facility A Lender and any Facility C Lender (if Facility C exists). For purposes of applying payments and proceeds distributed under clause 3 above, each Lender will first apply such amounts to all outstanding Loans and Interest Rate Agreement Obligations then due and owing to such Lender before such amounts will be held as cash collateral for L/C Obligations in which such Lender is a L/C Participant.

The Administrative Agent, the Facility A Administrative Agent and the Facility C Administrative Agent (if Facility C exists) shall ratably distribute such payments to the applicable Lenders, the Facility A Lenders and the Facility C Lenders (if Facility C exists) promptly upon receipt in like funds as received. If any payment hereunder becomes due and payable on a day other than a Business Day, such payment shall be extended to the next succeeding Business Day, and, with respect to payments of principal, interest thereon shall be payable at the then applicable rate during such extension."

3.6 Subsection 6.10(b) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

10

"(b) With respect to any Person that, subsequent to the Original Closing Date, becomes a direct or indirect Subsidiary of the Borrower, promptly (and in any event within 30 days after such Person becomes a Subsidiary): (i) cause such new Subsidiary to become a party to the

Subsidiary Guarantee and, to the extent such Subsidiary holds any Capital Stock of any Subsidiary that is not an Immaterial Subsidiary, to the Subsidiary Pledge Agreement and (ii) if requested by the Administrative Agent or the Required Lenders, deliver to the Administrative Agent legal opinions relating to the matters described in clause (i) immediately preceding, which opinions shall be in form and substance, and from counsel, reasonably satisfactory to the Administrative Agent. Notwithstanding the foregoing, no Immaterial Subsidiary, Foreign Subsidiary, Non-Wholly Owned Subsidiary or TCAS Subsidiary (except as provided below) of the Borrower or its Subsidiaries shall be required to execute a Subsidiary Guarantee or Subsidiary Pledge Agreement, and no more than 65% of the total combined voting power of the Capital Stock of or equity interests in (A) any direct or indirect Foreign Subsidiary of the Borrower or (B) any direct or indirect Subsidiary of the Borrower if more than 65% of the assets of such Subsidiary are securities of foreign companies (such determination to be made on the basis of fair market value), and no Subsidiary of any Person described in clause (A) or (B), shall be required to be pledged hereunder; provided, that if, after the consummation of any sale of a portion of Capital Stock of the TCAS Subsidiary, the TCAS Subsidiary thereafter becomes a Wholly Owned Subsidiary, then the TCAS Subsidiary shall become a party to the Subsidiary Guarantee and Subsidiary Pledge Agreement and the Borrower shall promptly (and in any event within 30 days after such event occurs) comply with the requirements of this subsection 6.10(b) with respect to the TCAS Subsidiary; provided, further, that if any Non-Wholly Owned Subsidiary thereafter becomes a Wholly Owned Subsidiary, then such Subsidiary shall become a party to the Subsidiary Guarantee and Subsidiary Pledge Agreement and Borrower shall promptly (and in any event within 30 days after such event occurs) comply with the requirements of this subsection 6.10(b) with respect to such Subsidiary; provided, further, that if the Borrower shall be required to cause any Immaterial Subsidiary (including, without limitation, any Immaterial Subsidiary which is also a Non-Wholly Owned Subsidiary) to become bound by any guarantee of Indebtedness for borrowed money in respect of any Subordinated Indebtedness or Indebtedness incurred pursuant to subsection 7.2(d), the Borrower shall cause such Subsidiary to execute a Subsidiary Guarantee and cause the same to be delivered to the Administrative Agent promptly (and in any event within 30 days after such event occurs); provided, further, that no Guarantee Obligation of any Immaterial Subsidiary in effect at the time such Subsidiary becomes a Subsidiary of the Borrower shall trigger a requirement that the Borrower cause such Subsidiary to execute and deliver a Subsidiary Guarantee pursuant to the immediately preceding proviso unless the Borrower is required, by virtue of such Guarantee Obligation, to cause such Subsidiary to become bound by a guarantee of Indebtedness for borrowed money in respect of any Subordinated Indebtedness. Notwithstanding anything to the contrary contained in this Agreement, the Borrower shall cause at all times Subsidiaries that, together with the Borrower, comprise not less than seventy-five percent (75%) of Consolidated Total Assets to be party to the Subsidiary Guarantee; provided that for purposes of determining compliance with this requirement, the value of Capital Stock of any Subsidiary shall be deemed excluded; provided, further,

11

that if any Subsidiary is a Non-Wholly Owned Subsidiary, the assets of such Subsidiary to be included in the above calculation shall be reduced by the minority interest for such Subsidiary as reported in the Borrower's consolidated balance sheet."

3.7 Subsection 7.1(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(a) Debt Ratio. Permit the Debt Ratio at the last day of any fiscal quarter to be greater than the ratio set forth below opposite the date on which such fiscal quarter ends:

Fiscal Quarter Ending -----	Ratio -----
September 30, 2003	4.25
December 31, 2003	4.25
March 31, 2004	4.25
June 30, 2004	4.25
September 30, 2004	4.00
December 31, 2004	4.00
March 31, 2005	4.00
June 30, 2005	4.00
September 30, 2005 and thereafter	3.50"

3.8 Subsection 7.1 of the Credit Agreement is hereby amended and restated in its entirety by inserting a new subclause (c) therein as follows:

"(c) Consolidated Senior Debt Ratio. Permit the Consolidated Senior Debt Ratio at the last day of the fiscal quarter ending December 31, 2003 and each fiscal quarter ending thereafter to be greater than 2.50 to 1.00."

3.9 Subsection 7.2(b) of the Credit Agreement is hereby amended and restated to read as follows:

"(b) Indebtedness of the Borrower incurred to finance the acquisition of fixed or capital assets (whether pursuant to a loan, a Financing Lease or otherwise) in an aggregate principal amount not exceeding \$50,000,000 at any time outstanding, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

3.10 Subsection 7.2(c) of the Credit Agreement is hereby amended and

restated to read as follows:

"(c) Indebtedness assumed in connection with any Investment permitted pursuant to subsection 7.9(k) hereof, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

12

3.11 Subsection 7.2(d) of the Credit Agreement is hereby amended and restated to read as follows:

"(d) additional Indebtedness of the Borrower and/or its Subsidiaries not constituting Subordinated Debt (of which up to \$100,000,000 may be secured by Liens permitted pursuant to subsection 7.3(i) hereof) so long as (i) on the date such additional Indebtedness is incurred no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof, (ii) the Consolidated Senior Debt Ratio for the Borrower'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 (assuming for purposes of this subsection 7.2(d) only, all Commitments of all Lenders, all Facility A Commitments of all Facility A Lenders and all Facility C Commitments (if Facility C exists) of Facility C Lenders (if Facility C exists) have been drawn in full, but taking into account any payment or prepayment of any Term Loans or term loans under Facility C (if Facility C exists)) would have been no greater than 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 at the beginning of such four-quarter period and (iii) not later than two (2) Business Days after the incurrence of such Indebtedness the Administrative Agent shall have a received certificate of a Responsible Officer setting forth, in reasonable detail, the pro forma computation of the Consolidated Senior Debt Ratio required to determine compliance with this subsection 7.2(d) and certifying the satisfaction of the conditions in this subsection 7.2(d) to the incurrence of such Indebtedness;"

3.12 Subsection 7.2(i) of the Credit Agreement is hereby amended and restated to read as follows:

"(i) Indebtedness secured by Permitted Liens, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

3.13 Subsection 7.3(i) of the Credit Agreement is hereby amended and restated to read as follows:

"(i) Liens (not otherwise permitted hereunder) which secure obligations not exceeding (as to the Borrower and all Subsidiaries) \$100,000,000 in aggregate amount at any time outstanding;"

3.14 Subsection 7.4(b) of the Credit Agreement is hereby amended and restated to read as follows:

"(b) Guarantee Obligations of Holdings, Borrower or its Subsidiaries incurred after the date hereof in respect of an aggregate amount of obligations (together with obligations permitted to be guaranteed under subsection 7.4(i)) not to exceed \$100,000,000 at any one time outstanding;"

13

3.15 Subsection 7.4(c) of the Credit Agreement is hereby amended and restated to read as follows:

"(c) Guarantee Obligations of Holdings, Borrower or any Subsidiary in respect of any Subordinated Debt and refundings and refinancings thereof, provided such Guarantee Obligations are subordinated to the Obligations on terms no less favorable to the Lenders, Facility A Lenders and Facility C Lenders (if Facility C exists) than those governing the Subordinated Debt and no such refunding or refinancing shortens the maturity of the original Indebtedness;"

3.16 Subsection 7.4 of the Credit Agreement is hereby amended by (i) deleting the word "and" appearing at the end of subsection (g) thereof, (ii) deleting the period "." at the end of subsection (h) thereof and inserting "; and" in place thereof and (iii) adding the following as subsection (i) thereto:

"(i) Guarantee Obligations of any Subsidiary in effect at the time such Subsidiary was acquired through an Investment permitted pursuant to subsection 7.9(i) hereof in respect of an aggregate amount of obligations (together with obligations permitted to be guaranteed under subsection 7.4(b)) not to exceed \$100,000,000 at any one time outstanding, and extensions, renewals and replacements thereof; provided, however, that no such extension, renewal or replacement shall shorten the fixed maturity or increase the principal amount of the Indebtedness guaranteed by the original guarantee."

3.17 Subsection 7.5 of the Credit Agreement is hereby amended by (i) deleting the word "and" appearing at the end of subsection (a) thereof, (ii) deleting the period "." at the end of subsection (b) thereof and inserting "; and" in place thereof and (iii) adding the following as subsection (c) thereto:

"(c) Borrower or any Subsidiary of Borrower may convey, sell, lease, assign, transfer or otherwise dispose of the Capital Stock of any

Subsidiary or any Subsidiary may enter into any merger, consolidation or amalgamation or convey, sell, lease, assign, transfer or otherwise dispose of, all or substantially all of its property, business or assets; provided that the Net Proceeds thereof shall be applied pursuant to subsection 2.6(b) (ii)."

3.18 Subsection 7.6(j) of the Credit Agreement is hereby amended and restated to read as follows:

"(j) the conveyance, sale, assignment or contribution to any new Subsidiary of the Borrower or any existing Subsidiary of the Borrower of assets of the Borrower or any Subsidiary of the Borrower provided, that if such Subsidiary to which the assets are conveyed, sold, assigned or contributed is not a party to a Subsidiary Guarantee, such assets shall not exceed five percent (5%) of the Consolidated Total Assets;"

3.19 Subsection 7.9(k) of the Credit Agreement is hereby amended and restated to read as follows:

14

"(k) (i) Investments in the form of advances, loans or other extensions of credit to any Person (other than Borrower or any of its Subsidiaries) that is engaged in a Similar Business, so long as the aggregate outstanding amount of loans, advances or other extensions of credit made pursuant to this subsection 7.9(k) do not exceed an amount equal to five percent (5%) of the Consolidated Total Assets; and (ii) Investments made to acquire (A) all or any portion of the Capital Stock, or all or any portion of the assets, of any Person (other than the Borrower or any of its Subsidiaries) that is engaged in a Similar Business, or (B) all or substantially all of the assets of any division of any Person (other than the Borrower or any of its Subsidiaries) that is engaged in a Similar Business; provided, that (I) if such Investment is an acquisition of a majority of the Voting Stock of any Person, such Person's board of directors or similar governing body shall have approved such acquisition and (II) at the time of each such Investment described above in clauses (i) and (ii) (both before and after giving effect to such Investment), there shall exist no Default or Event of Default; provided, further, that in connection with each individual, or series of related, Investments made pursuant to this subsection 7.9(k) exceeding \$50,000,000, the Borrower shall deliver to the Administrative Agent, not later than two (2) Business Days after the consummation of such Investment or Investments, a certificate of a Responsible Officer that certifies that no Default or Event of Default has occurred and is continuing or will be caused as a result of consummating such proposed Investment;"

3.20 Subsection 7.11(a) of the Credit Agreement is hereby amended and restated to read as follows:

"(a) Enter into any transaction, including, without limitation, any purchase, sale, lease or exchange of property or the rendering of any service, with any Affiliate (other than the Borrower or any Wholly Owned Subsidiary which is a party to the Subsidiary Guarantee) unless such transaction is (i) otherwise permitted under this Agreement and (ii) upon fair and reasonable terms no less favorable to the Borrower or such Subsidiary, as the case may be, than it would obtain in a comparable arm's length transaction with a Person which is not an Affiliate."

SECTION 4. Omnibus Amendment to CERTAIN CReDIT documents. Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 6 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Documents referenced below as follows:

4.1 The definition of "Permitted Parent Distributions" in Section 1.1(b) of the Parent Guarantee is hereby amended and restated to read as follows:

"Permitted Parent Distributions": (a) the issuance by Holdings of options or other equity securities of Holdings to outside directors, members of management or employees of Holdings in the ordinary course of business, (b) cash payments made in lieu of issuing fractional shares of Holdings' common stock or preferred stock, (c) from and after January 1, 2004, Parent Distributions funded solely with the proceeds of dividends received from the Borrower pursuant to clause (C) of the definition of Permitted Stock Payments in the Credit Agreements so long as at the time of declaring and paying any

15

such Parent Distribution no Default or Event of Default shall have occurred and be continuing (the "Clause (C) Dividends"), (d) the application of up to \$2,000,000 of the proceeds of the sale of common stock of Holdings to the repurchase of common stock of Holdings from management of Holdings or the Borrower, (e) from and after January 1, 2004, cash payments to repurchase common stock of Holdings solely with proceeds of (i) Clause (C) Dividends, (ii) dividends received from the Borrower pursuant to clause (E) of the definition of Permitted Stock Payments in the Credit Agreement (the "Clause (E) Dividends") and (iii) Net Proceeds of the issuance of Capital Stock of Holdings and/or Permitted Convertible Securities issued after January 1, 2004; provided, however, that the cash payments to repurchase common stock of Holdings deriving from Clause (E) Dividends, issuances of Capital Stock of Holdings and/or issuances of Permitted Convertible Securities shall not exceed \$200,000,000 in the aggregate from and after January 1, 2004 and (f) from and after January 1, 2004, cash payments in an aggregate amount up to \$10,000,000 in any fiscal year of the Borrower to

repurchase common stock of Holdings held by any employee, director, officer, consultant or agent (a "Benefit Plan Beneficiary") of the Borrower, Holdings or their Subsidiaries pursuant to any restricted stock plan or to which any such Benefit Plan Beneficiary has a right under any option plan of the Borrower or Holdings (or to repurchase other common stock of Holdings held by any such Benefit Plan Beneficiary having a value not exceeding the amount of the exercise price of an option being exercised by such Benefit Plan Beneficiary and the amount of the obligations of such Benefit Plan Beneficiary under the Code with respect to the common stock underlying such option) in order to enable (i) the Borrower, Holdings or such Benefit Plan Beneficiary to comply with obligations under the Code, (ii) the Borrower or Holdings to issue cash to such Benefit Plan Beneficiary in lieu of fractional shares of common stock or (iii) the payment of the exercise price of an option held by such Benefit Plan Beneficiary."

4.2 Section 4.2 of the Parent Guarantee is hereby amended by inserting "(c)," after the reference to "Subsection 7.4(b),".

4.3 Name Changes. The table below sets forth the new name of each Subsidiary whose name has changed. Each of the Borrower Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto), the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto) is hereby amended by deleting each reference to the names listed in the "Old Name" column below in such document and substituting therefor the corresponding name in the "New Name" column.

Old Name	New Name
Goodrich Avionics Systems, Inc.	L-3 Communications Avionics Systems, Inc.
Goodrich Aerospace Component	L-3 Communications Avionics
Overhaul & Repair, Inc.	Component Overhaul and Repair, Inc.
	16
Goodrich FlightSystems, Inc.	L-3 Communications FlightSystems Corporation
Atlantic Science and Technology Corporation	L-3 Communications Atlantic Science and Technology Corporation
Coleman Research Corporation	SYColeman Corporation
EER Systems, Inc.	L-3 Communications Government Services, Inc.
Celerity Systems Incorporated	L-3 Communications CSI, Inc.
L-3 Communications AeroTech LLC	L-3 Communications Vertex Aerospace LLC

4.4 Dissolutions. The Borrower hereby represents and warrants to the Administrative Agent and Lenders that:

(a) Telos Corporation ("Telos"), formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications ILEX Systems, Inc. ("L-3 ILEX") on August 8, 2003 in a transaction permitted under the Credit Agreements, that L-3 ILEX was the surviving corporation in the merger and that Telos ceased to exist as a result of the merger;

(b) L-3 Communications Analytics Corporation ("L-3 Analytics"), formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. ("L-3 GSI") on September 26, 2003 in a transaction permitted under the Credit Agreements, that L-3 GSI was the surviving corporation in the merger and that L-3 Analytics ceased to exist as a result of the merger;

(c) AMI Instruments, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on November 21, 2003 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger;

(d) SPD Holdings, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications SPD Technologies, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications SPD Technologies, Inc. was the surviving corporation in the merger and SPD Holdings, Inc. ceased to exist as a result of the merger;

(e) L-3 Communications SPD Technologies, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into

the Borrower on November 21, 2003 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger;

(f) Southern California Microwave, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on November 21, 2003 in a transaction permitted

under the Credit Agreements and ceased to exist as a result of the merger;

(g) L-3 Communications Avionics Component Overhaul and Repair, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Avionics Systems, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Avionics Systems, Inc. was the surviving corporation in the merger and L-3 Communications Avionics Component Overhaul and Repair, Inc. ceased to exist as a result of the merger;

(h) L-3 Communications FlightSystems Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Avionics Systems, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Avionics Systems, Inc. was the surviving corporation in the merger and L-3 Communications FlightSystems Corporation ceased to exist as a result of the merger;

(i) L-3 Communications IMC Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Government Services, Inc. was the surviving corporation in the merger and L-3 Communications IMC Corporation ceased to exist as a result of the merger;

(j) L-3 Communications TMA Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Government Services, Inc. was the surviving corporation in the merger and L-3 Communications TMA Corporation ceased to exist as a result of the merger;

(k) L-3 Communications Atlantic Science and Technology Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications ILEX Systems, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications ILEX Systems, Inc. was the surviving corporation in the merger and L-3 Communications Atlantic Science and Technology Corporation ceased to exist as a result of the merger; and

(l) L-3 Communications DBS Microwave, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into

18

the Borrower on April 27, 2002 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger.

The parties to this Amendment accordingly agree that each reference in the Borrower Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto), the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto) to Telos Corporation, L-3 Communications Analytics Corporation, AMI Instruments, Inc., SPD Holdings, Inc., L-3 Communications SPD Technologies, Inc., Southern California Microwave, Inc., L-3 Communications Avionics Component Overhaul and Repair, Inc., L-3 Communications FlightSystems Corporation, L-3 Communications IMC Corporation, L-3 Communications TMA Corporation, L-3 Communications Atlantic Science and Technology Corporation and L-3 Communications DBS Microwave, Inc. is hereby deleted.

4.5 Schedules. To more fully reflect the foregoing amendments described in Sections 4.3 and 4.4 of this Amendment, Schedule 1 to the Borrower Pledge Agreement is hereby amended and restated to read as provided on Schedule B-1 attached hereto and Schedules 1 and 2 to the Subsidiary Pledge Agreement are hereby amended and restated to read as provided on Schedules S-1 and S-2 attached hereto.

SECTION 5. CONDITIONS TO EFFECTIVENESS OF SECTIONS 1 AND 2. The provisions of Sections 1 and 2 of this Amendment shall be deemed effective on February 24, 2004 provided that each of the following conditions have been satisfied (such effective date occurring upon satisfaction of such conditions being referred to herein as the "EXTENSION EFFECTIVE DATE"):

5.1 The Borrower shall have delivered to Administrative Agent executed copies of this Amendment and each of the other Credit Parties shall have delivered to the Administrative Agent executed copies of the Guarantors' Consent and Acknowledgment to this Amendment in the form attached hereto; provided that if not all of the Lenders shall have complied with the condition set forth in Section 5.2 below, the Borrower shall have provided the Administrative Agent with the Exercise Notice;

5.2 The Required Lenders, each of which shall be an Extending Lender, shall have delivered to the Administrative Agent an executed original or facsimile of a counterpart of this Amendment;

5.3 The Administrative Agent shall have received a secretary's or assistant secretary's certificate of the Borrower certifying board resolutions authorizing the execution, delivery and performance of this Amendment by the Borrower; and

5.4 The representations and warranties contained in Section 7 hereof shall be true and correct in all respects.

SECTION 6. CONDITIONS TO EFFECTIVENESS OF SECTIONS 3 AND 4. The provisions of Sections 3 and 4 of this Amendment shall be deemed effective as of the date when each of the following conditions have been satisfied (such effective date occurring upon satisfaction of such conditions being referred to herein as the "AMENDMENT EFFECTIVE DATE"):

19

6.1 The Borrower shall have delivered to Administrative Agent executed copies of this Amendment and each of the other Credit Parties shall have delivered to the Administrative Agent executed copies of the Guarantors' Consent and Acknowledgment to this Amendment in the form attached hereto;

6.2 The Requisite Class Lenders party to the Credit Agreement shall have delivered to the Administrative Agent an executed original or facsimile counterpart of its signature page to this Amendment;

6.3 The Administrative Agent shall have received a secretary's or assistant secretary's certificate of the Borrower certifying board resolutions authorizing the execution, delivery and performance of this Amendment by the Borrower;

6.4 The representations and warranties contained in Section 7 hereof shall be true and correct in all respects; and

6.5 All conditions to effectiveness set forth in Sections 3.1, 3.2, 3.3, and 3.4 in the Third Omnibus Amendment Regarding Third Amended and Restated Credit Agreement of even date herewith shall have been satisfied.

SECTION 7. REPRESENTATIONS AND WARRANTIES. In order to induce Lenders to enter into this Amendment, the Borrower represents and warrants to each Lender that the following statements are true, correct and complete:

7.1 Authorization and Enforceability. (a) The Borrower has all requisite corporate power and authority to enter into this Amendment and to carry out the transactions contemplated by, and perform its obligations under, the Credit Agreement as modified by this Amendment (the "AGREEMENT"), (b) the execution and delivery of this Amendment has been duly authorized by all necessary corporate action on the part of the Borrower and (c) this Amendment and the Agreement have been duly executed and delivered by the Borrower and, when executed and delivered, will be the legally valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms, subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding, in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

7.2 Incorporation of Representations and Warranties From Credit Agreement. The representations and warranties contained in Section 4 of the Credit Agreement, after giving effect to the consents, waivers and amendments contained in Sections 1, 2, 3 and 4 of this Amendment, are and will be true, correct and complete in all material respects on and as of each of the Extension Effective Date and the Amendment Effective Date, to the same extent as though made on and as of such date, except to the extent such representations and warranties specifically relate to an earlier date, in which case they were true, correct and complete in all material respects on and as of such earlier date.

7.3 Absence of Default and Setoff. No event has occurred and is continuing or will result from the consummation of the transactions contemplated by this Amendment that constitutes a Default or an Event of Default and no defense, setoff or counterclaim of any kind, nature or

20

description exists to the payment and performance of the obligations owing by the Borrower to the Agents and the Lenders.

#### SECTION 8. MISCELLANEOUS.

8.1 Effect on the Credit Agreement and the other Credit Documents. Except as specifically provided in this Amendment, the Credit Agreement and the other Credit Documents shall remain in full force and effect and are hereby ratified and confirmed. The execution, delivery and performance of this Amendment shall not, except as expressly provided herein, constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of the Administrative Agent or any Lender under, the Credit Agreement or any of the other Credit Documents.

8.2 Fees and Expenses. The Borrower acknowledges that all costs, fees and expenses as described in Section 10.5 of the Credit Agreement incurred by Administrative Agent and its counsel with respect to this Amendment and the documents and transactions contemplated hereby shall be for the account of the Borrower.

8.3 GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

8.4 SUBMISSION TO JURISDICTION; WAIVERS; WAIVER OF JURY TRIAL; ACKNOWLEDGMENTS; CONFIDENTIALITY. Each of the terms and conditions set forth in Sections 10.12, 10.13, 10.14 and 10.15 of the Credit Agreement are hereby incorporated into this Amendment as if set forth fully herein except that each reference to "Agreement" therein shall be deemed to be a reference to "Amendment" herein.

8.5 Counterparts; Effectiveness. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument. Except for the terms of Sections 1 and 2 hereof (which shall only become effective on the Extension Effective Date) and Sections 3 and 4 hereof (which shall only become effective on the Amendment Effective Date), this Amendment shall become effective upon the execution of a counterpart hereof by the Borrower and the Required Lenders and receipt by the Borrower and the Administrative Agent of written or telephonic notification of such execution and authorization of delivery thereof.

8.6 Amendment Fee. Subject to the occurrence of the Amendment Effective Date, the Borrower hereby agrees to pay to each Lender consenting to the Requested Extension and the waiver of the Notice Limitation and submitting to the Administrative Agent an executed counterpart to this Amendment on or before February 19, 2004 (each such Lender, a "CONSENTING LENDER") a non-refundable fee (the "AMENDMENT FEE") in the amount set forth in the Third Omnibus Amendment Fee Letter regarding this Amendment, which Amendment Fee will be based and payable on that portion of such Consenting Lender's Commitment which is subject to the Requested Extension. The Amendment Fee owing to each Consenting Lender shall be paid

21

in immediately available funds by the Borrower to the Administrative Agent for the benefit of such Consenting Lenders not later than noon (New York time) on the first Business Day following the occurrence of the Amendment Effective Date.

[SIGNATURE PAGES FOLLOW]

22

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Title:

BANK OF AMERICA, N.A.,  
as Administrative Agent and as a Lender

By: \_\_\_\_\_  
Title:

LEHMAN COMMERCIAL PAPER INC.,  
as Documentation Agent, Syndication  
Agent and as a Lender

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

Guarantors' Acknowledgment and Consent

Each of the undersigned hereby acknowledges receipt of the attached Amendment and consents to the execution and performance thereof by L-3 Communications Corporation. Each of the undersigned hereby also reaffirms that the guarantee and any applicable Pledge Agreement of such undersigned in favor of the Administrative Agent for the ratable benefit of the Lenders and the Agents remains in full force and effect and acknowledges and agrees that there is no defense, setoff or counterclaim of any kind, nature or description to obligations arising under such guarantee or any applicable Pledge Agreement.

L-3 COMMUNICATIONS HOLDINGS, INC.

By:

-----  
Name: Christopher C. Cambria  
Title: Vice President, General  
Counsel and Secretary

L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P.

By: L-3 COMMUNICATIONS AIS GP CORPORATION,  
as General Partner

By:

-----  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

L-3 COMMUNICATIONS VERTEX AEROSPACE LLC  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC  
WESCAM LLC  
WESCAM AIR OPS LLC

By:

-----  
Name: Christopher C. Cambria  
Title: Authorized Person

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT TO CONSENT, WAIVER  
AND THIRD OMNIBUS AMENDMENT REGARDING SECOND AMENDED  
AND RESTATED 364 DAY CREDIT AGREEMENT]

APCOM, INC.  
BROADCAST SPORTS INC.  
ELECTRODYNAMICS, INC.  
HENSCHEL, INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.  
INTERSTATE ELECTRONICS CORPORATION  
KDI PRECISION PRODUCTS, INC.  
L-3 COMMUNICATIONS AEROMET, INC.  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS INVESTMENTS INC.  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
L-3 COMMUNICATIONS MAS (US) CORPORATION  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION CALIFORNIA  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION DELAWARE  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED  
MICRODYNE CORPORATION  
MICRODYNE OUTSOURCING INCORPORATED  
MPRI, INC.  
PAC ORD, INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR, INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION  
WESCAM SONOMA INC.  
WESCAM AIR OPS INC.  
WESCAM INCORPORATED  
WESCAM HOLDINGS (US) INC.  
WOLF COACH, INC.

By:

-----  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT TO CONSENT, WAIVER  
AND THIRD OMNIBUS AMENDMENT REGARDING SECOND AMENDED  
AND RESTATED 364 DAY CREDIT AGREEMENT]

THE BANK OF NEW YORK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

BANK ONE, N.A. (Main Office Chicago)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

FLEET NATIONAL BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT LYONNAIS NEW YORK BRANCH

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

WACHOVIA BANK NATIONAL ASSOCIATION  
(f/k/a First Union Commercial  
Corporation)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

HSBC BANK USA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

THE GOVERNOR AND COMPANY OF THE BANK  
OF IRELAND

By: \_\_\_\_\_  
Title:

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

COMERICA BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT INDUSTRIEL ET COMMERCIAL

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

BARCLAYS BANK PLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

SOCIETE GENERALE

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND SECOND OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

SUNTRUST BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

WEBSTER BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

THE BANK OF NOVA SCOTIA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

CREDIT SUISSE FIRST BOSTON

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO CONSENT, WAIVER AND THIRD OMNIBUS AMENDMENT REGARDING  
SECOND AMENDED AND RESTATED 364 DAY CREDIT AGREEMENT]

PURCHASING LENDERS:

MIZUHO CORPORATE BANK, LTD.  
(successor to The Fuji Bank,  
Limited, The Dai-Ichi Kanho Bank,  
Ltd. and The Industrial Bank of  
Japan, Limited)

By: \_\_\_\_\_  
Title:

BANK OF TOKYO-MITSUBISHI TRUST  
COMPANY

By: \_\_\_\_\_  
Title:

KEY BANK NATIONAL ASSOCIATION

By: \_\_\_\_\_  
Title:

MORGAN STANLEY BANK

By: \_\_\_\_\_

Title:

FORTIS CAPITAL CORP.

By: \_\_\_\_\_

Title:

FORTIS CAPITAL CORP.

By: \_\_\_\_\_

Title:

[Signature pages to Second Amendment to  
Second Amended and Restated 364 Day Credit Agreement]

SCHEDULE B-1\*

[SEE ATTACHED AMENDED SCHEDULE 1 TO BORROWER PLEDGE AGREEMENT]

- \_\_\_\_\_  
\* BORROWER TO PROVIDE NEW SCHEDULE

SCHEDULE S-1

[SEE ATTACHED AMENDED SCHEDULE 1 TO SUBSIDIARY PLEDGE AGREEMENT]\*

- \_\_\_\_\_  
\* BORROWER TO PROVIDE NEW SCHEDULE

SCHED. S-1 - 1

SCHEDULE S-2

[SEE ATTACHED AMENDED SCHEDULE 2 TO SUBSIDIARY PLEDGE AGREEMENT]\*

- \_\_\_\_\_  
\* BORROWER TO PROVIDE NEW SCHEDULE

SCHED. S-2 - 1

## L-3 COMMUNICATIONS CORPORATION

THIRD OMNIBUS AMENDMENT REGARDING  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT

This THIRD OMNIBUS AMENDMENT REGARDING THE THIRD AMENDED AND RESTATED CREDIT AGREEMENT (this "AMENDMENT") is dated as of February 24, 2004 and entered into by and among L-3 COMMUNICATIONS CORPORATION, a Delaware corporation (the "BORROWER") which is wholly owned by L-3 COMMUNICATIONS HOLDINGS, INC., a Delaware corporation ("HOLDINGS"), the Lenders party to the Credit Agreement referred to below on the date hereof (the "LENDERS"), BANK OF AMERICA, N.A. ("BOA"), as administrative agent for the Agents (as defined below) and the Lenders (in such capacity, the "ADMINISTRATIVE AGENT"), LEHMAN COMMERCIAL PAPER, INC. ("LCPI") as syndication agent and documentation agent (in such capacity, the "SYNDICATION AGENT" and the "DOCUMENTATION AGENT") and certain financial institutions named as co-agents. All capitalized terms used herein without definition shall have the same meanings herein as set forth in the Credit Agreement (as defined below).

W I T N E S S E T H:  
- - - - -

WHEREAS, the Borrower, the Lenders, the Syndication Agent, the Documentation Agent, the Administrative Agent and certain other parties have entered into the Third Amended and Restated Credit Agreement dated as of May 16, 2001 (as amended, supplemented, restated or otherwise modified from time to time, the "CREDIT AGREEMENT"); and

WHEREAS, the Borrower has requested that certain amendments be made with respect to the Credit Agreement and certain of the other Credit Documents.

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

SECTION 1. AMENDMENTS TO CREDIT AGREEMENT. Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 3 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Agreement as follows:

1.1 Subsection 1.1 of the Credit Agreement is hereby amended by inserting the following defined terms in the proper alphabetical order:

"Consolidated Senior Debt": all Consolidated Total Debt other than Subordinated Debt.

"Consolidated Senior Debt Ratio": as of the last day of any period of four consecutive fiscal quarters, the ratio of (a) Consolidated Senior Debt on such day to (b) Consolidated EBITDA for such period.

"Designated Parent Repurchases": shall mean the sum of the Net Proceeds of the issuance of Permitted Convertible Securities and/or Capital Stock of Holdings from and after January 1, 2004 which are utilized to repurchase common stock of Holdings.

"Investments": as defined in subsection 7.9.

"Non-Wholly Owned Subsidiary": any Subsidiary of the Borrower that is not a Wholly Owned Subsidiary.

"Third Omnibus Amendment Fee Letter": shall mean that certain Third Omnibus Amendment Fee Letter between the Administrative Agent and the Borrower dated on or about January 30, 2004."

1.2 The following defined terms in subsection 1.1 of the Credit Agreement are hereby amended and restated as follows:

"Consolidated EBITDA": as of the last day of any fiscal quarter, Consolidated Net Income of the Borrower, its Subsidiaries and, without duplication, the Acquired Businesses (excluding, without duplication, (v) impairment losses incurred on goodwill and other intangible assets or on debt or equity investments computed in accordance with Financial Accounting Standard No. 142 or other GAAP, (w) gains or losses incurred on the retirement of debt computed in accordance with Financial Accounting Standard No. 145, (x) extraordinary gains and losses in accordance with GAAP, (y) gains and losses in connection with asset dispositions whether or not constituting extraordinary gains and losses and (z) gains or losses on discontinued operations) for the four fiscal quarters ended on such date, plus (i) Consolidated Interest Expense of the Borrower and its Subsidiaries and all Consolidated Interest Expense of Holdings with respect to the Permitted Convertible Securities guaranteed by the Borrower or its Subsidiaries and, without duplication, the Acquired Businesses for such period, plus (ii) to the extent deducted in computing such Consolidated Net Income of the Borrower or its Subsidiaries and, without duplication, the Acquired Businesses, the sum of income taxes, depreciation and amortization for such period. For the purposes of calculating Consolidated EBITDA for any period of four consecutive fiscal quarters occurring after the AIS Acquisition (each, a "Reference Period") pursuant to any determination of the Debt Ratio, Consolidated EBITDA for such Reference Period shall be calculated after giving pro forma effect to (i) exclude from costs the

positive difference, if any, between (A) the amount of annual corporate overhead costs attributed to the operations associated with the business comprising the AIS Acquisition by Raytheon Company prior to such acquisition by the Borrower and (B) the amount of annual corporate overhead costs that will be attributed by the Borrower to the operations associated with the business comprising the AIS Acquisition from and after such acquisition by the Borrower, (ii) exclude any losses or gains associated with any contract estimate at completion ("EAC"), unrecoverable inventories and uncollectable receivables adjustment included in the

2

historical results of operations associated with the business comprising the AIS Acquisition within the 12 months prior to the effective date of the AIS Acquisition for accounting purposes, if such contract EAC, unrecoverable inventories or uncollectible receivable adjustments pertained to contracts or assets excluded from the business comprising the AIS Acquisition, and (iii) exclude any losses or gains, up to a maximum amount of \$16,000,000, associated with any contract EAC, unrecoverable inventories and uncollectable receivables adjustment included in the historical results of operations associated with the Sea Sentinel contract within the 12 months prior to the effective date of the AIS Acquisition for accounting purposes; provided, however, that such adjustments to Consolidated EBITDA are demonstrated by appropriate footnotes to the audited financial statements of the business comprising the AIS Acquisition or appropriate schedules and other materials prepared and certified by the Borrower and delivered to the Administrative Agent no more than 15 days after the completion of the audit of the financial statements of the business comprising the AIS Acquisition for the fiscal year ended prior to the consummation of AIS Acquisition.

"Credit Documents": this Agreement, the Notes, the Applications, the Guarantees, the Fee Letter, the Lender Fee Letter, the Third Omnibus Amendment Fee Letter and the Pledge Agreements.

"GAAP" means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or such other principles as may be approved by a significant segment of the accounting profession in the United States, that are applicable to the circumstances as of the date of determination.

"Immaterial Subsidiary": any Subsidiary of the Borrower having assets not exceeding five percent (5%) of the Consolidated Total Assets; provided, however, that if any Subsidiary is a Non-Wholly Owned Subsidiary, the assets of such Subsidiary to be included in the above calculation shall be reduced by the minority interest for such Subsidiary as reported in the Borrower's consolidated balance sheet.

"Net Proceeds": the aggregate cash proceeds (including Cash Equivalents) received by Holdings or any of its Subsidiaries in respect of:

(a) any issuance by Holdings or any of its Subsidiaries of Indebtedness after the Closing Date and any issuance by Holdings of any Capital Stock after the Closing Date;

(b) any Asset Sale or other transaction permitted by subsection 7.5(c); and

(c) any cash payments received in respect of promissory notes or other evidences of indebtedness delivered to Holdings or such Subsidiary in respect of an Asset Sale;

3

in each case net of (without duplication) (i), (A) in the case of an Asset Sale or other transaction permitted by subsection 7.5(c), the amount required to repay any Indebtedness (other than the Loans) secured by a Lien on any assets of Holdings or a Subsidiary of Holdings that are sold or otherwise disposed of in connection with such Asset Sale or other transaction permitted by subsection 7.5(c) and (B) reasonable and appropriate amounts established by Holdings or such Subsidiary, as the case may be, as a reserve against liabilities associated with such Asset Sale or other transaction permitted by subsection 7.5(c) and retained by Holdings or such Subsidiary, (ii) the reasonable expenses (including legal fees and brokers' and underwriters' commissions, lenders fees, credit enhancement fees, accountants' fees, investment banking fees, survey costs, title insurance premiums and other customary fees, in any case, paid to third parties or, to the extent permitted hereby, Affiliates) incurred in effecting such issuance, sale or transaction and (iii) any taxes reasonably attributable to such sale or transaction and reasonably estimated by Holdings or such Subsidiary to be actually payable.

"Permitted Stock Payments": (A) dividends by the Borrower to Holdings in amounts equal to the amounts required for Holdings to (i) pay franchise taxes and other fees required to maintain its legal existence and (ii) provide for other operating costs of up to \$1,000,000 per fiscal year, (B) dividends by the Borrower to Holdings 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 Borrower would be required to pay in respect of the income of the Borrower and its Subsidiaries if the Borrower were a stand alone entity that was not owned by Holdings, (C) from and after January 1, 2004, dividends by the

Borrower to Holdings in an aggregate amount not to exceed \$25,000,000 in any fiscal quarter of the Borrower so long as at the time of declaring and paying any such dividend no Default or Event of Default shall have occurred and be continuing, (D) dividends by the Borrower to Holdings to fund interest expense or dividends in respect of the Permitted Convertible Securities issued by Holdings, provided that such dividends under this clause (D) shall not, in any fiscal year, exceed an amount equal to the interest or dividends actually accruing on the outstanding principal amount of such Permitted Convertible Securities in such fiscal year less the sum of all intercompany advances funded pursuant to subsection 7.9(l) hereof by the Borrower to Holdings in respect of such Permitted Convertible Securities in such fiscal year, (E) from and after January 1, 2004, dividends by the Borrower to Holdings in an amount not to exceed \$200,000,000 less the Designated Parent Repurchases to permit Holdings to repurchase common stock of Holdings, so long as such dividends are paid from the Net Proceeds of the issuance of Additional Subordinated Indebtedness issued after January 1, 2004 and (F) from and after January 1, 2004, dividends by the Borrower to Holdings in an aggregate amount up to \$10,000,000 in any fiscal year of the Borrower to fund cash payments to repurchase common stock of Holdings held by any employee, director, officer, consultant or agent (a "Benefit Plan Beneficiary") of the Borrower, Holdings or their Subsidiaries pursuant to any restricted stock plan or to which any such Benefit Plan Beneficiary has a right under any option plan of the Borrower or Holdings (or to repurchase other common stock of Holdings held by any such Benefit Plan Beneficiary having a value not exceeding the amount of the exercise price of an option being exercised by such Benefit Plan Beneficiary and the amount of the obligations of

4

such Benefit Plan Beneficiary under the Code with respect to the common stock underlying such option) in order to enable (i) the Borrower, Holdings or such Benefit Plan Beneficiary to comply with obligations under the Code, (ii) the Borrower or Holdings to issue cash to such Benefit Plan Beneficiary in lieu of fractional shares of common stock or (iii) the payment of the exercise price of an option held by such Benefit Plan Beneficiary."

1.3 Section 1 of the Credit Agreement is hereby amended by (a) deleting the text appearing in subsection 1.2(b) and inserting "[INTENTIONALLY OMITTED]" in place thereof and (b) adding a new subsection 1.6 at the end thereof as follows:

#### "1.6 Accounting Terms.

(a) All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial covenants, financial ratios and other financial calculations contained in this Agreement shall be prepared in conformity with GAAP as in effect from time to time, applied consistently throughout the periods reflected therein, except as otherwise specifically prescribed herein.

(b) If at any time any change in GAAP after January 1, 2004 would affect the computation of any financial ratio or requirement set forth in any Credit Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) if a request for such an amendment has been made, the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP."

1.4 Subsection 2.1(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

(a) Revolving Credit Loans. Subject to the terms and conditions hereof, each Revolving Credit Lender severally agrees to make revolving credit loans to the Borrower, from time to time during the Revolving Credit Commitment Period, in an aggregate principal amount at any one time outstanding which, when added to the aggregate principal amount of outstanding Swing Line Loans in which such Lender has purchased a participation (or, in the case of the Swing Line Lender, the Swing Line Loans made by such Swing Line Lender less the participations purchased in such Swing Line Loans by any other Lender) and such Lender's Commitment Percentage of the then outstanding L/C Obligations, does not exceed the amount of such Lender's Revolving Credit Commitment. During the Revolving Credit Commitment Period, the Borrower may use the Revolving Credit Commitments by borrowing, prepaying the Revolving Credit

5

Loans, in whole or in part, and reborrowing, all in accordance with the terms and conditions hereof.

At any time not less than thirty (30) days prior to the Termination Date, the Borrower may increase the aggregate Commitments by (I) entering into a binding written agreement, substantially in the form of Exhibit G hereto, with any Lender to increase the Commitment of such Lender (an "Increased Commitment Agreement") which Increased Commitment Agreement shall be presented to the Agents for acknowledgment and acceptance (which shall not be withheld unless the effect thereof would be to exceed the

maximum permitted amount herein for all Commitments, Facility B Commitments and Facility C Commitments (if Facility C exists) in the aggregate) and/or (II) subject to the First Offer Requirement (as defined below) enter into a binding written agreement substantially in the form of Exhibit H hereto (a "Lender Addition Agreement") with any bank, financial institution, or Investment Fund to become a Lender under this Agreement by making a Commitment and causing such Person to take all other actions required to become a new Lender hereunder (a "New Lender"); provided that the sum of (i) the aggregate Commitments of all Lenders (including New Lenders), (ii) the aggregate Facility B Commitments of all Facility B Lenders and (iii) the aggregate Facility C Commitments (if Facility C exists) of all Facility C Lenders (if Facility C exists) may not exceed, as of the date all or any portion of the Indebtedness comprising the Incremental Facility (as defined below) is incurred, an aggregate amount that would cause the Consolidated Senior Debt Ratio for the Borrower's most recently ended four full fiscal quarters for which internal financial statements are available to be greater than 2.0 to 1.0 (determined on a pro forma basis, assuming for purposes of this subsection 2.1(a) only, all of the proposed additional commitments had been incurred at the beginning of such four-quarter period and all Commitments of all Lenders, all Facility B Commitments of all Facility B Lenders and all Facility C Commitments (if Facility C exists) of all Facility C Lenders (if Facility C exists) that are outstanding immediately prior to giving effect to the incurrence of such proposed additional commitments have been drawn in full, but taking into account any payment or prepayment of any Term Loans or term loans under Facility C (if Facility C exists)) (such new or increased commitments, the "Incremental Facility"); and provided, further that, no consent of any Lender shall be required for such Incremental Facility except for the consents described under clauses (I) and (II) above. In order to become a New Lender, a party must execute a Lender Addition Agreement and deliver the same to the Administrative Agent, the Syndication Agent and the Borrower for counter-execution. On the Eurodollar Loans Maturity Date (or, subject to compliance with subsection 2.16, on any Business Day) occurring on or immediately following the date that (i) the Agents have acknowledged their acceptance of any Increased Commitment Agreement delivered pursuant to clause (I) above or (ii) any Lender Addition Agreement has been executed by all necessary parties and delivered to the Agents, the increase in any such Lender's Commitment contemplated thereby shall become effective and/or the New Lender shall become a party to this Agreement, as applicable. Promptly thereafter, the Administrative Agent shall amend Schedule I hereto to accurately reflect the Commitments of the Lenders then in existence, whereupon such amended Schedule I shall be substituted for the pre-existing Schedule I, be deemed a part of this Agreement without any further action or consent of any party and be promptly distributed to each Lender and the Borrower by the Administrative Agent. The

6

Incremental Facility shall have such economic terms (i.e., pricing, amount, tenor, amortization) as shall be agreed at the time with the lenders participating therein, and shall, otherwise, be on the same terms as this Agreement; provided that without the written consent of Required Class Lenders for each Class, (i) the applicable interest rate margin under the Incremental Facility shall not exceed the Applicable Margin under this Agreement or the "Applicable Margin" under and as defined in the Facility B Credit Agreement by more than fifty basis points and (ii) the maturity date of the Incremental Facility shall be equal to or occurring after the scheduled Termination Date under this Agreement or the "Termination Date" under and as defined in the Facility B Credit Agreement; provided, further, that if the Borrower chooses to implement the Incremental Facility pursuant to clause (I) or (II) above, the Incremental Facility shall have the same economic terms (i.e. pricing, tenor, amortization) as this Agreement. In the alternative, without the consent of any Lender, Borrower may cause the Incremental Facility to be implemented and separately documented as Facility C, which shall have BOA as the administrative agent and provide for a ratable sharing of all Collateral and Guarantee Obligations under the Guarantees among and between the Lenders, the Facility B Lenders and the Facility C Lenders. In any case, the Administrative Agent shall have the right to execute, on behalf of the Lenders, any amendments and/or other documents necessary to implement the Incremental Facility; provided that such amendments and/or other documents do not affect any of the rights or obligations of any Lender for which the written consent of such Lender is necessary under subsection 10.1 unless the written consent of such Lender is received by the Administrative Agent. When the Incremental Facility is not implemented and separately documented as Facility C, the Borrower shall send the Administrative Agent (for distribution to each Lender) a written offer to participate in the Incremental Facility pursuant to clause (I) above, and each such Lender shall have the right, but no obligation, to commit to a ratable portion of the Incremental Facility, provided that no later than fourteen (14) days after receipt of such written request, each such Lender shall advise the Administrative Agent and the Borrower whether it intends to participate in the Incremental Facility and the amount of its proposed commitment (the "First Offer Requirement"). Only after satisfying the First Offer Requirement and allocating requested commitments to Lenders requesting participation in such Incremental Facility shall Borrower be permitted to offer participation in any remaining commitments for the Incremental Facility to any proposed New Lender pursuant to clause (II) above."

1.5 Subsection 2.12(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(a) Each borrowing by the Borrower from the Revolving Credit Lenders hereunder, each payment by the Borrower on account of any commitment fee hereunder and any reduction of the Revolving Credit Commitments of Revolving Credit Lenders shall be made pro rata according to the respective

Commitment Percentages of the Revolving Credit Lenders. Except during any period in which an Event of Default has occurred and is continuing, each payment (including each prepayment) by the Borrower on account of principal of and interest on the Revolving Credit Loans, and any application by the Administrative Agent of the proceeds of any Collateral, shall be made pro rata according to the respective outstanding principal amounts of such Loans then

7

held by the Lenders. All payments (including prepayments) to be made by the Borrower hereunder in respect of any Loan, whether on account of principal, interest, Reimbursement Obligations (whether in respect of Domestic L/Cs or Foreign L/Cs), fees, expenses or otherwise, shall be made without set off or counterclaim and shall be made prior to 11:00 A.M., New York City time, on the due date thereof to the Administrative Agent, for the account of the Lenders with respect to such Loans, at the Administrative Agent's office specified in subsection 10.2, in Dollars and in immediately available funds; provided, that with respect to any Reimbursement Obligations of the Borrower arising from the presentment to the Issuing Lender of a draft under a Foreign L/C, the Borrower may make payment in the applicable Alternative Currency if such payment is received by the Issuing Lender on the date such draft is paid by the Issuing Lender.

At any time that an Event of Default has occurred and is continuing, all payments (including prepayments) made by the Borrower hereunder and any application by the Administrative Agent of the proceeds of any Collateral and/or payment under any Guarantee shall be applied in the following order: (1) to the ratable payment of all amounts due and owing by the Borrower pursuant to subsection 10.5 of this Agreement, subsection 10.5 of the Facility B Credit Agreement or subsection 10.5 of the Facility C Credit Agreement (if Facility C exists) to the Agents, the Facility B Agents and/or the Facility C Agents (if Facility C exists) and, after payment in full thereof, to any other Lender, Facility B Lender or Facility C Lender (if Facility C exists); (2) to the ratable payment of all interest, fees and commissions due and owing under this Agreement, the Facility B Credit Agreement or the Facility C Credit Agreement (if Facility C exists) or to the Agents, the Facility B Agents, the Facility C Agents (if Facility C exists), the Swing Line Lender, any Lender, any Facility B Lender or any Facility C Lender (if Facility C exists); and (3) to the ratable payment (or cash collateralization) of all other obligations of the Borrower to the Agents, the Facility B Agents, the Facility C Agents (if Facility C exists), the Swing Line Lender, any Lender, any Facility B Lender or any Facility C Lender (if Facility C exists) under any Credit Document, Facility B Credit Document, Facility C Credit Document (if Facility C exists) or Interest Rate Agreement with any Lender, any Facility B Lender or any Facility C Lender (if Facility C exists), including, without limitation the aggregate outstanding principal amount of Loans, Facility B Loans and Facility C Loans (if Facility C exists), the aggregate L/C Obligations, Facility B L/C Obligations and Facility C L/C Obligations (if Facility C exists) and the aggregate outstanding amount of Interest Rate Agreement Obligations to any Lender, any Facility B Lender and any Facility C Lender (if Facility C exists). For purposes of applying payments and proceeds distributed under clause 3 above, each Lender will first apply such amounts to all outstanding Loans and Interest Rate Agreement Obligations then due and owing to such Lender before such amounts will be held as cash collateral for L/C Obligations in which such Lender is a L/C Participant.

The Administrative Agent, the Facility B Administrative Agent and the Facility C Administrative Agent (if Facility C exists) shall ratably distribute such payments to the applicable Lenders, the Facility B Lenders and the Facility C Lenders (if Facility C exists) promptly upon receipt in like funds as received. If any payment hereunder becomes due and payable on a day other than a Business Day, such payment shall be extended to the next succeeding Business Day, and, with respect to payments of

8

principal, interest thereon shall be payable at the then applicable rate during such extension."

1.6 Subsection 6.10(b) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(b) With respect to any Person that, subsequent to the Original Closing Date, becomes a direct or indirect Subsidiary of the Borrower, promptly (and in any event within 30 days after such Person becomes a Subsidiary): (i) cause such new Subsidiary to become a party to the Subsidiary Guarantee and, to the extent such Subsidiary holds any Capital Stock of any Subsidiary that is not an Immaterial Subsidiary, to the Subsidiary Pledge Agreement and (ii) if requested by the Administrative Agent or the Required Lenders, deliver to the Administrative Agent legal opinions relating to the matters described in clause (i) immediately preceding, which opinions shall be in form and substance, and from counsel, reasonably satisfactory to the Administrative Agent. Notwithstanding the foregoing, no Immaterial Subsidiary, Foreign Subsidiary, Non-Wholly Owned Subsidiary or TCAS Subsidiary (except as provided below) of the Borrower or its Subsidiaries shall be required to execute a Subsidiary Guarantee or Subsidiary Pledge Agreement, and no more than 65% of the total combined voting power of the Capital Stock of or equity interests in (A) any direct or indirect Foreign Subsidiary of the Borrower or (B) any direct or indirect Subsidiary of the Borrower if more than 65% of the assets of such Subsidiary are securities of foreign companies (such determination to be made on the basis of fair market value), and no Subsidiary of any Person

described in clause (A) or (B), shall be required to be pledged hereunder; provided, that if, after the consummation of any sale of a portion of Capital Stock of the TCAS Subsidiary, the TCAS Subsidiary thereafter becomes a Wholly Owned Subsidiary, then the TCAS Subsidiary shall become a party to the Subsidiary Guarantee and Subsidiary Pledge Agreement and the Borrower shall promptly (and in any event within 30 days after such event occurs) comply with the requirements of this subsection 6.10(b) with respect to the TCAS Subsidiary; provided, further, that if any Non-Wholly Owned Subsidiary thereafter becomes a Wholly Owned Subsidiary, then such Subsidiary shall become a party to the Subsidiary Guarantee and Subsidiary Pledge Agreement and Borrower shall promptly (and in any event within 30 days after such event occurs) comply with the requirements of this subsection 6.10(b) with respect to such Subsidiary; provided, further, that if the Borrower shall be required to cause any Immaterial Subsidiary (including, without limitation, any Immaterial Subsidiary which is also a Non-Wholly Owned Subsidiary) to become bound by any guarantee of Indebtedness for borrowed money in respect of any Subordinated Indebtedness or Indebtedness incurred pursuant to subsection 7.2(d), the Borrower shall cause such Subsidiary to execute a Subsidiary Guarantee and cause the same to be delivered to the Administrative Agent promptly (and in any event within 30 days after such event occurs); provided, further, that no Guarantee Obligation of any Immaterial Subsidiary in effect at the time such Subsidiary becomes a Subsidiary of the Borrower shall trigger a requirement that the Borrower cause such Subsidiary to execute and deliver a Subsidiary Guarantee pursuant to the immediately preceding proviso unless the Borrower is required, by virtue of such Guarantee Obligation, to cause such Subsidiary to become bound by a guarantee of Indebtedness for borrowed money in respect of any Subordinated Indebtedness.

9

Notwithstanding anything to the contrary contained in this Agreement, the Borrower shall cause at all times Subsidiaries that, together with the Borrower, comprise not less than seventy-five percent (75%) of Consolidated Total Assets to be party to the Subsidiary Guarantee; provided that for purposes of determining compliance with this requirement, the value of Capital Stock of any Subsidiary shall be deemed excluded; provided, further, that if any Subsidiary is a Non-Wholly Owned Subsidiary, the assets of such Subsidiary to be included in the above calculation shall be reduced by the minority interest for such Subsidiary as reported in the Borrower's consolidated balance sheet."

1.7 Subsection 7.1(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(a) Debt Ratio. Permit the Debt Ratio at the last day of any fiscal quarter to be greater than the ratio set forth below opposite the date on which such fiscal quarter ends:

Fiscal Quarter Ending -----	Ratio -----
September 30, 2003	4.25
December 31, 2003	4.25
March 31, 2004	4.25
June 30, 2004	4.25
September 30, 2004	4.00
December 31, 2004	4.00
March 31, 2005	4.00
June 30, 2005	4.00
September 30, 2005 and thereafter	3.50"

1.8 Subsection 7.1 of the Credit Agreement is hereby amended and restated in its entirety by inserting a new subclause (c) therein as follows:

"(c) Consolidated Senior Debt Ratio. Permit the Consolidated Senior Debt Ratio at the last day of the fiscal quarter ending December 31, 2003 and each fiscal quarter ending thereafter to be greater than 2.50 to 1.00."

1.9 Subsection 7.2(b) of the Credit Agreement is hereby amended and restated to read as follows:

"(b) Indebtedness of the Borrower incurred to finance the acquisition of fixed or capital assets (whether pursuant to a loan, a Financing Lease or otherwise) in an aggregate principal amount not exceeding \$50,000,000 at any time outstanding, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

1.10 Subsection 7.2(c) of the Credit Agreement is hereby amended and restated to read as follows:

10

"(c) Indebtedness assumed in connection with any Investment permitted pursuant to subsection 7.9(k) hereof, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

1.11 Subsection 7.2(d) of the Credit Agreement is hereby amended and restated to read as follows:

"(d) additional Indebtedness of the Borrower and/or its Subsidiaries not constituting Subordinated Debt (of which up to \$100,000,000 may be secured by Liens permitted pursuant to subsection 7.3(i) hereof) so long as

(i) on the date such additional Indebtedness is incurred no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof, (ii) the Consolidated Senior Debt Ratio for the Borrower'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 (assuming for purposes of this subsection 7.2(d) only, all Commitments of all Lenders, all Facility B Commitments of all Facility B Lenders and all Facility C Commitments (if Facility C exists) of Facility C Lenders (if Facility C exists) have been drawn in full, but taking into account any payment or prepayment of any Term Loans or term loans under Facility C (if Facility C exists)) would have been no greater than 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 at the beginning of such four-quarter period and (iii) not later than two (2) Business Days after the incurrence of such Indebtedness the Administrative Agent shall have a received certificate of a Responsible Officer setting forth, in reasonable detail, the pro forma computation of the Consolidated Senior Debt Ratio required to determine compliance with this subsection 7.2(d) and certifying the satisfaction of the conditions in this subsection 7.2(d) to the incurrence of such Indebtedness;"

1.12 Subsection 7.2(i) of the Credit Agreement is hereby amended and restated to read as follows:

"(i) Indebtedness secured by Permitted Liens, and refundings or refinancings thereof, provided that no such refunding or refinancing shall shorten the maturity or increase the principal amount of the original Indebtedness;"

1.13 Subsection 7.3(i) of the Credit Agreement is hereby amended and restated to read as follows:

"(i) Liens (not otherwise permitted hereunder) which secure obligations not exceeding (as to the Borrower and all Subsidiaries) \$100,000,000 in aggregate amount at any time outstanding;"

1.14 Subsection 7.4(b) of the Credit Agreement is hereby amended and restated to read as follows:

11

"(b) Guarantee Obligations of Holdings, Borrower or its Subsidiaries incurred after the date hereof in respect of an aggregate amount of obligations (together with obligations permitted to be guaranteed under subsection 7.4(i)) not to exceed \$100,000,000 at any one time outstanding;"

1.15 Subsection 7.4(c) of the Credit Agreement is hereby amended and restated to read as follows:

"(c) Guarantee Obligations of Holdings, Borrower or any Subsidiary in respect of any Subordinated Debt and refundings and refinancings thereof, provided such Guarantee Obligations are subordinated to the Obligations on terms no less favorable to the Lenders, Facility B Lenders and Facility C Lenders (if Facility C exists) than those governing the Subordinated Debt and no such refunding or refinancing shortens the maturity of the original Indebtedness;"

1.16 Subsection 7.4 of the Credit Agreement is hereby amended by (i) deleting the word "and" appearing at the end of subsection (g) thereof, (ii) deleting the period "." at the end of subsection (h) thereof and inserting "; and" in place thereof and (iii) adding the following as subsection (i) thereto:

"(i) Guarantee Obligations of any Subsidiary in effect at the time such Subsidiary was acquired through an Investment permitted pursuant to subsection 7.9(i) hereof in respect of an aggregate amount of obligations (together with obligations permitted to be guaranteed under subsection 7.4(b)) not to exceed \$100,000,000 at any one time outstanding, and extensions, renewals and replacements thereof; provided, however, that no such extension, renewal or replacement shall shorten the fixed maturity or increase the principal amount of the Indebtedness guaranteed by the original guarantee."

1.17 Subsection 7.5 of the Credit Agreement is hereby amended by (i) deleting the word "and" appearing at the end of subsection (a) thereof, (ii) deleting the period "." at the end of subsection (b) thereof and inserting "; and" in place thereof and (iii) adding the following as subsection (c) thereto:

"(c) Borrower or any Subsidiary of Borrower may convey, sell, lease, assign, transfer or otherwise dispose of the Capital Stock of any Subsidiary or any Subsidiary may enter into any merger, consolidation or amalgamation or convey, sell, lease, assign, transfer or otherwise dispose of, all or substantially all of its property, business or assets; provided that the Net Proceeds thereof shall be applied pursuant to subsection 2.6(b)(ii)."

1.18 Subsection 7.6(j) of the Credit Agreement is hereby amended and restated to read as follows:

"(j) the conveyance, sale, assignment or contribution to any new Subsidiary of the Borrower or any existing Subsidiary of the Borrower of assets of the Borrower or any Subsidiary of the Borrower provided, that if such Subsidiary to which the assets are conveyed, sold, assigned or contributed is not a party to a Subsidiary Guarantee, such assets shall not exceed five percent (5%) of the Consolidated Total Assets;"

1.19 Subsection 7.9(k) of the Credit Agreement is hereby amended and restated to read as follows:

"(k) (i) Investments in the form of advances, loans or other extensions of credit to any Person (other than Borrower or any of its Subsidiaries) that is engaged in a Similar Business, so long as the aggregate outstanding amount of loans, advances or other extensions of credit made pursuant to this subsection 7.9(k) do not exceed an amount equal to five percent (5%) of the Consolidated Total Assets; and (ii) Investments made to acquire (A) all or any portion of the Capital Stock, or all or any portion of the assets, of any Person (other than the Borrower or any of its Subsidiaries) that is engaged in a Similar Business, or (B) all or substantially all of the assets of any division of any Person (other than the Borrower or any of its Subsidiaries) that is engaged in a Similar Business; provided, that (I) if such Investment is an acquisition of a majority of the Voting Stock of any Person, such Person's board of directors or similar governing body shall have approved such acquisition and (II) at the time of each such Investment described above in clauses (i) and (ii) (both before and after giving effect to such Investment), there shall exist no Default or Event of Default; provided, further, that in connection with each individual, or series of related, Investments made pursuant to this subsection 7.9(k) exceeding \$50,000,000, the Borrower shall deliver to the Administrative Agent, no later than two (2) Business Days after the consummation of such Investment or Investments, a certificate of a Responsible Officer that certifies that no Default or Event of Default has occurred and is continuing or will be caused as a result of consummating such proposed Investment;"

1.20 Subsection 7.11(a) of the Credit Agreement is hereby amended and restated to read as follows:

"(a) Enter into any transaction, including, without limitation, any purchase, sale, lease or exchange of property or the rendering of any service, with any Affiliate (other than the Borrower or any Wholly Owned Subsidiary which is a party to the Subsidiary Guarantee) unless such transaction is (i) otherwise permitted under this Agreement and (ii) upon fair and reasonable terms no less favorable to the Borrower or such Subsidiary, as the case may be, than it would obtain in a comparable arm's length transaction with a Person which is not an Affiliate."

SECTION 2. Omnibus Amendment to CERTAIN CReDIT documents. Subject to the satisfaction of each of the conditions to effectiveness set forth in Section 3 of this Amendment, the Borrower and the Requisite Class Lenders party to the Credit Agreement hereby agree to amend the Credit Documents referenced below as follows:

2.1 The definition of "Permitted Parent Distributions" in Section 1.1(b) of the Parent Guarantee is hereby amended and restated to read as follows:

"Permitted Parent Distributions": (a) the issuance by Holdings of options or other equity securities of Holdings to outside directors, members of management or employees of Holdings in the ordinary course of business, (b) cash payments made in lieu of issuing fractional shares of Holdings' common stock or preferred stock, (c) from and

after January 1, 2004, Parent Distributions funded solely with the proceeds of dividends received from the Borrower pursuant to clause (C) of the definition of Permitted Stock Payments in the Credit Agreements so long as at the time of declaring and paying any such Parent Distribution no Default or Event of Default shall have occurred and be continuing (the "Clause (C) Dividends"), (d) the application of up to \$2,000,000 of the proceeds of the sale of common stock of Holdings to the repurchase of common stock of Holdings from management of Holdings or the Borrower, (e) from and after January 1, 2004, cash payments to repurchase common stock of Holdings solely with proceeds of (i) Clause (C) Dividends, (ii) dividends received from the Borrower pursuant to clause (E) of the definition of Permitted Stock Payments in the Credit Agreement (the "Clause (E) Dividends") and (iii) Net Proceeds of the issuance of Capital Stock of Holdings and/or Permitted Convertible Securities issued after January 1, 2004; provided, however, that the cash payments to repurchase common stock of Holdings deriving from Clause (E) Dividends, issuances of Capital Stock of Holdings and/or issuances of Permitted Convertible Securities shall not exceed \$200,000,000 in the aggregate from and after January 1, 2004 and (f) from and after January 1, 2004, cash payments in an aggregate amount up to \$10,000,000 in any fiscal year of the Borrower to repurchase common stock of Holdings held by any employee, director, officer, consultant or agent (a "Benefit Plan Beneficiary") of the Borrower, Holdings or their Subsidiaries pursuant to any restricted stock plan or to which any such Benefit Plan Beneficiary has a right under any option plan of the Borrower or Holdings (or to repurchase other common stock of Holdings held by any such Benefit Plan Beneficiary having a value not exceeding the amount of the exercise price of an option being exercised by such Benefit Plan Beneficiary and the amount of the obligations of such Benefit Plan Beneficiary under the Code with respect to the common stock underlying such option) in order to enable (i) the Borrower, Holdings or such Benefit Plan Beneficiary to comply with obligations under the Code, (ii) the Borrower or Holdings to issue cash to such Benefit Plan Beneficiary in lieu of fractional shares of common stock or (iii) the payment of the exercise price of an option held by such Benefit Plan Beneficiary."

2.2 Section 4.2 of the Parent Guarantee is hereby amended by inserting

"(c)," after the reference to "Subsection 7.4(b),".

2.3 Name Changes. The table below sets forth the new name of each Subsidiary whose name has changed. Each of the Borrower Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto), the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto) is hereby amended by deleting each reference to the names listed in the "Old Name" column below in such document and substituting therefor the corresponding name in the "New Name" column.

Old Name	New Name
Goodrich Avionics Systems, Inc.	L-3 Communications Avionics Systems, Inc.
14	
Goodrich Aerospace Component Overhaul & Repair, Inc.	L-3 Communications Avionics Component Overhaul and Repair, Inc.
Goodrich FlightSystems, Inc.	L-3 Communications FlightSystems Corporation
Atlantic Science and Technology Corporation	L-3 Communications Atlantic Science and Technology Corporation
Coleman Research Corporation	SYColeman Corporation
EER Systems, Inc.	L-3 Communications Government Services, Inc.
Celerity Systems Incorporated	L-3 Communications CSI, Inc.
L-3 Communications AeroTech LLC	L-3 Communications Vertex Aerospace LLC

2.4 Dissolutions. The Borrower hereby represents and warrants to the Administrative Agent and Lenders that:

(a) Telos Corporation ("Telos"), formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications ILEX Systems, Inc. ("L-3 ILEX") on August 8, 2003 in a transaction permitted under the Credit Agreements, that L-3 ILEX was the surviving corporation in the merger and that Telos ceased to exist as a result of the merger;

(b) L-3 Communications Analytics Corporation ("L-3 Analytics"), formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. ("L-3 GSI") on September 26, 2003 in a transaction permitted under the Credit Agreements, that L-3 GSI was the surviving corporation in the merger and that L-3 Analytics ceased to exist as a result of the merger;

(c) AMI Instruments, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on November 21, 2003 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger;

(d) SPD Holdings, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications SPD Technologies, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications SPD Technologies, Inc. was the surviving

15

corporation in the merger and SPD Holdings, Inc. ceased to exist as a result of the merger;

(e) L-3 Communications SPD Technologies, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on November 21, 2003 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger;

(f) Southern California Microwave, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on November 21, 2003 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger;

(g) L-3 Communications Avionics Component Overhaul and Repair, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Avionics Systems, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Avionics Systems, Inc. was the surviving corporation in the merger and L-3 Communications Avionics Component Overhaul and Repair, Inc. ceased to exist as a result of the merger;

(h) L-3 Communications FlightSystems Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Avionics Systems, Inc. on November 21, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Avionics Systems, Inc. was the surviving corporation in the merger and L-3 Communications FlightSystems Corporation ceased to exist as a result of the merger;

(i) L-3 Communications IMC Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Government Services, Inc. was the surviving corporation in the merger and L-3 Communications IMC Corporation ceased to exist as a result of the merger;

(j) L-3 Communications TMA Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications Government Services, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications Government Services, Inc. was the surviving corporation in the merger and L-3 Communications TMA Corporation ceased to exist as a result of the merger;

(k) L-3 Communications Atlantic Science and Technology Corporation, formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into L-3 Communications ILEX Systems, Inc. on December 31, 2003 in a transaction permitted under the Credit Agreements, L-3 Communications ILEX Systems, Inc. was the surviving corporation in the merger and L-3 Communications

16

Atlantic Science and Technology Corporation ceased to exist as a result of the merger; and

(l) L-3 Communications DBS Microwave, Inc., formerly a party to the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement, was merged into the Borrower on April 27, 2002 in a transaction permitted under the Credit Agreements and ceased to exist as a result of the merger.

The parties to this Amendment accordingly agree that each reference in the Borrower Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto), the Subsidiary Guarantee Agreement and the Subsidiary Pledge Agreement (including, without limitation, Schedules 1 and 2 thereto) to Telos Corporation, L-3 Communications Analytics Corporation, AMI Instruments, Inc., SPD Holdings, Inc., L-3 Communications SPD Technologies, Inc., Southern California Microwave, Inc., L-3 Communications Avionics Component Overhaul and Repair, Inc., L-3 Communications FlightSystems Corporation, L-3 Communications IMC Corporation, L-3 Communications TMA Corporation, L-3 Communications Atlantic Science and Technology Corporation and L-3 Communications DBS Microwave, Inc. is hereby deleted.

2.5 Schedules. To more fully reflect the foregoing amendments described in Sections 2.3 and 2.4 of this Amendment, Schedule 1 to the Borrower Pledge Agreement is hereby amended and restated to read as provided on Schedule B-1 attached hereto and Schedules 1 and 2 to the Subsidiary Pledge Agreement are hereby amended and restated to read as provided on Schedules S-1 and S-2 attached hereto.

SECTION 3. CONDITIONS TO EFFECTIVENESS OF SECTIONS 1 AND 2. The provisions of Sections 1 and 2 of this Amendment shall be deemed effective as of the date when each of the following conditions have been satisfied (such effective date occurring upon satisfaction of such conditions being referred to herein as the "AMENDMENT EFFECTIVE DATE"):

3.1 The Borrower shall have delivered to Administrative Agent executed copies of this Amendment and each of the other Credit Parties shall have delivered to the Administrative Agent executed copies of the Guarantors' Consent and Acknowledgment to this Amendment in the form attached hereto;

3.2 The Requisite Class Lenders party to the Credit Agreement shall have delivered to the Administrative Agent an executed original or facsimile counterpart of its signature page to this Amendment;

3.3 The Administrative Agent shall have received a secretary's or assistant secretary's certificate of the Borrower certifying board resolutions authorizing the execution, delivery and performance of this Amendment by the Borrower;

3.4 The representations and warranties contained in Section 4 hereof shall be true and correct in all respects; and

17

3.5 All conditions to effectiveness set forth in Sections 5.1, 5.2, 5.3, and 5.4 in the Consent, Waiver and Third Omnibus Amendment Regarding Second Amended and Restated 364 Day Credit Agreement of even date herewith shall have been satisfied.

SECTION 4. REPRESENTATIONS AND WARRANTIES. In order to induce Lenders to enter into this Amendment, the Borrower represents and warrants to each Lender that the following statements are true, correct and complete:

4.1 Authorization and Enforceability. (a) The Borrower has all requisite corporate power and authority to enter into this Amendment and to carry out the transactions contemplated by, and perform its obligations under, the Credit Agreement as modified by this Amendment (the "AGREEMENT"), (b) the execution and delivery of this Amendment has been duly authorized by all necessary corporate action on the part of the Borrower and (c) this Amendment and the Agreement have been duly executed and delivered by the Borrower and, when executed and delivered, will be the legally valid and binding obligations of the Borrower,

enforceable against the Borrower in accordance with their respective terms, subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding, in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

4.2 Incorporation of Representations and Warranties From Credit Agreement. The representations and warranties contained in Section 4 of the Credit Agreement, after giving effect to the amendments contained in Sections 1 and 2 of this Amendment, are and will be true, correct and complete in all material respects on and as of each of the Amendment Effective Date, to the same extent as though made on and as of such date, except to the extent such representations and warranties specifically relate to an earlier date, in which case they were true, correct and complete in all material respects on and as of such earlier date.

4.3 Absence of Default and Setoff. No event has occurred and is continuing or will result from the consummation of the transactions contemplated by this Amendment that constitutes a Default or an Event of Default and no defense, setoff or counterclaim of any kind, nature or description exists to the payment and performance of the obligations owing by the Borrower to the Agents and the Lenders.

#### SECTION 5. MISCELLANEOUS.

5.1 Effect on the Credit Agreement and the other Credit Documents. Except as specifically provided in this Amendment, the Credit Agreement and the other Credit Documents shall remain in full force and effect and are hereby ratified and confirmed. The execution, delivery and performance of this Amendment shall not, except as expressly provided herein, constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of the Administrative Agent or any Lender under, the Credit Agreement or any of the other Credit Documents.

5.2 Fees and Expenses. The Borrower acknowledges that all costs, fees and expenses as described in Section 10.5 of the Credit Agreement incurred by Administrative Agent and its

18

counsel with respect to this Amendment and the documents and transactions contemplated hereby shall be for the account of the Borrower.

5.3 GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

5.4 SUBMISSION TO JURISDICTION; WAIVERS; WAIVER OF JURY TRIAL; ACKNOWLEDGMENTS; CONFIDENTIALITY. Each of the terms and conditions set forth in Sections 10.12, 10.13, 10.14 and 10.15 of the Credit Agreement are hereby incorporated into this Amendment as if set forth fully herein except that each reference to "Agreement" therein shall be deemed to be a reference to "Amendment" herein.

5.5 Counterparts; Effectiveness. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument. Except for the terms of Sections 1 and 2 hereof (which shall only become effective on the Amendment Effective Date), this Amendment shall become effective upon the execution of a counterpart hereof by the Borrower and the Required Lenders and receipt by the Borrower and the Administrative Agent of written or telephonic notification of such execution and authorization of delivery thereof.

5.6 Amendment Fee. Subject to the occurrence of the Amendment Effective Date, the Borrower hereby agrees to pay to each Lender submitting to the Administrative Agent an executed counterpart to this Amendment on or before February 19, 2004 (each such Lender, a "CONSENTING LENDER") a non-refundable fee (the "AMENDMENT FEE") in the amount set forth in the Third Omnibus Amendment Fee Letter regarding this Amendment, which Amendment Fee will be based and payable on that portion of such Consenting Lender's Commitment. The Amendment Fee owing to each Consenting Lender shall be paid in immediately available funds by the Borrower to the Administrative Agent for the benefit of such Consenting Lenders not later than noon (New York time) on the first Business Day following the occurrence of the Amendment Effective Date.

[SIGNATURE PAGES FOLLOW]

19

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Title:

BANK OF AMERICA, N.A., as Administrative  
Agent and as a Lender

By: \_\_\_\_\_  
Title:

LEHMAN COMMERCIAL PAPER INC., as  
Documentation Agent and Syndication  
Agent

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO SECOND OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

Guarantors' Acknowledgment and Consent

Each of the undersigned hereby acknowledges receipt of the attached  
Amendment and consents to the execution and performance thereof by L-3  
Communications Corporation. Each of the undersigned hereby also reaffirms that  
the guarantee and any applicable Pledge Agreement of such undersigned in favor  
of the Administrative Agent for the ratable benefit of the Lenders and the  
Agents remains in full force and effect and acknowledges and agrees that there  
is no defense, setoff or counterclaim of any kind, nature or description to  
obligations arising under such guarantee or any applicable Pledge Agreement

Dated as of February 24, 2004

L-3 COMMUNICATIONS HOLDINGS, INC.

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Vice President, General Counsel  
and Secretary

L-3 COMMUNICATIONS INTEGRATED SYSTEMS  
L.P.

By: L-3 COMMUNICATIONS AIS GP  
CORPORATION, as General Partner

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

L-3 COMMUNICATIONS VERTEX AEROSPACE LLC  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL  
AVIATION LLC  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC  
WESCAM LLC  
WESCAM AIR OPS LLC

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Authorized Person

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT  
TO THIRD OMNIBUS AMENDMENT REGARDING THE THIRD  
AMENDED AND RESTATED CREDIT AGREEMENT]

APCOM, INC.  
BROADCAST SPORTS INC.  
ELECTRODYNAMICS, INC.  
HENSCHEL, INC.  
HYGIENETICS ENVIRONMENTAL SERVICES, INC.

INTERSTATE ELECTRONICS CORPORATION  
KDI PRECISION PRODUCTS, INC.  
L-3 COMMUNICATIONS AEROMET, INC.  
L-3 COMMUNICATIONS AIS GP CORPORATION  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC.  
L-3 COMMUNICATIONS AYDIN CORPORATION  
L-3 COMMUNICATIONS CSI, INC.  
L-3 COMMUNICATIONS ESSCO, INC.  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC.  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC.  
L-3 COMMUNICATIONS INVESTMENTS INC.  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC.  
L-3 COMMUNICATIONS MAS (US) CORPORATION  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION CALIFORNIA  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION DELAWARE  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.  
L-3 COMMUNICATIONS WESTWOOD CORPORATION  
MCTI ACQUISITION CORPORATION  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED  
MICRODYNE CORPORATION  
MICRODYNE OUTSOURCING INCORPORATED  
MPRI, INC.  
PAC ORD, INC.  
POWER PARAGON, INC.  
SHIP ANALYTICS, INC.  
SHIP ANALYTICS INTERNATIONAL, INC.  
SHIP ANALYTICS USA, INC.  
SPD ELECTRICAL SYSTEMS, INC.  
SPD SWITCHGEAR, INC.  
SYCOLEMAN CORPORATION  
TROLL TECHNOLOGY CORPORATION  
WESCAM SONOMA INC.  
WESCAM AIR OPS INC.  
WESCAM INCORPORATED  
WESCAM HOLDINGS (US) INC.  
WOLF COACH, INC.

By:

-----  
Name: Christopher C. Cambria  
Title: Vice President and Secretary

[SIGNATURE PAGES TO GUARANTORS' ACKNOWLEDGMENT AND CONSENT  
TO THIRD OMNIBUS AMENDMENT REGARDING THE THIRD  
AMENDED AND RESTATED CREDIT AGREEMENT]

THE BANK OF NEW YORK

By:

-----  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BANK ONE, N.A. (Main Office Chicago)

By:

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Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

FLEET NATIONAL BANK

By:

-----  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE

CREDIT LYONNAIS NEW YORK BRANCH

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

WACHOVIA BANK NATIONAL ASSOCIATION  
(f/k/a First Union Commercial  
Corporation)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

HSBC BANK USA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE GOVERNOR AND COMPANY OF THE BANK OF  
IRELAND

By: \_\_\_\_\_  
Title:

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

COMERICA BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CREDIT INDUSTRIEL ET COMMERCIAL

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BARCLAYS BANK PLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

RZB FINANCE LLC

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

ERSTE BANK, NEW YORK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE MITSUBISHI TRUST AND BANKING  
CORPORATION

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

SOCIETE GENERALE

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

SUNTRUST BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

WEBSTER BANK

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUSAMENDMENT TO  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

THE BANK OF NOVA SCOTIA

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CREDIT SUISSE FIRST BOSTON

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

GENERAL ELECTRIC CAPITAL CORPORATION

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

MIZUHO CORPORATE BANK, LTD. (successor  
to The Fuji Bank, Limited, The Dai-Ichi  
Kanho Bank, Ltd. and The Industrial Bank  
of Japan, Limited)

By: \_\_\_\_\_  
Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

FORTIS CAPITAL CORP.

By:

-----  
Title:

FORTIS CAPITAL CORP.

By: \_\_\_\_\_

Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

BANK OF TOKYO-MITSUBISHI TRUST COMPANY

By: \_\_\_\_\_

Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

CHIAO TUNG BANK CO., LTD. NEW YORK  
AGENCY

By: \_\_\_\_\_

Title:

[SIGNATURE PAGES TO THIRD OMNIBUS AMENDMENT REGARDING THE  
THIRD AMENDED AND RESTATED CREDIT AGREEMENT]

SCHEDULE B-1\*

[SEE ATTACHED AMENDED SCHEDULE 1 TO BORROWER PLEDGE AGREEMENT]

- -----  
\* BORROWER TO PROVIDE NEW SCHEDULE

SCHED. B-1 - 1

SCHEDULE S-1

[SEE ATTACHED AMENDED SCHEDULE 1 TO SUBSIDIARY PLEDGE AGREEMENT]\*

- -----  
\* BORROWER TO PROVIDE NEW SCHEDULE

SCHED. S-1 - 1

[SEE ATTACHED AMENDED SCHEDULE 2 TO SUBSIDIARY PLEDGE AGREEMENT]\*

- -----

\* BORROWER TO PROVIDE NEW SCHEDULE

SUPPLEMENTAL INDENTURE TO BE DELIVERED  
BY GUARANTEEING SUBSIDIARIES

Supplemental Indenture (this "Supplemental Indenture"), dated as of February 25, 2004, among L-3 Communications Corporation (or its permitted successor), a Delaware corporation (the "Company"), each a direct or indirect subsidiary of the Company signatory hereto (each, a "Guaranteeing Subsidiary", and collectively, the "Guaranteeing Subsidiaries"), and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

W I T N E S S E T H  
- - - - -

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as of May 21, 2003 providing for the issuance of an unlimited amount of 6 1/8% Senior Subordinated Notes due 2013 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Company's Obligations (as defined in the Indenture) under the Notes and the Indenture on the terms and conditions set forth herein (the "Subsidiary Guarantee"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees as follows:

- (a) Such Guaranteeing Subsidiary, jointly and severally with all other current and future guarantors of the Notes (collectively, the "Guarantors" and each, a "Guarantor"), unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Notes or the Obligations of the Company under the Indenture or the Notes, that:
  - (i) the principal of, premium, interest and Additional Amounts, if any, on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption

1

or otherwise, and interest on the overdue principal of, premium, interest and Additional Amounts, if any, on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and

- (ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

- (b) Notwithstanding the foregoing, in the event that this Subsidiary Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of such Guaranteeing Subsidiary under this Supplemental Indenture and its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.

- (a) To evidence its Subsidiary Guarantee set forth in this Supplemental Indenture, such Guaranteeing Subsidiary hereby agrees that a notation of such Subsidiary Guarantee substantially in the form of Exhibit F to the Indenture shall be endorsed by an officer of such Guaranteeing Subsidiary on each Note authenticated and delivered by the Trustee after the date hereof.
- (b) Notwithstanding the foregoing, such Guaranteeing Subsidiary hereby agrees that its Subsidiary Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Subsidiary Guarantee.
- (c) If an Officer whose signature is on this Supplemental Indenture or on the Subsidiary Guarantee no longer holds that office at the time the Trustee authenticates the Note on which a Subsidiary Guarantee is endorsed, the Subsidiary Guarantee shall be valid

nevertheless.

- (d) The delivery of any Note by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Subsidiary Guarantee set forth in this Supplemental Indenture on behalf of each Guaranteeing Subsidiary.
- (e) Each Guaranteeing Subsidiary hereby agrees that its Obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or the Indenture, the

2

absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

- (f) Each Guaranteeing Subsidiary hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Subsidiary Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the Obligations contained in the Notes and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guaranteeing Subsidiary, or any custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guaranteeing Subsidiary, any amount paid by either to the Trustee or such Holder, the Subsidiary Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guaranteeing Subsidiary agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Obligations guaranteed hereby until payment in full of all Obligations guaranteed hereby. Each Guaranteeing Subsidiary further agrees that, as between such Guaranteeing Subsidiary, on the one hand, and the Holders and the Trustee, on the other hand:
  - (i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 6 of the Indenture for the purposes of the Subsidiary Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby; and
  - (ii) in the event of any declaration of acceleration of such Obligations as provided in Article 6 of the Indenture, such Obligations (whether or not due and payable) shall forthwith become due and payable by such Guaranteeing Subsidiary for the purpose of the Subsidiary Guarantee made pursuant to this Supplemental Indenture.
- (i) Each Guaranteeing Subsidiary shall have the right to seek contribution from any other non-paying Guaranteeing Subsidiary so long as the exercise of such right does not impair the rights of

3

the Holders or the Trustee under the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

#### 4. GUARANTEEING SUBSIDIARY MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to the Company or any other Guarantor.
- (b) Except as set forth in Article 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary), or successive consolidations or mergers in which a Guaranteeing Subsidiary or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary) authorized to acquire and operate the same; provided, however, that each Guaranteeing Subsidiary hereby covenants and agrees that (i) subject to the Indenture, upon any such consolidation, merger,

sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiaries, shall be expressly assumed (in the event that such Guaranteeing Subsidiary is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guaranteeing Subsidiary shall have been merged, or by the corporation which shall have acquired such property and (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.

- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Subsidiary Guarantee made pursuant to this Supplemental Indenture and the due and

4

punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiary, such successor corporation shall succeed to and be substituted for such Guaranteeing Subsidiary with the same effect as if it had been named herein as the Guaranteeing Subsidiary. Such successor corporation thereupon may cause to be signed any or all of the Subsidiary Guarantees to be endorsed upon the Notes issuable under the Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Subsidiary Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Subsidiary Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Subsidiary Guarantees had been issued at the date of the execution hereof.

#### 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guaranteeing Subsidiary), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guaranteeing Subsidiary or all of the Capital Stock of a Guaranteeing Subsidiary, then the Guaranteeing Subsidiary (in the event of a sale or other disposition of all of the Capital Stock of such Guaranteeing Subsidiary) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guaranteeing Subsidiary) shall be released from and relieved of its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guaranteeing Subsidiary, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, including without limitation, Section 4.10 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guaranteeing Subsidiary from its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto. If the Guaranteeing Subsidiary is not released from its obligations under its Subsidiary Guarantee, it shall remain liable for the full amount

5

of principal of and interest on the Notes and for the other obligations of such Guaranteeing Subsidiary under the Indenture as provided in this Supplemental Indenture.

- (b) Upon the designation of a Guaranteeing Subsidiary as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Guaranteeing Subsidiary shall be released and relieved of its Obligations under its Subsidiary Guarantee and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guaranteeing Subsidiary as an Unrestricted Subsidiary was made by the Company in accordance with the provisions of the Indenture, including without limitation Section 4.07 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guaranteeing Subsidiary from its Obligations under its Subsidiary Guarantee. Any Guaranteeing Subsidiary not released from its Obligations under its Subsidiary Guarantee shall remain liable for the full amount of principal of and interest on the Notes and for the other Obligations of any Guaranteeing Subsidiary under the Indenture as provided herein.

- (c) Each Guaranteeing Subsidiary shall be released and relieved of its obligations under this Supplemental Indenture in accordance with, and subject to, Section 4.18 of the Indenture.

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guaranteeing Subsidiary, as such, shall have any liability for any Obligations of the Company or any Guaranteeing Subsidiary under the Notes, any Subsidiary Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such Obligations or their creation. Each Holder of the 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 SEC that such a waiver is against public policy.

7. SUBORDINATION OF SUBSIDIARY GUARANTEES; ANTI-LAYERING. No Guaranteeing Subsidiary shall 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 Guaranteeing Subsidiary and senior in any respect in right of payment to any of the Subsidiary Guarantees. Notwithstanding the foregoing sentence, the Subsidiary Guarantee of each Guaranteeing Subsidiary shall be subordinated to the prior payment in full of all Senior Debt of that Guaranteeing Subsidiary (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

8. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

6

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Company.

7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: February 25, 2004

L-3 COMMUNICATIONS CORPORATION

By:

-----

Name:

Title:

Dated: February 25, 2004

APCOM, INC., a Maryland corporation  
BROADCAST SPORTS INC., a Delaware corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
HENSCHEL INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a  
Delaware corporation  
INTERSTATE ELECTRONICS CORPORATION, a  
California corporation  
KDI PRECISION PRODUCTS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon  
corporation  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a Delaware  
limited liability company  
L-3 COMMUNICATIONS AIS GP CORPORATION, a Delaware  
corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a Delaware  
corporation  
L-3 COMMUNICATIONS CSI, INC., a California  
corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware  
corporation  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION  
LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware  
limited liability company  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a  
Virginia corporation

L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a Delaware corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA, a California corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC., a California corporation

L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a Nevada corporation  
MCTI ACQUISITION CORPORATION, a Maryland corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland corporation  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware corporation  
SHIP ANALYTICS USA, INC., a Connecticut corporation  
SPD ELECTRICAL SYSTEMS, INC., a Delaware corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited liability company  
WESCAM HOLDINGS (US) INC., a Delaware corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM LLC, a Delaware limited liability company  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation  
As Guaranteeing Subsidiaries

By: \_\_\_\_\_  
Name:  
Title:

Dated: February 25, 2004

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

SUPPLEMENTAL INDENTURE TO BE  
DELIVERED BY GUARANTEEING SUBSIDIARIES

Supplemental Indenture (this "Supplemental Indenture"), dated as of February 25, 2004, among L-3 Communications Corporation (or its permitted successor), a Delaware corporation (the "Company"), each subsidiary of the Company signatory hereto (each, a "Guaranteeing Subsidiary", and collectively, the "Guaranteeing Subsidiaries"), and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

W I T N E S S E T H:  
- - - - -

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (as amended, the "Indenture"), dated as of December 11, 1998 providing for the issuance of an aggregate principal amount of up to \$300,000,000 of 8% Senior Subordinated Notes due 2008 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Company's Obligations under the Notes and the Indenture on the terms and conditions set forth herein (the "Subsidiary Guarantee"); and

WHEREAS, pursuant to Sections 4.13 and 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees as follows:

- (a) Each Guaranteeing Subsidiary, jointly and severally with all other current and future guarantors of the Notes (collectively, the "Guarantors" and each, a "Guarantor"), unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Notes or the Obligations of the Company under the Indenture or the Notes, that:

1

- (i) the principal of, premium and interest on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption or otherwise, and interest on the overdue principal of, premium and interest on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and

- (ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

- (b) Notwithstanding the foregoing, in the event that this Subsidiary Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of each Guaranteeing Subsidiary under this Supplemental Indenture and its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.

- (a) To evidence its Subsidiary Guarantee set forth in this Supplemental Indenture, each Guaranteeing Subsidiary hereby agrees that a notation of such Subsidiary Guarantee substantially in the form of Exhibit F to the Indenture shall be endorsed by an officer of such Guaranteeing Subsidiary on each Note authenticated and delivered by the Trustee after the date hereof.
- (b) Notwithstanding the foregoing, each Guaranteeing Subsidiary hereby agrees that its Subsidiary Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Subsidiary Guarantee.
- (c) If an Officer whose signature is on this Supplemental Indenture or on the Subsidiary Guarantee no longer holds that office at the time the Trustee authenticates the Note on which a Subsidiary Guarantee is endorsed, the Subsidiary Guarantee shall be valid

nevertheless.

- (d) The delivery of any Note by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Subsidiary Guarantee set forth in this Supplemental Indenture on behalf of each Guaranteeing Subsidiary.

2

- (e) Each Guaranteeing Subsidiary hereby agrees that its obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or the Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions of the Notes or the Indenture, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.
- (f) Each Guaranteeing Subsidiary hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Subsidiary Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the obligations contained in the Notes and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guaranteeing Subsidiary, or any Custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guaranteeing Subsidiary, any amount paid by either to the Trustee or such Holder, the Subsidiary Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guaranteeing Subsidiary agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any obligations guaranteed hereby until payment in full of all obligations guaranteed hereby. Each Guaranteeing Subsidiary further agrees that, as between such Guaranteeing Subsidiary, on the one hand, and the Holders and the Trustee, on the other hand:
  - (i) the maturity of the obligations guaranteed hereby may be accelerated as provided in Article 6 of the Indenture for the purposes of the Subsidiary Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed hereby; and
  - (ii) in the event of any declaration of acceleration of such obligations as provided in Article 6 of the Indenture, such obligations (whether or not due and payable) shall forthwith become due and payable by such Guaranteeing

3

Subsidiary for the purpose of the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

- (i) Each Guaranteeing Subsidiary shall have the right to seek contribution from any other non-paying Guaranteeing Subsidiary so long as the exercise of such right does not impair the rights of the Holders or the Trustee under the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

#### 4. GUARANTEEING SUBSIDIARIES MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to the Company or any other Guarantor.
- (b) Except as set forth in Article 4 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with such Guaranteeing Subsidiary), or successive consolidations or mergers in which a Guaranteeing Subsidiary or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with such Guaranteeing Subsidiary) authorized to acquire and operate the same; provided, however, that each Guaranteeing Subsidiary hereby covenants and agrees that (i) subject to the Indenture, upon any such consolidation, merger, sale or conveyance, the due and punctual performance and

observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiary, shall be expressly assumed (in the event that such Guaranteeing Subsidiary is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guaranteeing Subsidiary shall have been merged, or by the corporation which shall have acquired such property and (ii)

4

immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.

- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Subsidiary Guarantee made pursuant to this Supplemental Indenture and the due and punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by each Guaranteeing Subsidiary, such successor corporation shall succeed to and be substituted for such Guaranteeing Subsidiary with the same effect as if it had been named herein as the Guaranteeing Subsidiary. Such successor corporation thereupon may cause to be signed any or all of the Subsidiary Guarantees to be endorsed upon the Notes issuable under the Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Subsidiary Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Subsidiary Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Subsidiary Guarantees had been issued at the date of the execution hereof.

#### 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guaranteeing Subsidiary), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guaranteeing Subsidiary or all of the Capital Stock of a Guaranteeing Subsidiary, then the Guaranteeing Subsidiary (in the event of a sale or other disposition of all of the Capital Stock of such Guaranteeing Subsidiary) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guaranteeing Subsidiary) shall be released from and relieved of its obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or

5

the Guaranteeing Subsidiary, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, including without limitation, Section 4.10 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guaranteeing Subsidiary from its obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto. If the Guaranteeing Subsidiary is not released from its obligations under its Subsidiary Guarantee, it shall remain liable for the full amount of principal of and interest on the Notes and for the other obligations of such Guaranteeing Subsidiary under the Indenture as provided in this Supplemental Indenture.

- (b) Upon the designation of a Guaranteeing Subsidiary as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Guaranteeing Subsidiary shall be released and relieved of its obligations under its Subsidiary Guarantee and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guaranteeing Subsidiary as an Unrestricted Subsidiary was made by the Company in accordance with the provisions of the Indenture, including without limitation Section 4.07 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guaranteeing Subsidiary from its obligations under its Subsidiary Guarantee. Any Guaranteeing Subsidiary not released from its obligations under its Subsidiary Guarantee shall remain liable for the full amount of principal of and interest on the Notes and for the other obligations of any Guaranteeing Subsidiary under the Indenture as provided herein.

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guaranteeing Subsidiary, as such, shall have any liability for any obligations of the Company or any Guaranteeing Subsidiary under the Notes, any Subsidiary Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the 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.

7. SUBORDINATION OF SUBSIDIARY GUARANTEES; ANTI-LAYERING. No Guaranteeing Subsidiary shall 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 Guaranteeing Subsidiary and senior in any respect in right of payment to any of the Subsidiary Guarantees. Notwithstanding the foregoing sentence, the Subsidiary Guarantee of each Guaranteeing Subsidiary shall be subordinated to the prior payment in full of

6

all Senior Debt of that Guaranteeing Subsidiary (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

8. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Company.

7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: February 25, 2004

L-3 COMMUNICATIONS CORPORATION

By:

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Name:

Title:

Dated: February 25, 2004

APCOM, INC., a Maryland corporation  
BROADCAST SPORTS INC., a Delaware corporation  
L-3 COMMUNICATIONS CSI, INC., a California corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
HENSCHEL INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a Delaware corporation  
INTERSTATE ELECTRONICS CORPORATION, a California corporation  
KDI PRECISION PRODUCTS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon corporation  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS AIS GP CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware corporation  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a Virginia corporation  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a

Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a Delaware corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA, a California corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION, a Delaware corporation  
  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC., a California corporation  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a Nevada corporation  
MCTI ACQUISITION CORPORATION, a Maryland corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland corporation  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware corporation  
SHIP ANALYTICS USA, INC., a Connecticut corporation  
SPD ELECTRICAL SYSTEMS, INC., a Delaware corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited liability company  
WESCAM HOLDINGS (US) INC., a Delaware corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM LLC, a Delaware limited liability company  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation  
As Guaranteeing Subsidiaries

By: \_\_\_\_\_  
Name:  
Title:

Dated: February 25, 2004

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

SUPPLEMENTAL INDENTURE TO BE  
DELIVERED BY GUARANTORS

SUPPLEMENTAL INDENTURE (this "Supplemental Indenture"), dated as of February 25, 2004, among L-3 Communications Holdings, Inc. (or its permitted successor), a Delaware corporation (the "Company"), each subsidiary of the Company signatory hereto (each, a "Guarantor", and collectively, the "Guarantors"), and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

W I T N E S S E T H :  
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WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as October 24, 2001 providing for the issuance of an aggregate principal amount of up to \$420,000,000 of 4.00% Senior Subordinated Convertible Contingent Debt Securities (CODES) due 2011 (the "Securities");

WHEREAS, the Indenture provides that under certain circumstances the Guarantors shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guarantors shall unconditionally guarantee all of the Company's Obligations under the Securities and the Indenture on the terms and conditions set forth herein (the "Guarantee"); and

WHEREAS, pursuant to Section 14.7 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guarantors and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Securities as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guarantor hereby agrees as follows:

(a) Each Guarantor, jointly and severally with all other current and future guarantors of the Securities (collectively, the "Guaranteeing Subsidiaries" and each, a "Guaranteeing Subsidiary"), unconditionally guarantees to each Holder of a Security authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Securities or the Obligations of the Company under the Indenture or the Securities, that:

(i) the principal of, premium, interest (including Contingent Interest, if any) and Additional Amounts, if any, on the

1

Securities will be promptly paid in full when due, whether at maturity, by acceleration, redemption or otherwise, and interest on the overdue principal of, premium, interest (including Contingent Interest, if any) and Additional Amounts, if any, on the Securities, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and

(ii) in case of any extension of time for payment or renewal of any Securities or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

(b) Notwithstanding the foregoing, in the event that this Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of each Guarantor under this Supplemental Indenture and its Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF GUARANTEES.

(a) To evidence its Guarantee set forth in this Supplemental Indenture, each Guarantor hereby agrees that a notation of such Guarantee, substantially in the form included as Exhibit B to the Indenture, shall be endorsed by an Officer of such Guarantor on each Security authenticated and delivered by the Trustee after the date hereof.

(b) Notwithstanding the foregoing, each Guarantor hereby agrees that its Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Security a notation of such Guarantee.

(c) If an Officer whose signature is on this Supplemental Indenture

or on the Guarantee no longer holds that office at the time the Trustee authenticates the Security on which a Guarantee is endorsed, the Guarantee shall be valid nevertheless.

- (d) The delivery of any Security by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Guarantee set forth in this Supplemental Indenture on behalf of each Guarantor.
- (e) Each Guarantor hereby agrees that its obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Securities or the Indenture, the absence of any

2

action to enforce the same, any waiver or consent by any Holder of the Securities with respect to any provisions of the Securities or the Indenture, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

- (f) Each Guarantor hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the obligations contained in the Securities and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guarantor, or any Custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guarantor, any amount paid by either to the Trustee or such Holder, the Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guarantor agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any obligations guaranteed hereby until payment in full of all obligations guaranteed hereby. Each Guarantor further agrees that, as between such Guarantor, on the one hand, and the Holders and the Trustee, on the other hand:
  - (i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 4 of the Indenture for the purposes of the Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby;
  - (ii) in the event of any declaration of acceleration of such Obligations as provided in Article 4 of the Indenture, such Obligations (whether or not due and payable) shall forthwith become due and payable by such Guarantor for the purpose of the Guarantee made pursuant to this Supplemental Indenture; and
  - (iii) each Guarantor shall have the right to seek contribution from any other non-paying Guarantor so long as the

3

exercise of such right does not impair the rights of the Holders or the Trustee under the Guarantee made pursuant to this Supplemental Indenture.

#### 4. GUARANTORS MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 6 and 9 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Securities shall prevent (a) any consolidation or merger of any Guarantor with or into the Company or any Guaranteeing Subsidiary, (b) any transfer, sale or conveyance of the property of any Guarantor as an entirety or substantially as an entirety, to the Company or any other Guaranteeing Subsidiary or (c) any merger of a Guarantor with or into an Affiliate of that Guarantor in another State of the United States so long as the amount of Indebtedness of the Company and the domestic non-Guarantor subsidiaries is not increased thereby.
- (b) Except as set forth in Article 9 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Securities shall prevent any consolidation or merger of any Guarantor with or into a corporation or corporations other than the Company or any other Guaranteeing Subsidiary (in each case, whether or not affiliated with the Guarantor), or successive consolidations or mergers in which a Guarantor or its successor or successors shall be a party or parties, or shall prevent any

sale or conveyance of the property of any Guarantor as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guaranteeing Subsidiary (in each case, whether or not affiliated with the Guarantor) authorized to acquire and operate the same; provided, however, that each Guarantor hereby covenants and agrees that (i) subject to the Indenture, upon any such consolidation, merger, sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guarantor, shall be expressly assumed (in the event that such Guarantor is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guarantor shall have been merged, or by the corporation which shall have acquired such property, (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists, and (iii) such transaction will only be permitted under the Indenture and this Supplemental Indenture if it would be permitted under the terms of all of the indentures governing the Outstanding Senior Subordinated Notes as the same are in effect on the date

4

hereof (whether or not those indentures are subsequently amended, waived, modified or terminated or expire and whether or not any of these Securities continue to be outstanding).

- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Guarantee made pursuant to this Supplemental Indenture and the due and punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by each Guarantor, such successor corporation shall succeed to and be substituted for such Guarantor with the same effect as if it had been named herein as one of the Guarantors. Such successor corporation thereupon may cause to be signed any or all of the Guarantees to be endorsed upon the Securities issuable under the Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Guarantees had been issued at the date of the execution hereof.

#### 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guarantor), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guarantor or all of the Capital Stock of a Guarantor, then the Guarantor (in the event of a sale or other disposition of all of the Capital Stock of such Guarantor) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guarantor) shall be released from and relieved of its obligations under this Supplemental Indenture and its Guarantee made pursuant hereto. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guarantor, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guarantor from its obligations under this Supplemental Indenture and its Guarantee made pursuant hereto. If the Guarantor is not released from its obligations under its Guarantee, it shall

5

remain liable for the full amount of principal of and interest (including Contingent Interest, if any) and Additional Amounts, if any, on the Securities and for the other obligations of such Guarantor under the Indenture as provided herein.

- (b) Upon the designation of a Guarantor as an Excluded Subsidiary in accordance with the terms of the Indenture and the indentures governing the Outstanding Senior Subordinated Notes as the same are in effect on the date hereof (whether or not those indentures are subsequently amended, waived, modified or terminated or expire and whether or not any of those Securities continue to be outstanding), such Guarantor shall be released and relieved of its obligations under the Indenture and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guarantor as an Excluded Subsidiary was made by the Company in accordance with the provisions of the Indenture and the indentures governing the Outstanding Senior Subordinated Notes as the same are in effect on the date hereof

(whether or not those indentures are subsequently amended, waived, modified, terminated or expire and whether or not any of those Securities continue to be outstanding), the Trustee shall execute any documents reasonably required in order to evidence the release of such Guarantor from its obligations under its Guarantee. Any Guarantor not released from its obligations under its Guarantee shall remain liable for the full amount of principal of and interest on the Securities and for the other obligations of any Guarantor under the Indenture as provided herein.

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guarantor, as such, shall have any liability for any obligations of the Company or any Guarantor under the Securities, any Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Securities by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Securities. Such waiver may not be effective to waive liabilities under the federal securities laws and it is the view of the Securities and Exchange Commission that such a waiver is against public policy.

7. SUBORDINATION OF GUARANTEES; ANTI-LAYERING. No Guarantor shall 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 Guarantees. Notwithstanding the foregoing sentence, the Guarantee of each Guarantor shall be subordinated to the prior payment in full of all Senior Debt of that Guarantor (in the same manner and to the same extent that the Securities are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

6

8. THIS SUPPLEMENTAL INDENTURE, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guarantors and the Company.

7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: February 25, 2004

L-3 COMMUNICATIONS HOLDINGS, INC.

By:

-----

Name:

Title:

Dated: February 25, 2004

APCOM, INC., a Maryland corporation  
BROADCAST SPORTS INC., a Delaware corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
HENSCHEL INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a  
Delaware corporation  
INTERSTATE ELECTRONICS CORPORATION, a  
California corporation  
KDI PRECISION PRODUCTS, INC., a Delaware  
corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon  
corporation  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a  
Delaware limited liability company  
L-3 COMMUNICATIONS AIS GP CORPORATION, a  
Delaware corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a  
Delaware corporation  
L-3 COMMUNICATIONS CORPORATION, a Delaware  
corporation  
L-3 COMMUNICATIONS CSI, INC., a California

corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware corporation  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a Virginia corporation  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a Delaware corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION CALIFORNIA, a California corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS CORPORATION DELAWARE, a Delaware corporation

L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC., a California corporation  
L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a Nevada corporation  
MCTI ACQUISITION CORPORATION, a Maryland corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland corporation  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware corporation  
SHIP ANALYTICS USA, INC., a Connecticut corporation  
SPD ELECTRICAL SYSTEMS, INC., a Delaware corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited liability company  
WESCAM HOLDINGS (US) INC., a Delaware corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM LLC, a Delaware limited liability company  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation  
As Guaranteeing Subsidiaries

By: \_\_\_\_\_  
Name:  
Title:

Dated: February 25, 2004

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:



SUPPLEMENTAL INDENTURE TO BE DELIVERED  
BY GUARANTEEING SUBSIDIARIES

Supplemental Indenture (this "Supplemental Indenture"), dated as of February 25, 2004, among L-3 Communications Corporation (or its permitted successor), a Delaware corporation (the "Company"), each subsidiary of the Company signatory hereto (each, a "Guaranteeing Subsidiary", and collectively, the "Guaranteeing Subsidiaries"), and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

W I T N E S S E T H  
- - - - -

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as of June 28, 2002 providing for the issuance of an aggregate principal amount of up to \$750,000,000 of 7 5/8% Senior Subordinated Notes due 2012 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Company's obligations under the Notes and the Indenture on the terms and conditions set forth herein (the "Subsidiary Guarantee"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees as follows:

- (a) Such Guaranteeing Subsidiary, jointly and severally with all other current and future guarantors of the Notes (collectively, the "Guarantors" and each, a "Guarantor"), unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Notes or the Obligations of the Company under the Indenture or the Notes, that:

1

- (i) the principal of, premium, interest and Additional Amounts, if any, on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption or otherwise, and interest on the overdue principal of, premium, interest and Additional Amounts, if any, on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and
- (ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

- (b) Notwithstanding the foregoing, in the event that this Subsidiary Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of such Guaranteeing Subsidiary under this Supplemental Indenture and its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.

- (a) To evidence its Subsidiary Guarantee set forth in this Supplemental Indenture, such Guaranteeing Subsidiary hereby agrees that a notation of such Subsidiary Guarantee substantially in the form of Exhibit F to the Indenture shall be endorsed by an officer of such Guaranteeing Subsidiary on each Note authenticated and delivered by the Trustee after the date hereof.
- (b) Notwithstanding the foregoing, such Guaranteeing Subsidiary hereby agrees that its Subsidiary Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Subsidiary Guarantee.
- (c) If an Officer whose signature is on this Supplemental Indenture or on the Subsidiary Guarantee no longer holds that office at the time the Trustee authenticates the Note on which a Subsidiary

Guarantee is endorsed, the Subsidiary Guarantee shall be valid nevertheless.

2

- (d) The delivery of any Note by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Subsidiary Guarantee set forth in this Supplemental Indenture on behalf of each Guaranteeing Subsidiary.
- (e) Each Guaranteeing Subsidiary hereby agrees that its obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or the Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.
- (f) Each Guaranteeing Subsidiary hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Subsidiary Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the Obligations contained in the Notes and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guaranteeing Subsidiary, or any custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guaranteeing Subsidiary, any amount paid by either to the Trustee or such Holder, the Subsidiary Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guaranteeing Subsidiary agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Obligations guaranteed hereby until payment in full of all Obligations guaranteed hereby. Each Guaranteeing Subsidiary further agrees that, as between such Guaranteeing Subsidiary, on the one hand, and the Holders and the Trustee, on the other hand:

3

- (i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 6 of the Indenture for the purposes of the Subsidiary Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed hereby; and
- (ii) in the event of any declaration of acceleration of such obligations as provided in Article 6 of the Indenture, such obligations (whether or not due and payable) shall forthwith become due and payable by such Guaranteeing Subsidiary for the purpose of the Subsidiary Guarantee made pursuant to this Supplemental Indenture.
- (i) Each Guaranteeing Subsidiary shall have the right to seek contribution from any other non-paying Guaranteeing Subsidiary so long as the exercise of such right does not impair the rights of the Holders or the Trustee under the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

#### 4. GUARANTEEING SUBSIDIARY MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to the Company or any other Guarantor.
- (b) Except as set forth in Article 4 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary), or successive consolidations or mergers in which a Guaranteeing Subsidiary or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary) authorized to acquire and operate the same; provided, however, that each Guaranteeing Subsidiary hereby covenants and agrees that (i) subject to the Indenture, upon

any such consolidation, merger, sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiaries, shall be expressly assumed (in the event that such Guaranteeing Subsidiary is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guaranteeing Subsidiary shall have been merged, or by the corporation which shall have acquired such property and (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.

- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Subsidiary Guarantee made pursuant to this Supplemental Indenture and the due and punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiary, such successor corporation shall succeed to and be substituted for such Guaranteeing Subsidiary with the same effect as if it had been named herein as the Guaranteeing Subsidiary. Such successor corporation thereupon may cause to be signed any or all of the Subsidiary Guarantees to be endorsed upon the Notes issuable under the Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Subsidiary Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Subsidiary Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Subsidiary Guarantees had been issued at the date of the execution hereof.

#### 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guaranteeing Subsidiary), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guaranteeing Subsidiary or all of the Capital Stock of a Guaranteeing Subsidiary, then the Guaranteeing Subsidiary (in the

event of a sale or other disposition of all of the Capital Stock of such Guaranteeing Subsidiary) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guaranteeing Subsidiary) shall be released from and relieved of its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guaranteeing Subsidiary, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, including without limitation, Section 4.10 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guaranteeing Subsidiary from its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto. If the Guaranteeing Subsidiary is not released from its obligations under its Subsidiary Guarantee, it shall remain liable for the full amount of principal of and interest on the Notes and for the other obligations of such Guaranteeing Subsidiary under the Indenture as provided in this Supplemental Indenture.

- (b) Upon the designation of a Guaranteeing Subsidiary as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Guaranteeing Subsidiary shall be released and relieved of its obligations under its Subsidiary Guarantee and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guaranteeing Subsidiary as an Unrestricted Subsidiary was made by the Company in accordance with the provisions of the Indenture, including without limitation Section 4.07 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guaranteeing Subsidiary from its obligations under its Subsidiary Guarantee. Any Guaranteeing Subsidiary not released from its Obligations under its Subsidiary Guarantee shall remain liable for the full amount of principal of and interest on the Notes and for the other Obligations of any Guaranteeing Subsidiary under the Indenture as provided herein.

- (c) Each Guaranteeing Subsidiary shall be released and relieved of its obligations under this Supplemental Indenture in accordance with, and subject to, Section 4.18 of the Indenture.

6

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guaranteeing Subsidiary, as such, shall have any liability for any obligations of the Company or any Guaranteeing Subsidiary under the Notes, any Subsidiary Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the 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 SEC that such a waiver is against public policy.

7. SUBORDINATION OF SUBSIDIARY GUARANTEES; ANTI-LAYERING. No Guaranteeing Subsidiary shall 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 Guaranteeing Subsidiary and senior in any respect in right of payment to any of the Subsidiary Guarantees. Notwithstanding the foregoing sentence, the Subsidiary Guarantee of each Guaranteeing Subsidiary shall be subordinated to the prior payment in full of all Senior Debt of that Guaranteeing Subsidiary (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

8. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Company.

7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: February 25, 2004

L-3 COMMUNICATIONS CORPORATION

By:

-----

Name:

Title:

Dated: February 25, 2004

APCOM, INC., a Maryland corporation  
BROADCAST SPORTS INC., a Delaware corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
HENSCHEL INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a Delaware corporation  
INTERSTATE ELECTRONICS CORPORATION, a California corporation  
KDI PRECISION PRODUCTS, INC., a Delaware corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon corporation  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS AIS GP CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a Delaware corporation  
L-3 COMMUNICATIONS CSI, INC., a California corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware corporation  
L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a Virginia corporation

L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a  
Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a  
Delaware corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a  
Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION CALIFORNIA, a California  
corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION  
SYSTEMS CORPORATION DELAWARE, a Delaware  
corporation  
L-3 COMMUNICATIONS SECURITY SYSTEMS  
CORPORATION, a Delaware corporation  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.,  
a California corporation

L-3 COMMUNICATIONS VECTOR INTERNATIONAL  
AVIATION LLC, a Delaware limited liability  
company  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a  
Nevada corporation  
MCTI ACQUISITION CORPORATION, a Maryland  
corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES  
INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland  
corporation  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware  
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SHIP ANALYTICS USA, INC., a Connecticut  
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corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California  
corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited  
liability company  
WESCAM HOLDINGS (US) INC., a Delaware  
corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM LLC, a Delaware limited liability  
company  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation  
As Guaranteeing Subsidiaries

By: \_\_\_\_\_  
Name:  
Title:

Dated: February 25, 2004

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:



TRANSACTION AGREEMENT

DATED AS OCTOBER 21, 2003

BY AND AMONG

L-3 COMMUNICATIONS CORPORATION,

RAAH I, LLC,

AND

VERTEX AEROSPACE LLC

TABLE OF CONTENTS

ARTICLE I	DEFINITIONS.....	1
Section 1.1	Definitions.....	1
ARTICLE II	PURCHASE AND SALE.....	1
Section 2.1	Agreement to Purchase and Sell.....	1
Section 2.2	Purchase Price.....	1
Section 2.3	Payment of Purchase Price.....	2
Section 2.4	Closing.....	2
Section 2.5	Adjustment of Purchase Price.....	2
ARTICLE III	REPRESENTATIONS AND WARRANTIES OF SELLER AND THE COMPANY.....	4
Section 3.1	Representations and Warranties of Seller and the Company.....	4
ARTICLE IV	REPRESENTATIONS AND WARRANTIES OF PURCHASER.....	4
Section 4.1	Representations and Warranties of Purchaser.....	4
ARTICLE V	COVENANTS AND AGREEMENTS OF SELLER AND THE COMPANY.....	4
Section 5.1	Conduct of Business by the Company.....	4
Section 5.2	Inspection and Access to Information.....	7
Section 5.3	No Solicitation of Transactions .....	7
Section 5.4	Notices of Certain Events.....	7
Section 5.5	Supplements to Schedules.....	8
Section 5.6	Insurance.....	8
Section 5.7	Novation.....	8
Section 5.8	Accounts Payable.....	8
Section 5.9	Dealings with Affiliates.....	8
Section 5.10	No Solicitation of Employees.....	8
Section 5.11	Material Leases.....	8
ARTICLE VI	COVENANTS AND AGREEMENTS OF PURCHASER.....	9
Section 6.1	Confidentiality. ....	9
Section 6.2	Employees.....	9
ARTICLE VII	COVENANTS OF THE PARTIES.....	9
Section 7.1	Further Assurances.....	9
Section 7.2	Certain Filings; Consents.....	10
Section 7.3	Antitrust Laws.....	10
Section 7.4	Public Announcements.....	10

ARTICLE VIII	TAX MATTERS.....	11
Section 8.1	Certain Taxes.....	11
Section 8.2	Allocation of Transaction Consideration.....	11
ARTICLE IX	CONDITIONS TO CLOSING.....	11
Section 9.1	Conditions to Each Party's Obligations.....	11
Section 9.2	Conditions to Obligations of Purchaser.....	12
Section 9.3	Conditions to Obligations of Seller.....	13
ARTICLE X	TERMINATION.....	14
Section 10.1	Termination.....	14
Section 10.2	Effect of Termination.....	14
ARTICLE XI	NON-SURVIVAL.....	15
Section 11.1	Non-Survival.....	15
ARTICLE XII	MISCELLANEOUS PROVISIONS.....	15
Section 12.1	Notices.....	15
Section 12.2	Schedules and Exhibits.....	16
Section 12.3	Assignment; Successors in Interest.....	16
Section 12.4	Number; Gender.....	16
Section 12.5	Interpretation.....	16
Section 12.6	Amendment; Waiver.....	17
Section 12.7	Controlling Law.....	17
Section 12.8	Consent to Jurisdiction, Etc.....	17
Section 12.9	Waiver of Jury Trial.....	17
Section 12.10	Severability.....	18
Section 12.11	Counterparts; Effectiveness.....	18
Section 12.12	Enforcement of Certain Rights.....	18
Section 12.13	Waiver.....	18
Section 12.14	Integration.....	18
Section 12.15	Cooperation Following the Closing.....	19
Section 12.16	Transaction Costs.....	19
Section 12.17	Post-Closing Confidentiality.....	19
Section 12.18	Government Audit Assistance.....	18

#### LIST OF EXHIBITS

Exhibit A	Defined Terms
Exhibit B	Representations and Warranties of Seller and the Company
Exhibit C	Representations and Warranties of Purchaser

#### LIST OF ATTACHMENTS

Attachment I	Legal Opinion of Counsel to Seller
Attachment II	Legal Opinion of Counsel to Purchaser
Attachment III	Opening Balance Sheet

#### LIST OF SCHEDULES

Schedule B.1	Organization
Schedule B.3	Subsidiaries
Schedule B.4	Membership Interests
Schedule B.5	Absence of Restrictions and Conflicts
Schedule B.6(a)	Owned Real Property
Schedule B.6(b)	Leased Real Property
Schedule B.7	Title to Personal Property
Schedule B.9	No Undisclosed Liabilities
Schedule B.10	Absence of Certain Changes
Schedule B.11	Legal Proceedings
Schedule B.12	Compliance with Law
Schedule B.13(a)	Contracts
Schedule B.13(d)	Government Contracts
Schedule B.13(e)	Bids
Schedule B.13(g)	Audits
Schedule B.13(h)	Investigations and Disclosures
Schedule B.13(i)	Claims relating to Government Contracts
Schedule B.13(j)	Suspensions and Disbarments
Schedule B.13(k)	Teaming Agreements
Schedule B.13(m)	Sales, Commission and Similar Agreements
Schedule B.13(n)	Loss Contracts
Schedule B.14(a)	Tax Returns; Taxes
Schedule B.15	Officers and Consultants
Schedule B.16	Employee Plans and Benefit Arrangements
Schedule B.17	Labor Relations
Schedule B.18	Insurance Policies
Schedule B.19	Environmental, Health and Safety Matters
Schedule B.20(a)	Intellectual Property
Schedule B.20(b)	Software
Schedule B.20(d)	Infringements

Schedule B.21	Transactions with Affiliates	
Schedule B.22	10 Largest Suppliers, Sole Source Suppliers and 10 Largest Customers	
Schedule B.25	Warranties	
Schedule B.26	Receivables	
Schedule B.27	Order Backlog	
Schedule B.28	Inventories	
Schedule B.31	Organizational Conflicts of Interest	
Schedule B.33	Other Indebtedness	

## TRANSACTION AGREEMENT

This TRANSACTION AGREEMENT (together with the Exhibits, Schedules and Attachments hereto, this "Agreement"), dated as of October 21, 2003, is made and entered into by and among L-3 COMMUNICATIONS CORPORATION, a Delaware corporation ("Purchaser"), RAAH I, LLC, a Delaware limited liability company ("Seller"), and VERTEX AEROSPACE LLC, a Delaware limited liability company (the "Company"). Purchaser, Seller and the Company are sometimes individually referred to herein as a "Party" and collectively as the "Parties."

## W I T N E S S E T H:

WHEREAS, Seller owns all of the membership interests of the Company;

WHEREAS, the Parties desire to enter into this Agreement, and in connection therewith, Seller proposes to sell to Purchaser, and Purchaser proposes to purchase from Seller (the "Acquisition"), all of the membership interests of the Company; and

WHEREAS, in connection with the Acquisition the Parties desire to make certain representations and warranties to each other and to enter into certain agreements in connection therewith;

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants, agreements and conditions hereinafter set forth, and intending to be legally bound hereby, the Parties agree as follows:

ARTICLE I  
DEFINITIONS

Section 1.1 Definitions. Capitalized terms used in this Agreement shall have the meanings specified in Exhibit A or elsewhere in this Agreement.

ARTICLE II  
PURCHASE AND SALE

Section 2.1 Agreement to Purchase and Sell. Subject to the terms and conditions of this Agreement, at the Closing, Seller will sell and transfer to Purchaser, and Purchaser will purchase and acquire from Seller, all of the membership interests of the Company, free and clear of all Encumbrances.

Section 2.2 Purchase Price. Subject to adjustment in accordance with Section 2.5, the aggregate amount to be paid for all of the membership interests of the Company shall

be \$650,000,000 (the "Purchase Price").

Section 2.3 Payment of Purchase Price.

(a) On the Closing Date, Purchaser shall pay to Seller the Purchase Price.

(b) The payment required under this Section 2.3 shall be made in cash by wire transfer of immediately available funds to such bank accounts as shall be designated in writing by Seller (including such bank accounts specified in the pay-off letters referred to in Section 9.2(e)(viii)) at least three Business Days prior to the applicable payment date.

Section 2.4 Closing. The closing (the "Closing") of the Contemplated Transactions shall take place at the offices of Winston & Strawn LLP, 200 Park Avenue, New York, New York 10166, on December 1, 2003; provided, however, that if all of the conditions to Closing set forth in Article IX have not been satisfied (or waived by the party entitled to waive the condition) as of that date, the Closing shall take place on the second Business Day following the satisfaction or waiver (by the party entitled to waive the condition) of all conditions to the Closing set forth in Article IX, or at such other time and place as the parties to this Agreement may agree. The Closing shall be deemed to occur at 11:59 p.m. New York time on the Closing Date.

Section 2.5 Adjustment of Purchase Price.

(a) Promptly following the Closing Date, but in no event later than 90 days after the Closing Date, Purchaser shall, at its expense and to the extent requested with the assistance of Seller, prepare and submit to Seller a statement setting forth, in reasonable detail, the consolidated Net Assets of the Company and the Company Subsidiaries as of the close of business on the Closing Date (the "Proposed Final Net Asset Amount"). In the event Seller disputes the correctness of the Proposed Final Net Asset Amount, Seller shall notify Purchaser in writing of its objections within 30 days after receipt of Purchaser's calculation of the Proposed Final Net Asset Amount and shall set forth, in writing and in reasonable detail, each of the reasons for Seller's objections. If Seller fails to deliver such notice of objections within such time, Seller shall be deemed to have accepted Purchaser's calculation. Purchaser and Seller shall endeavor in good faith to resolve any disputed matters within 20 days after Purchaser's receipt of Seller's notice of objections. If Purchaser and Seller are unable to resolve the disputed matters, Purchaser and Seller shall select a nationally known independent accounting firm (which firm shall not be the then regular auditors of Purchaser, Seller or the Company) to resolve the matters in dispute (in a manner consistent with Section 2.5(b)), including the appropriate amount of interest, if any, due on the disputed amounts (determined in accordance with Section 2.5(c) or Section 2.5(d), as the case may be), and the determination of such firm in respect of the correctness of each matter remaining in dispute shall be conclusive and binding on Purchaser and Seller. The consolidated Net Assets of the Company and the Company Subsidiaries as of the close of business on the Closing Date, as finally determined pursuant to this Section 2.5(a) (whether by failure of Seller to deliver notice

2

of objection, by agreement of Purchaser and Seller or by determination of the independent accountants selected as set forth above), is referred to herein as the "Final Net Asset Amount."

(b) The Proposed Final Net Asset Amount and the Final Net Asset Amount shall be determined in accordance with GAAP and in a manner consistent with the accounting principles, policies, practices and methods utilized in the preparation of the Opening Balance Sheet, as disclosed in the notes to the Opening Balance Sheet.

(c) If the Final Net Asset Amount is greater than \$141,606,454, the excess shall be paid to Seller by Purchaser by wire transfer in immediately available funds to an account of Seller designated in writing within two Business Days of the date on which the Final Net Asset Amount is finally determined, together with simple interest thereon during the period commencing on the Closing Date and ending on the date of payment (the "Interest Period") at a rate equal to LIBOR during such Interest Period. Any payment due Seller under this Section 2.5(c) shall be made on or before the fifth Business Day following the date on which the Final Net Asset Amount is finally determined.

(d) If the Final Net Asset Amount is less than \$141,606,454, the deficiency shall be paid to Purchaser by Seller in immediately available funds to an account of Purchaser designated in writing within two Business Days of the date on which the Final Net Asset Amount is finally determined, together with simple interest thereon during the Interest Period at a rate equal to LIBOR during such Interest Period. Any payment due Purchaser under this Section 2.5(d) shall be made on or before the fifth Business Day following the date on which the Final Net Asset Amount is finally determined.

(e) Subject to any applicable privileges (including, without limitation, the attorney-client privilege and the work product privilege), Purchaser shall make available to Seller and, upon request, to the independent accountants selected pursuant to Section 2.5(a), the books, records, documents and work papers underlying the preparation of the statement of the Proposed Final Net Asset Amount. Subject to any applicable privileges (including without limitation, the attorney-client privilege and work product privilege), Seller shall make available to Purchaser and, upon request, to the independent accountants selected pursuant to Section 2.5(a), the books, records, documents and work papers created or prepared by or for Seller in connection with the review of the Proposed Final Net Asset Amount.

(f) The fees and expenses, if any, of the accounting firm selected to resolve any disputes between Purchaser and Seller in accordance with Section 2.5(a) shall be paid one-half by Purchaser and one-half by Seller.

3

#### ARTICLE III REPRESENTATIONS AND WARRANTIES OF SELLER AND THE COMPANY

Section 3.1 Representations and Warranties of Seller and the Company. Seller and the Company represent and warrant to Purchaser as set forth in Exhibit B.

#### ARTICLE IV REPRESENTATIONS AND WARRANTIES OF PURCHASER

Section 4.1 Representations and Warranties of Purchaser. Purchaser

represents and warrants to Seller and the Company as set forth in Exhibit C.

ARTICLE V  
COVENANTS AND AGREEMENTS OF SELLER AND THE COMPANY

Section 5.1 Conduct of Business by the Company.

(a) From the date hereof until the Closing Date, the Company shall and shall cause the Company Subsidiaries to, and Seller shall cause the Company and the Company Subsidiaries to, except as expressly permitted by this Agreement and except as otherwise consented to in writing by Purchaser:

(i) conduct its businesses in the ordinary course on a basis consistent with past practice;

(ii) use its commercially reasonable efforts to preserve intact the goodwill and business organization of the Company and each Company Subsidiary, keep the officers and employees of the Company and each Company Subsidiary available to Purchaser and preserve the relationships and goodwill of the Company and each Company Subsidiary with customers, distributors, suppliers, employees and others having business relations with the Company or any Company Subsidiary;

(iii) comply, in all material respects, with all Applicable Laws;

(iv) duly and timely file or cause to be filed all reports and returns required to be filed with any Governmental Entity and promptly pay or cause to be paid when due all Taxes, assessments and governmental charges, including interest and penalties levied or assessed, unless (A) diligently contested in good faith by appropriate proceedings and (B) an appropriate and adequate reserve is maintained with respect thereto and such reserve is included in the calculation of the Final Net Asset Amount;

4

(v) not consent to the admission or withdrawal of any member of the Company or any Company Subsidiary or grant any right, option or other commitment with respect to interests in the Company or any Company Subsidiary;

(vi) not dispose of or permit to lapse any rights to the use of any patent, trademark, trade name, service mark, license or copyright of the Company or any Company Subsidiary, including, without limitation, any of the Intellectual Property, or dispose of or disclose to any Person, any trade secret, formula, process, technology or know-how of the Company or any Company Subsidiary not heretofore a matter of public knowledge;

(vii) (1) except in the ordinary course of business consistent with past practice, not (A) sell or otherwise dispose of any assets except to customers of the Business, (B) create, incur or assume any Indebtedness, (C) grant, create, incur or suffer to exist any Encumbrances on the real or personal properties of the Company or any Company Subsidiary which did not exist on the date hereof other than Permitted Encumbrances, (D) incur any liability or obligation (absolute, accrued or contingent), (E) write-off any guaranteed checks, notes or accounts receivable or (F) cancel any debt or waive any claims or rights; or (2) make any commitment for any capital expenditure to be made on or after the Closing Date in excess of \$250,000 in the case of any single expenditure or \$1,500,000 in the case of all capital expenditures;

(viii) not increase, other than in the ordinary course of business consistent with past practice, the base compensation of, enter into or amend any new bonus or incentive agreement or arrangement with, or enter into or amend any severance, change of control or similar agreement or arrangement with, any employees, directors, managers, consultants or agents of the Company or any Company Subsidiary; provided, however, that entering into any severance, change of control or similar agreement or arrangement that is the sole obligation of Seller, and not the obligation of the Company or any Company Subsidiary, shall not require the consent of Purchaser;

(ix) not increase, other than in the ordinary course of business consistent with past practice, the benefits provided under any Employee Plans or Benefit Arrangements or establish, adopt, enter into or, except as required by Applicable Law, terminate or amend any Employee Plans or Benefit Arrangements or promise or commit to undertake to do so in the future;

(x) not pay, discharge, settle or satisfy any claim, liability or obligation (absolute, contingent or otherwise) other than the payment, discharge or satisfaction in the ordinary course of business consistent with past practice of claims, liabilities and obligations reflected or reserved against in the Opening

5

Balance Sheet, or incurred in the ordinary course of business

consistent with past practice;

(xi) maintain in full force and effect and in the same amounts policies of insurance comparable in amount and scope of coverage to that maintained as of the date of this Agreement by or on behalf of the Company and each Company Subsidiary;

(xii) continue to maintain its books and records in accordance with GAAP consistently applied, and on a basis consistent with the Company's past practice;

(xiii) not (A) enter into any Contract which is expected to result in a loss; or (B) enter into any Contract (or group of related Contracts with the same Person or such Person's Affiliates) involving payments to be made or received by or to Company in excess of \$10,000,000 per annum other than Contracts relating to Bids set forth on Schedule B.13(e) on substantially the same terms and conditions as the Bids;

(xiv) not make, enter into, amend or terminate any bid or proposal (or series of related bids or proposals) which if accepted would result in a Contract, nor make, enter into, amend or terminate any customer option (or series of related customer options), relating to a Contract that, in any case, (A) involves an amount in excess of \$10,000,000, or (B) is expected to result in a loss;

(xv) not declare, set aside or pay any non-cash dividends on or make any other non-cash distributions (whether in stock, equity securities or property) in respect of any membership interests or other equity securities of the Company, nor split, subdivide, combine or reclassify any membership interests or other equity securities of the Company, nor issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any membership interests or other equity securities of the Company;

(xvi) not make or rescind any material express or deemed election relating to Taxes of the Company or any Company Subsidiary, other than Income Taxes, nor settle or compromise any material claim, action, suit, litigation, proceeding, arbitration, investigation, audit or controversy relating to Taxes; notwithstanding the foregoing, no election will be made by or on behalf of the Company or any Company Subsidiary to be taxed as a corporation for purposes of any Income Tax;

(xvii) not release, settle or compromise any claim, action, suit, litigation, proceeding, arbitration, investigation or controversy involving any current or former officer, director, stockholder, consultant or employee Company; or

6

(xviii) not agree in writing or otherwise to take any of the actions described in clauses (i) through (xvii) (inclusive).

(b) In connection with the continued operation of the Business between the date hereof and the Closing Date, Seller and the Company will confer in good faith on a regular and frequent basis with Purchaser regarding operational matters and the general status of ongoing operations of the Company and each Company Subsidiary.

(c) Except as otherwise expressly permitted by this Agreement, between the date of this Agreement and the Closing Date, Seller and the Company will not, and will cause each Company Subsidiary not to, without the prior consent of Purchaser, take any affirmative action, or fail to take any reasonable action within their or its control, as a result of which any of the changes or events listed in Section B.10 of Exhibit B is likely to occur.

Section 5.2 Inspection and Access to Information. From the date hereof to the Closing Date or until this Agreement is terminated as provided in Article X, the Company shall and shall cause each of the Company Subsidiaries to, and Seller shall cause the Company and each of the Company Subsidiaries and Representatives to, provide Purchaser and its accountants, counsel, advisors, employee benefits and environmental consultants and other authorized Representatives full access, during reasonable hours and under reasonable circumstances, to any and all of its premises, employees (including executive officers), properties, contracts, commitments, books, records and other information (including Tax Returns filed and those in preparation), promptly upon request therefor, any and all financial, technical and operating data and other information pertaining to the Company, the Company Subsidiaries and the Business, and otherwise fully cooperate with the conduct of due diligence by Purchaser and its Representatives.

Section 5.3 No Solicitation of Transactions The Company and Seller will not, and Seller shall cause the Company and the Company Subsidiaries not to, directly or indirectly, through any officer, member or agent of any of them or otherwise, initiate, solicit or encourage (including by way of furnishing non-public information or assistance), or enter into negotiations of any type, directly or indirectly, or enter into a confidentiality agreement, letter of intent or purchase agreement, merger agreement or other similar agreement with any Person other than Purchaser with respect to the purchase or sale of any membership interests of the Company or any Company Subsidiary, or a merger, consolidation, business combination, sale of all or any substantial portion of the assets of the Company or any Company Subsidiary, or the liquidation or

similar extraordinary transaction with respect to the Company or any Company Subsidiary.

Section 5.4 Notices of Certain Events. Promptly after any of Seller, the Company or any Company Subsidiary obtains knowledge of the following, Seller shall notify Purchaser in writing of:

- (a) any actions, suits, claims, investigations or proceedings commenced or, to its knowledge, threatened against, relating to or involving or otherwise affecting the Company or any Company Subsidiary
- (i) that, had they been commenced or threatened

7

prior to the date of this Agreement, would have been required to have been disclosed in order to make the representations and warranties in Exhibit B true and complete, or (ii) that relate to the consummation of the Contemplated Transactions; and

- (b) any fact or circumstance which would make any representation or warranty in Exhibit B untrue or inaccurate in any material respect as of the Closing Date or as of the date of this Agreement.

Section 5.5 Supplements to Schedules. From time to time up to the Closing Date, Seller will promptly (a) supplement or amend the Schedules which it has delivered pursuant to this Agreement with respect to any matter occurring after the date hereof which, if existing or occurring at or prior to the date hereof, would have been required to be set forth or described in such Schedules or which is necessary to correct any information in such Schedules which has been rendered inaccurate thereby and (b) provide notice to Purchaser with respect to any matter first existing or occurring on or prior to the date hereof which was omitted from the Schedules, but required to be set forth or described therein, or is necessary to correct any information therein. No supplement or amendment to any Schedule, or notice regarding any Schedule, or notice pursuant to Section 5.4, will have any effect for the purpose of determining satisfaction of the conditions set forth in Section 9.2.

Section 5.6 Insurance. The Company shall, and shall cause each Company Subsidiary to, in good faith cooperate with Purchaser and take all actions reasonably requested by Purchaser that are necessary or desirable to permit Purchaser to have available to it following the Closing the benefits (whether direct or indirect) of the insurance policies maintained by or on behalf of the Company and each Company Subsidiary that are currently in force.

Section 5.7 Novation. Seller hereby agrees to cooperate and to provide such assistance to Purchaser as may be necessary in the event that a novation of any Contract is required by any Governmental Entity at any time following the Closing Date.

Section 5.8 Accounts Payable. Between the date of this Agreement and the Closing Date, Seller shall cause the Company and the Company Subsidiaries to, and the Company shall cause the Company Subsidiaries to, satisfy all accounts payable of the Company and the Company Subsidiaries in the ordinary course of business consistent with past practice.

Section 5.9 Dealings with Affiliates. As of the Closing Date, Seller shall cause all Intercompany Agreements (other than those between or among the Company and any of the Company Subsidiaries) to be terminated and of no force and effect, and there shall be no unsatisfied obligations or liabilities thereunder, pursuant to termination agreements in form and substance reasonably satisfactory to Purchaser.

Section 5.10 No Solicitation of Employees. During the period beginning on the Closing Date and ending on the third anniversary of the Closing Date (the "Covenant Period"), Seller will not, will cause its Affiliates to not, and will not authorize or induce any third party to, directly or indirectly, employ, engage as a consultant or solicit for employment or consulting, on

8

its own behalf or on behalf of any Affiliate or third party, or otherwise encourage the resignation of, any of the employees or consultants of the Company or any Company Subsidiary or any Person who was an employee or consultant of the Company or any Company Subsidiary at any time during the Covenant Period.

Section 5.11 Material Leases. Seller and the Company will use their reasonable best efforts to obtain an acknowledgment from (1) the landlord of the Company's Madison, Mississippi headquarters facility and (2) the landlord of the Newport News, Virginia headquarters facility of Flight International Aviation LLC that (a) there are no defaults or events of default by the lessee under the applicable leases, (b) no consent or approval of such landlord is required by reason of the Contemplated Transactions, and (c) neither the execution, delivery or performance of this Agreement or any other Transaction Document nor the consummation of any of the transactions contemplated hereby or thereby will result in a default or event of default under, or create any right on the part of such landlord under, or result in the loss of any benefits under, or result in the termination of, any such lease.

#### ARTICLE VI COVENANTS AND AGREEMENTS OF PURCHASER

Section 6.1 Confidentiality. Purchaser agrees that all information provided or otherwise made available in connection with the Contemplated Transactions to Purchaser or any of its respective Representatives shall be

treated as if provided under the Confidentiality Agreement.

Section 6.2 Employees. The Company agrees to provide Purchaser such information as Purchaser may reasonably request with respect to compensation, service, and other information relating to the employment of the Company Employees. During the period beginning immediately after the Closing and ending on the first anniversary of the Closing Date, Purchaser shall cause the Company to continue to provide to each Company Employee (i) salary, and (ii) employee benefits and plans, in each case, in amounts and on terms substantially comparable in the aggregate to those provided by the Company to the Company Employees on the date hereof; provided, however, that Purchaser shall not be required to provide any Company Employees with (A) any equity-based or equity linked plans (or their equivalent, such as, without limitation, phantom stock plans or stock appreciation rights), or (B) any incentive bonus programs, executive compensation plans or cash incentive plans based on the achievement of financial or other performance targets. Nothing in this Agreement, express or implied, confers upon any Company Employee any right to continued employment with the Company or any Company Subsidiary for a specified period of time or confers any obligation upon Purchaser, the Company or any Company Subsidiary to provide such right.

#### ARTICLE VII COVENANTS OF THE PARTIES

Section 7.1 Further Assurances. Subject to the terms and conditions of this

9

Agreement, each Party shall use reasonable commercial efforts to take, or cause to be taken, all actions and to do, or cause to be done, all things necessary or desirable under Applicable Law to consummate the Contemplated Transactions. Each of the Parties shall execute and deliver such other documents, certificates, agreements and other writings and take such other actions as may be necessary or desirable to consummate or implement the Contemplated Transactions. Except as otherwise expressly set forth in this Agreement, nothing in this Section 7.1 shall require Purchaser to make any payments in order to obtain any consents or approvals necessary or desirable in connection with the consummation of the Contemplated Transactions.

Section 7.2 Certain Filings; Consents. Purchaser and Seller shall cooperate with one another (i) in determining whether any action by or in respect of, or filing with, any Governmental Entity is required, or any actions, consents, approvals or waivers are required to be obtained from third parties, in connection with the consummation of the Contemplated Transactions and (ii) subject to the terms and conditions of this Agreement, in taking such actions or making any such filings, furnishing information required in connection therewith and seeking timely to obtain any such actions, consents, approvals or waivers.

Section 7.3 Antitrust Laws. Purchaser and Seller shall take all actions necessary or appropriate to make any filings required by the Hart Scott Rodino Antitrust Improvement Act of 1976, as amended (the "HSR Act"), or any other Antitrust Laws, in respect of the Contemplated Transactions, including, without limitation, complying as promptly as practicable with any requests for additional information; provided, however, that, notwithstanding anything in this Agreement or any other agreement to which any of the Parties are parties or by which they are bound, in no event shall Purchaser or any of its Affiliates be required to agree or commit to divest, hold separate, offer for sale, abandon, limit its operation of or take similar action with respect to any assets (tangible or intangible) or any business interests in connection with or as a condition to receiving the consent or approval of any Governmental Entity (including, without limitation, under the HSR Act).

Section 7.4 Public Announcements. Prior to the Closing, the Parties shall consult with each other before issuing any press release or making any public statement with respect to this Agreement or the Contemplated Transactions and, except as may be required by Applicable Law or any listing agreement with any national or international securities exchange, no Party shall issue any such press release or make any such public statement without the prior written consent of the other Parties. The parties agree that the initial press release to be issued with respect to the Confidential Transactions shall be issued jointly by the Company and Purchaser immediately after the execution of this Agreement. Notwithstanding anything to the contrary set forth herein or in any other agreement to which the Parties are parties or by which they are bound (including, without limitation, the Confidentiality Agreement), the obligations of confidentiality contained herein and therein, as they relate to the Contemplated Transactions, shall not apply to the tax structure or tax treatment of the Contemplated Transactions, and each Party (and any employee, representative, or agent or any Party) may disclose to any and all Persons, without limitation of any kind, the tax structure and tax treatment of the transactions contemplated by this Agreement and all materials of any kind (including options or other tax analyses) that are provided to such

10

Party relating to such tax treatment and tax structure; provided, however, that such disclosure shall not include information for which nondisclosure is reasonably necessary in order to comply with applicable securities laws.

#### ARTICLE VIII TAX MATTERS

Section 8.1 Certain Taxes. All transfer, documentary, sales, use,

stamp, registration and other such Taxes and fees (including any penalties and interest) incurred in connection with the Contemplated Transactions shall be paid one-half by Seller and one-half by Purchaser when due, and each Party will, at its own expense, file all necessary Tax Returns and other documentation with respect to all such transfer, documentary, sales, use, stamp, registration and other Taxes and fees, and, if required by Applicable Law, each other Party will, and will cause its Affiliates to, join in the execution of any such Tax Returns and other documentation.

#### Section 8.2 Allocation of Transaction Consideration.

(a) The Purchase Price shall be allocated among the assets of the Company and each Company Subsidiary in accordance with a schedule to be mutually agreed upon by Seller and Purchaser prior to the Closing. Purchaser and Seller will file all Tax Returns consistent with the agreed upon allocation of the Purchase Price. For U.S. federal Income Tax purposes and for purposes of all other Income Taxes for which the Company is treated as a disregarded or tax transparent entity, Purchaser and Seller agree to treat the sale of the Company as the sale of assets by the Company and each of the Company Subsidiaries.

(b) In the event that Seller and Purchaser fail to mutually agree upon the allocation of the Purchase Price prior to the Closing, Seller and Purchaser shall select a nationally known independent accounting firm (which firm shall not be the then regular auditors of Purchaser, Seller or the Company) to resolve the matters in dispute, which determination shall be final and binding on the Parties. The fees and expenses, if any, of such accounting firm shall be paid one-half by Seller and one-half by Purchaser.

#### ARTICLE IX CONDITIONS TO CLOSING

Section 9.1 Conditions to Each Party's Obligations. The respective obligations of each Party to effect the Contemplated Transactions are subject to the fulfillment at or prior to the Closing of each of the following conditions:

(a) Injunction. There will be no effective injunction, writ or preliminary restraining order or any order of any nature issued by, or any Applicable Law of, a Governmental Entity of competent jurisdiction to the effect that the Acquisition may not be consummated as provided in this Agreement.

11

(b) Antitrust Approvals. The waiting period applicable to the consummation of the Acquisition under the HSR Act shall have expired or been terminated.

Section 9.2 Conditions to Obligations of Purchaser. The obligations of Purchaser to consummate the transactions contemplated by this Agreement are subject to the fulfillment at or prior to the Closing of each of the following additional conditions:

(a) Representations and Warranties. The representations and warranties of Seller set forth in Exhibit B shall have been true and correct as of the date hereof and shall be true and correct as of the Closing Date as though made on and as of the Closing Date except for those representations and warranties which refer to facts existing at a specific date, which shall be true and correct as of such date, in each case (other than in the case of those representations and warranties contained in Section B.2, Section B.4(b) and Section B.10(a) of Exhibit B) subject to the standard set forth in the introductory paragraph of Exhibit B.

(b) Performance of Obligations of the Company and Seller. Each of the Company and Seller shall have performed in all material respects all covenants and agreements required to be performed by each of them under this Agreement on or prior to the Closing Date.

(c) No Company Material Adverse Effect. Between the date of this Agreement and the Closing Date, there shall have been no Company Material Adverse Effect.

(d) Closing Date Indebtedness; Release of Encumbrances. The Closing Date Indebtedness shall have been repaid in full by disbursement of cash on hand of the Company and a portion of the Purchase Price or otherwise, and Seller shall have delivered to Purchaser evidence satisfactory to Purchaser that the Closing Date Indebtedness has been paid in full and that all Encumbrances affecting any property of the Company and the Company Subsidiaries or any of the membership interests of the Company or any Company Subsidiary have been released.

(e) Seller Ancillary Documents. Seller shall have executed and delivered, or caused to be executed and delivered, to Purchaser the following:

(i) a certificate of an authorized officer of Seller as to compliance with the conditions set forth in Sections 9.2(a), 9.2(b), 9.2(c) and 9.2(d);

(ii) a written consent for the admission of Purchaser, and the simultaneous withdrawal of Seller, as a member of the Company;

(iii) a legal opinion of counsel to Seller as to the matters set forth in Attachment I;

12

(iv) the record books of the Company and each Company Subsidiary relating to the organization of such entity and the capital account balances of its members;

(v) a certificate dated the Closing Date and sworn under penalties of perjury, setting forth Seller's name, address and federal tax identification number and stating that it is not a "foreign person" within the meaning of Section 1445 of the Code, such certificate to be in the form set forth in the Treasury Regulations;

(vi) resignations of the officers of the Company and each Company Subsidiary, as requested by Purchaser, effective as of the Closing Date;

(vii) a certified copy of resolutions adopted by the Board of Representatives of Seller authorizing the execution and delivery of this Agreement and the consummation of the Contemplated Transactions; and

(viii) pay-off letters from the Company's lenders regarding the Closing Date Indebtedness in form and substance reasonably satisfactory to Purchaser.

Section 9.3 Conditions to Obligations of Seller. The obligations of Seller to consummate the transactions contemplated by this Agreement will be subject to the fulfillment at or prior to the Closing of each of the following additional conditions:

(a) Representations and Warranties. The representations and warranties of Purchaser set forth in Exhibit C shall have been true and correct as of the date hereof and shall be true and correct as of the Closing Date as though made on and as of the Closing Date except for those representations and warranties which refer to facts existing at a specific date, which shall be true and correct as of such date, in each case subject to the standard set forth in the introductory paragraph of Exhibit C;

(b) Performance of Obligations by Purchaser. Purchaser shall have performed in all material respects all covenants and agreements required to be performed by it under this Agreement on or prior to the Closing Date;

(c) Purchaser Ancillary Documents. Purchaser shall have delivered, or caused to be delivered, to Seller the following:

(i) a certificate of an authorized officer as to compliance with the conditions set forth in Sections 9.3(a) and 9.3(b);

(ii) a legal opinion of counsel to Purchaser as to the matters set forth in Attachment II; and

(iii) a certified copy of resolutions adopted by the Board of Directors of Purchaser and any L-3 Company to which this Agreement has been assigned in accordance with the provisions of Section 12.3, authorizing the execution and

13

delivery of this Agreement and the consummation of the Contemplated Transactions.

#### ARTICLE X TERMINATION

Section 10.1 Termination. This Agreement may be terminated at any time at or prior to the Closing (the "Termination Date"):

(a) in writing by mutual consent of the Parties;

(b) by written notice from Purchaser to Seller, if any of the conditions set forth in Sections 9.1 or 9.2 shall have become incapable of fulfillment, and shall not have been waived by Purchaser, unless such failure results from a breach by Purchaser of this Agreement;

(c) by written notice from Seller to Purchaser, if any of the conditions set forth in Sections 9.1 or 9.3 shall have become incapable of fulfillment, and shall not have been waived by Seller, unless such failure results from a breach by Seller of this Agreement; or

(d) by written notice by Seller to Purchaser or Purchaser to Seller, as the case may be, if the Closing has not occurred on or prior to December 15, 2003; provided, however, that the right to terminate this Agreement under this Section 10.1(d) shall not be available to any party whose failure to fulfill any obligations under this Agreement shall have been the cause of or resulted in the failure of the Closing to occur on or prior to such date.

Section 10.2 Effect of Termination. In the event of termination of this

Agreement pursuant to this Article X, (a) this Agreement will forthwith become void and of no further force or effect, except that the provisions of Sections 6.1 and 7.4, Article XII and this Section 10.2, shall survive the termination of this Agreement, and (b) such termination shall be without liability of any Party (or any member, partner, officer, director, employee, representative or stockholder of any Party) to any other Party; provided, however, if the Contemplated Transactions fail to close as a result of a breach of the provisions of any of the Transaction Documents, the breaching Party shall be fully liable for any and all damages or losses incurred or suffered by the other Parties as a result of such breach. The rights and remedies under this Article X shall be cumulative and not exclusive of any rights or remedies provided under Applicable Law.

ARTICLE XI  
NON-SURVIVAL

Section 11.1 Non-Survival. None of the representations and warranties of the Parties

14

contained herein or in any certificate or other writing delivered pursuant to this Agreement shall survive the Closing; provided, however, that the representations and warranties set forth in Section B.4(b) of Exhibit B shall survive the Closing for a period of one year from the Closing Date.

ARTICLE XII  
MISCELLANEOUS PROVISIONS

Section 12.1 Notices. All notices, communications and deliveries under this Agreement shall be made in writing signed by or on behalf of the Party making the same, shall specify the Section under this Agreement pursuant to which it is given or being made, and shall be delivered personally or by telecopy transmission or sent by registered or certified mail (return receipt requested) or by overnight delivery (with evidence of delivery and postage and other fees prepaid) as follows:

To Purchaser (or the Company following Closing):	L-3 Communications Corporation 600 Third Avenue New York, New York 10166 Attention: Christopher C. Cambria, Esq. Facsimile: (212) 805-5494
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With a copy to:	Proskauer Rose LLP 1585 Broadway New York, New York 10036-8299 Attention: James P. Gerkis, Esq. Facsimile: (212) 969-2900
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To Seller (or the Company prior to the Closing):	RAAH I, LLC c/o Veritas Capital Management, L.L.C. 660 Madison Avenue New York, New York 10166 Attention: Robert B. McKeon Facsimile: (212) 688-9411
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With a copy to:	Winston & Strawn LLP 200 Park Avenue New York, New York 10166 Attention: Benjamin M. Polk, Esq. Facsimile: (212) 294-4700
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15

or to such other representative or at such other address of a party as such party may furnish to the other parties in writing. Any such notice, communication or delivery will be deemed given or made upon receipt or refusal of receipt.

Section 12.2 Schedules and Exhibits. The Schedules and Exhibits to this Agreement are hereby incorporated into this Agreement and are hereby made a part of this Agreement as if set out in full in this Agreement.

Section 12.3 Assignment; Successors in Interest. The provisions of this Agreement and the Transaction Documents shall be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided that before the Closing Date no Party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement or any Transaction Document without the prior written consent of the other Party; and provided further, that no assignment, delegation or other transfer of rights under this Agreement shall relieve the assignor of any liability or obligations hereunder. Notwithstanding the foregoing, Purchaser may assign its rights hereunder to any L-3 Company without the prior written consent of any other Party, provided that (a) any such assignee expressly assumes, in a writing addressed to Seller, to be bound by Purchaser's obligations hereunder and (b) any such assignment shall not materially delay, prevent or, in any case, delay beyond the Termination Date, as provided in Section 10.1(d), the satisfaction of any of the conditions to the obligation of Purchaser to consummate the Closing required under Sections 9.1 and 9.2 hereof. No such assignment shall limit or affect Purchaser's obligations hereunder. Any attempted assignment in violation of this Section 12.3 shall be void.

Section 12.4 Number; Gender. Whenever the context so requires, the singular number will include the plural and the plural will include the singular, and the gender of any pronoun will include the other genders.

Section 12.5 Interpretation. The article and section headings contained in this Agreement are for convenience of reference only and shall not affect the meaning or interpretation of this Agreement. As used in this Agreement, any reference to the masculine, feminine or neuter gender shall include all genders, the plural shall include the singular, and singular shall include the plural. Unless the context otherwise requires, the term "party" when used herein means a party hereto. References herein to a party or other Person include their respective successors and assigns. The words "include," "includes" and "including" when used herein shall be deemed to be followed by the phrase "without limitation". Unless the context otherwise requires, references herein to Articles, Sections, Schedules and Attachments shall be deemed references to Articles and Sections of, and Schedules and Attachments to, this Agreement. Unless the context otherwise requires, the words "hereof," "hereby" and "herein" and words of similar meaning when used in this Agreement refer to this Agreement in its entirety and not to any particular Article, Section or provision hereof. With regard to each and every term and condition of this Agreement, the parties understand and agree that the same have or has been mutually negotiated, prepared and drafted, and that if at any time the parties desire or are required to interpret or construe any such term or condition or any agreement or instrument subject thereto, no consideration shall be given to the issue of which party actually prepared,

16

drafted or requested any term or condition of this Agreement.

Section 12.6 Amendment; Waiver. This Agreement may not be amended, modified or supplemented except by written agreement of the Parties. Any provision of this Agreement may be waived prior to the Closing Date if, and only if, such amendment or waiver is in writing and signed by the Party against whom the waiver is to be effective.

Section 12.7 Controlling Law. This Agreement will be governed by and construed and enforced in accordance with the internal laws of the State of New York without reference to its choice of law rules.

Section 12.8 Consent to Jurisdiction, Etc. Each of the Parties hereby irrevocably consents and agrees that any action, suit or proceeding arising in connection with any disagreement, dispute, controversy or claim arising out of or relating to this Agreement or any Transaction Document (for purposes of this Section, a "Legal Dispute") shall be brought only to the exclusive jurisdiction of the courts of the State of New York located in the City of New York or the federal courts located in the Southern District of New York. The Parties agree that, after a Legal Dispute is before a court as specified in this Section 12.8 and during the pendency of such Legal Dispute before such court, all actions, suits or proceedings with respect to such Legal Dispute or any other Legal Dispute, including, without limitation, any counterclaim, cross-claim or interpleader, shall be subject to the exclusive jurisdiction of such court. Each of the Parties hereby waives, and agrees not to assert, as a defense in any legal dispute, that it is not subject thereto or that such action, suit or proceeding may not be brought or is not maintainable in such court or that its property is exempt or immune from execution, that the action, suit or proceeding is brought in an inconvenient forum or that the venue of the action, suit or proceeding is improper. Each Party hereto agrees that a final judgment in any action, suit or proceeding described in this Section 12.8 after the expiration of any period permitted for appeal and subject to any stay during appeal shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by Applicable Law.

Section 12.9 Waiver of Jury Trial. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY AGREES TO WAIVE ITS RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY DEALINGS BETWEEN THEM RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT. The scope of this waiver is intended to be all-encompassing of all Legal Disputes (as defined in Section 12.8) that may be filed in any court and that relate to the subject matter of the Contemplated Transactions, including contract claims, tort claims, breach of duty claims and all other common law and statutory claims. Each Party hereby acknowledges that this waiver is a material inducement to enter into a business relationship, that each has already relied on this waiver in entering into this Agreement, and that each will continue to rely on this waiver in their related future dealings. Each Party further warrants and represents that it has reviewed this waiver with its legal counsel and that it knowingly and voluntarily waives its jury trial rights following consultation with legal counsel. THIS WAIVER IS IRREVOCABLE, MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING (OTHER THAN BY A MUTUAL WRITTEN WAIVER

17

SPECIFICALLY REFERRING TO THIS SECTION 12.9 AND EXECUTED BY EACH OF THE PARTIES), AND THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THE CONTEMPLATED TRANSACTIONS. In the event of litigation, this Agreement may be filed as a written consent to a trial by the court.

Section 12.10 Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction will, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this Agreement, and any such prohibition or unenforceability in any jurisdiction will not invalidate or

render unenforceable such provision in any other jurisdiction. To the extent permitted by Applicable Law, the Parties waive any provision of Applicable Law which renders any such provision prohibited or unenforceable in any respect.

Section 12.11 Counterparts; Effectiveness. This Agreement may be executed in two or more counterparts, each of which will be deemed an original with the same effect as if the signatures hereto and thereto were upon the same instrument. This Agreement and each of the other Transaction Documents shall become effective when each Party hereto or thereto, as the case may be, shall have received a counterpart thereof signed by the other Parties hereto or thereto, as the case may be.

Section 12.12 Enforcement of Certain Rights. Nothing expressed or implied in this Agreement is intended, or will be construed, to confer upon or give any Person other than the Parties, and their successors or permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement, or result in such Person being deemed a third party beneficiary of this Agreement.

Section 12.13 Waiver. Any agreement on the part of a Party to any extension or waiver of any provision of this Agreement will be valid only if set forth in an instrument in writing signed on behalf of such Party. A waiver by a Party of the performance of any covenant, agreement, obligation, condition, representation or warranty will not be construed as a waiver of any other covenant, agreement, obligation, condition, representation or warranty. A waiver by any Party of the performance of any act will not constitute a waiver of the performance of any other act or an identical act required to be performed at a later time.

Section 12.14 Integration. This Agreement, the other Transaction Documents and the Confidentiality Agreement supersede all prior negotiations, agreements and understandings among the Parties with respect to the subject matter of this Agreement and constitutes the entire agreement between the Parties.

Section 12.15 Cooperation Following the Closing. Following the Closing, each of the Parties shall deliver to the others such further information and documents and shall execute and deliver to the others such further instruments and agreements as the other Party shall reasonably request to consummate or confirm the Contemplated Transactions, to accomplish the purpose of

18

this Agreement or to assure to the other Party the benefits of this Agreement and the other Transaction Documents.

Section 12.16 Transaction Costs. Except as otherwise expressly provided herein, (a) Purchaser will pay its own fees, costs and expenses incurred in connection with this Agreement and the Contemplated Transactions, including, without limitation, the fees, costs and expenses of its financial advisors, accountants and counsel and the HSR Act filing fees and (b) the Company shall pay one-half of the fees, costs and expenses of Seller and the Company, up to a maximum aggregate amount of \$3,250,000, incurred in connection with this Agreement and the Contemplated Transactions and the 2003 Form S-1 preparation (including, without limitation, the fees, costs and expenses of their financial advisors, including Credit Suisse First Boston LLC, accountants, counsel and financial printers), and Seller shall pay the balance of such fees, costs and expenses.

Section 12.17 Post-Closing Confidentiality. From and after the Closing, Seller will, and will cause its Affiliates to, hold in strict confidence, and will not use to the detriment of Purchaser or any of its Affiliates, all confidential and proprietary information with respect to the Company and the Company Subsidiaries.

Section 12.18 Government Audit Assistance. Seller and its Affiliates shall furnish Purchaser with such assistance as may be reasonably requested by Purchaser in Government Contract audits, but only to the extent Seller and its Affiliates have information that is not readily available to the Company and the Company Subsidiaries.

[Signature pages follow]

19

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed, as of the date first above written.

L-3 COMMUNICATIONS CORPORATION

By: \_\_\_\_\_  
Name: Christopher C. Cambria  
Title: Senior Vice President

RAAH I, LLC

By: \_\_\_\_\_  
Name: Robert B. McKeon  
Title: Authorized Signatory

VERTEX AEROSPACE LLC

By: RAAH I, LLC, as Manager and sole Member

By: \_\_\_\_\_  
Name: Robert B. McKeon  
Title: Authorized Signatory

20

EXHIBIT A  
DEFINED TERMS

"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," when used with respect to any specified Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "Controlling" and "Controlled" have meanings correlative to the foregoing. In the case of Purchaser, "Affiliate" means L-3 Communications Holdings, Inc. and its Subsidiaries.

"Applicable Law" means, with respect to any Person, any domestic or foreign, federal, state or local statute, law, ordinance, rule, administrative interpretation, regulation, order, writ, injunction, decree or other requirement of any Governmental Entity applicable to such Person or any of its properties, assets, officers, directors, employees, managers, consultants or agents (in connection with such officer's, director's, employee's, manager's, consultant's or agent's activities on behalf of such Person).

"Benefit Arrangements" means all employment agreements and arrangements, including, without limitation, all fringe benefit plans, bonus, severance, separation, holiday pay, paid time off, profit sharing, incentive compensation, cafeteria plans, seniority, and other policies, practices, programs, agreements or statements of terms and conditions (whether created by contractual arrangement or under or by virtue of Applicable Law) providing employee or executive compensation or benefits to managers, employees or members or former employees, managers or members of the Company or any Company Subsidiary, or any of their beneficiaries or dependents, maintained by or contributed to by the Company or any Company Subsidiary since the Formation Date, whether or not created under or governed by the laws of the United States, any state thereof or any foreign jurisdiction, other than an Employee Plan.

"Bid" means any quotation, bid or proposal made by the Company or any of its Affiliates that if accepted or awarded to the Company or its Affiliates would lead to a Contract with any Person for the sale of products or services by the Company or its Affiliates.

"Business" means the business of the Company and each Company Subsidiary as it has been or may be conducted on or before the Closing Date.

"Business Day" means any day except Saturday, Sunday or any day on which banks in New York, NY are authorized or required by law to close.

"Closing Date" means the date on which the Closing occurs.

"Closing Date Indebtedness" means all Indebtedness of the Company and each Company Subsidiary as of the Closing.

A-1

"Code" means the Internal Revenue Code of 1986, as amended and the regulations thereunder.

"Company Employee" means each individual who works primarily or exclusively for the Business and who, on the Closing Date, is actively employed by the Company or by any Company Subsidiary, including any employee who is on vacation leave or jury duty, or on other authorized leave of absence (other than long-term disability), family or workers' compensation leave, or military leave

as of the Closing Date, whether paid or unpaid; provided, however, that the term Company Employee shall exclude any other inactive or former employee, including any individual who (a) is on long-term disability leave or unauthorized leave of absence, layoff with or without recall rights at the Closing Date or (b) has been terminated or has terminated his or her employment or retired before the Closing Date.

"Company Material Adverse Effect" means any circumstance, change or effect that, either individually or in the aggregate with all other circumstances, changes or effects, (a) has or is reasonably likely to have a material adverse effect on the business, assets, financial condition or results of operations of the Business taken as a whole, but excluding (i) effects or changes that are generally applicable to the industries and markets in which the Business operates or (ii) changes in the United States or world financial markets or general economic conditions, or (b) would have a material adverse effect on the ability of Seller and the Company to perform their obligations under this Agreement or the ability of Seller and the Company to consummate the Contemplated Transactions.

"Company Subsidiaries" means Flight International Aviation LLC, a Delaware limited liability company, Flight Capital LLC, a Delaware limited liability company, and Vector International Aviation LLC, a Delaware limited liability company.

"Confidentiality Agreement" means the letter agreement dated October 13, 2003 by and between The Veritas Capital Fund, L.P. and L-3 Communications Corporation.

"Contemplated Transactions" means the transactions contemplated by this Agreement and the other Transaction Documents.

"Contracts" means all contracts, agreements, leases (including leases of real property), licenses, commitments, sales and purchase orders, and other undertakings of any kind, whether written or oral.

"Employee Plans" means, collectively, each "employee benefit plan" as defined in Section 3(3) of ERISA, maintained or contributed to by the Company or any Company Subsidiary since the Formation Date, or any similar plans governed by the laws of a jurisdiction outside the United States, which provides or provided benefits to managers, employees or members or former employees, managers or members of the Company or any Company Subsidiary or their dependents or beneficiaries.

A-2

"Encumbrances" means all mortgages, liens, pledges, security interests, rights of first refusal and other similar rights, voting trusts or agreements, charges, claims, easements, rights of way, leases, subleases, options, restrictions, encumbrances and infringements of any nature whatsoever, including patent, copyright, trade secret, trademark and other intellectual property infringement.

"Environmental Laws" means any and all federal, state, local, provincial and foreign statutes, laws, regulations, ordinances, injunctions, judicial decisions, permits, or agreements with any Governmental Entity or other third party which relate to protection of the environment, pollution control, product registration, the protection or reclamation of natural resources, or which impose liability for, or standards of conduct concerning, the manufacture, processing, generation, distribution, use, treatment, storage, disposal, discharge, release, emission, cleanup, transport or handling of Hazardous Materials, including the Resource Conservation and Recovery Act of 1976, as amended, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), the Superfund Amendments and Reauthorization Act of 1984, as amended, the Toxic Substances Control Act, as amended, any other so-called "Superfund" or "Superlien" laws, and the Occupational Safety and Health Act of 1970, as amended, to the extent it relates to the handling of and exposure to hazardous or toxic chemicals.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

"ERISA Affiliate Plan" means each employee benefit plan as defined in Section 3(3) of ERISA, other than an Employee Plan, sponsored or maintained or required to be sponsored or maintained at any time within the last six years by any Person (whether incorporated or unincorporated), that together with the Company or any Company Subsidiary would be deemed a "single employer" within the meaning of Section 414 of the Code since the Formation Date (including any predecessor to the Company) (an "ERISA Affiliate"), or to which such ERISA Affiliate makes or has made, or has or has had an obligation to make, contributions at any time.

"Eurodollar Business Day" means any Business Day on which commercial banks are open for international business (including dealings in dollar deposits) in London.

"Formation Date" means June 27, 2001, the date of the formation of the Company.

"GAAP" means United States Generally Accepted Accounting Principles as in effect on the date of the Agreement.

"Government Contract" means any Contract between the Company and any Governmental Entity.

"Governmental Entity" means any foreign, domestic, federal, territorial, state or local governmental authority, quasi-governmental

authority, instrumentality, court, government or self-regulatory organization, commission, tribunal, arbitrator or arbitral authority, or organization

A-3

or any regulatory, administrative or other agency, or any political or other subdivision, department or branch of any of the foregoing.

"Hazardous Materials" means (i) substances defined as "hazardous substances" or "hazardous waste" pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or the Resource Conservation and Recovery Act of 1976, as amended, (ii) substances defined as "hazardous substances" or "hazardous waste" in the regulations adopted pursuant to any of said laws, (iii) substances defined as "toxic substances" in the Toxic Substances Control Act, as amended, and (iv) petroleum, petroleum derivatives, petroleum products, asbestos and asbestos-containing materials and any other substances or materials as regulated pursuant to Environmental Laws.

"Income Tax" means any Tax imposed on or measured by income, gross receipts, profits or gains, including any minimum or add-on minimum Tax.

"Indebtedness" means, as to any Person: (a) indebtedness created, issued or incurred by such Person for borrowed money (whether by loan or the issuance and sale of securities or otherwise), including without limitation any interest, prepayment penalties, expenses or fees accruing thereon or payable with respect thereto; (b) any obligations of such Person under any derivative agreements or any other similar agreements (including, without limitation, interest-rate, exchange-rate, commodity and equity-linked agreements), including breakage costs; and (c) Indebtedness of others guaranteed by such Person; provided, however, Indebtedness of the Company also includes, without limitation, the indebtedness in respect of leasehold improvements relating to the Company's Madison, Mississippi headquarters facility, which indebtedness had as of June 27, 2003 an outstanding balance of \$867,000.

"Intellectual Property" means all inventions (whether patentable or unpatentable), patent rights, copyrights, invention disclosures, technology, know-how, processes, trade secrets, confidential information, proprietary data, formulae, data bases, moral rights, domain names, manufacturing or servicing methods and data, specifications, drawings, algorithms, prototypes, designs, design rights, design tools, white papers, research and development data, computer software programs in both source code and object code form; all trademarks, trade names, service marks and service names; all registrations, applications, recordings, licenses and common-law rights relating thereto, all rights to sue at law or in equity for any infringement or other impairment thereto, including the right to receive all proceeds and damages therefrom, and all rights to obtain renewals, continuations, divisions or other extensions of legal protections pertaining thereto; all copies and tangible embodiments thereof (in whatever form or medium), and registrations and applications for any of the foregoing assets listed above and all other tangible and intangible proprietary information, materials and associated goodwill; and all of the foregoing in any jurisdiction throughout the world.

"Intercompany Agreements" means all Contracts, including tax sharing agreements, but excluding non-equity employment or compensation arrangements with employees, between the Company or any Company Subsidiary, on the one hand, and any of its officers, managers, directors, members, stockholders or Affiliates (or any Affiliate of any such officer, manager,

A-4

director, member or stockholder), on the other hand; provided, however, that Intercompany Agreements shall not include any Contract between the Company or any Company Subsidiary, on the one hand, and Raytheon Company or any of its Subsidiaries, on the other hand.

"Knowledge" As used in this Agreement, the term "Knowledge" of any Party means the actual knowledge of any senior executive officers of that Party after due inquiry by such officers with the personnel of the Company and the Company Subsidiaries. The relevant senior executive officers for purposes of Seller and the Company are Daniel Grafton, Jay Ward, Jim Van Dusen, R. Steven Sinquefield, Gary Sneary, Errol Oller, Neal Patton and Tom Johnson.

"L-3 Company" means L-3 Communications Corporation and any of its Subsidiaries.

"LIBOR" means:

(i) the rate per annum equal to the offered rate that appears on the page of the Telerate screen (or any successor thereto) that displays an average British Bankers Association Interest Settlement Rate for deposits in U.S. dollars (for delivery on the Closing Date and thereafter each succeeding July 1st and January 1st) with a term equivalent to (or closest to) the period commencing on the Closing Date and ending on the succeeding June 30th or December 31st, as the case may be, and thereafter for successive six-month periods, determined as of approximately 11:00 a.m. (London time) two Eurodollar Business Days prior to the first day of such period;

(ii) if the rate referenced in the preceding subsection (i) does not appear on such page or service or such page or service shall cease to be available, the rate per annum equal to the offered rate on such other page or other service that displays an average British Bankers Association Interest Settlement Rate for deposits in U.S. dollars (for delivery on the Closing Date and thereafter each succeeding July 1st and January 1st) with a term equivalent to (or

closest to) the period commencing on the Closing Date and ending on the succeeding June 30th or December 31st, as the case may be, and thereafter for successive six-month periods, determined as of approximately 11:00 a.m. (London time) two Eurodollar Business Days prior to the first day of such period; or

(iii) if the rates referenced in the preceding subsections (i) and (ii) are not available, the rate per annum equal to the rate of interest at which deposits in U.S. dollars for delivery on the first day of such period in same day funds with a term equivalent to such period would be offered by Bank of America's London Branch to major bank is in the London interbank Eurodollar market at their request approximately 4:00 p.m. (London time) two Eurodollar Business Days prior to the first day of such period.

"Multiemployer Plan" means a "multi-employer plan" within the meaning of Section 3(37) or Section 4001(a)(3) of ERISA or Section 414(f) of the Code.

"Net Assets" means (i) all of the assets and properties of the Company and the Company Subsidiaries on a consolidated basis, minus (ii) all liabilities of the Company and the Company

A-5

Subsidiaries on a consolidated basis, determined, in each case, in accordance with GAAP consistently applied with the audited consolidated financial statements of the Company and the Company Subsidiaries as of December 27, 2002, subject to the adjustments described on Attachment III hereto.

"Opening Balance Sheet" means the unaudited balance sheet of Seller and its Subsidiaries on a consolidated basis as of September 26, 2003 and the notes thereto, a copy of which is attached hereto as Attachment III.

"Other Indebtedness" means, with respect to any Person, (i) any indebtedness of such Person under any conditional sales or other title retention agreements relating to property purchased by such Person, (ii) any obligations of such Person issued or assumed as the deferred purchase price of property or services (excluding trade accounts payable and accrued obligations incurred in the ordinary course of business), (iii) any synthetic lease obligations or any other similar lease obligations of such Person, (iv) any purchase money obligations of such Person, (v) any obligations of such Person as an account party in respect of any letters of credit or bankers' acceptances, (vi) any obligations of such Person in respect of off-balance-sheet agreements or transactions that are in the nature of, or in substitution of, financing, (vii) any indebtedness or other obligations of any other Person of the type specified in any of the foregoing clauses, the payment or collection of which such Person has guaranteed or in respect of which such Person is liable, contingently or otherwise, including liable by way of agreement to purchase products or securities, to provide funds for payment, to maintain working capital or other balance sheet conditions or otherwise to assure a creditor against loss or (viii) any indebtedness or other obligations of any other Person of the type specified in any of the foregoing clauses which is secured (or, pursuant to an existing right, could be secured at a later date) by an Encumbrance on any property of such Person. Notwithstanding any of the foregoing, Other Indebtedness shall not include any obligations under leases that are operating leases or capitalized leases under GAAP.

"Permitted Encumbrances" means (i) liens for Taxes not yet due and payable, (ii) statutory liens of landlords and liens of carriers, warehousemen, mechanics, materialmen and repairmen incurred in the ordinary course of business consistent with past practice and not yet delinquent and (iii) zoning, building, or other restrictions, covenants, rights of way, encumbrances, easements and other minor irregularities in title, none of which, individually or in the aggregate, (A) interfere in any material respect with the present use of or occupancy of such parcel by the Company or the Company Subsidiary, as the case may be, (B) have more than an immaterial effect on the value thereof or its use or (C) would impair the ability of such parcel to be sold.

"Person" means any individual, corporation, partnership, limited liability partnership, limited liability company, joint venture, trust, unincorporated organization, other entity or Government Entity.

"Purchaser Material Adverse Effect" means a material adverse effect on the ability of Purchaser to perform its obligations under this Agreement or on the ability of Purchaser to consummate the Contemplated Transactions.

A-6

"Representatives" means with respect to any Person each of its directors, officers, partners, members, advisors, attorneys, accountants, employees or agents.

"Securities Laws" means the Securities Act of 1933, as amended, and any state, local or foreign securities laws.

"Subsidiary" as it relates to any Person, shall mean with respect to such Person, any other Person of which the specified Person, either directly or through or together with any other of its Subsidiaries, owns more than 50% of the voting power in the election of directors or their equivalents, other than as affected by events of default, together in each case, with any predecessor in interest thereto.

"Tax Authority" shall mean a Governmental Entity having jurisdiction over the assessment, determination, collection or imposition of any Tax.

"Taxes" means all federal, state, local and foreign taxes, and any charges, fees, imposts or other assessments with respect thereto, including but not limited to all gross receipts, net income, sales, use, ad valorem, value added, transfer, franchise, license, withholding, payroll, employment, excise, estimated, severance, stamp, real property, personal property, occupation taxes, tariffs and customs duties, together with any interest and any penalties, assessments or additions to tax or additional amounts resulting from, attributable to or incurred in connection with any Tax or any contest or dispute thereof, imposed by any Tax Authority, including all obligations for taxes under any tax sharing, tax indemnity or similar agreement.

"Tax Return" means any report, return, declaration, claim for refund or information return, election, disclosure, estimate, computation or statement relating to Taxes required to be filed with any Governmental Entity, including any schedule or attachment thereto, and including any amendment thereof.

"Transaction Documents" means (i) this Agreement and (ii) any other certificate, agreement, document or other instrument to be executed and delivered in connection with the Contemplated Transactions.

A-7

EXHIBIT B  
REPRESENTATIONS AND WARRANTIES OF SELLER AND THE COMPANY

The representations and warranties of Seller and the Company contained in this Exhibit B (other than those contained in Section B.2, Section B.4(b) and Section B.10(a)) shall be deemed true and correct, and Seller and the Company shall not be deemed to have breached any such representation or warranty as a consequence of the existence of any fact, event or circumstance inconsistent with such representation or warranty, unless such fact, event or circumstance, individually or taken together with all other facts, events or circumstances inconsistent with any representation or warranty contained in this Exhibit B, has resulted or is reasonably likely to result in loss, liability, damage or expense to Purchaser or the Company and the Company Subsidiaries or a diminution in value of the Company and the Company Subsidiaries in excess of \$20,000,000, except to the extent reflected in an adjustment to the Purchase Price in accordance with Section 2.5, disregarding for these purposes (i) any qualification or exception for, or reference to, materiality or Company Material Adverse Effect in any such representation or warranty and (ii) any use of the terms "material", "materially", "in all material respects," "Company Material Adverse Effect" or similar terms or phrases in any such representation or warranty. The representations and warranties in Section B.2, Section B.4(b) and Section B.10(a) shall not be qualified by the preceding sentence.

Except as set forth on the Schedules (it being understood that an item included on a Schedule referenced in any Section or subsection of this Exhibit B shall be deemed to relate to each other Section or subsection of this Exhibit B to the extent such relationship is readily apparent), and subject to the preceding paragraph, Seller and the Company hereby represent and warrant to Purchaser on the date hereof and on the Closing Date as follows:

B.1 Organization. The Company and each Company Subsidiary is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware. The Company and each Company Subsidiary has all requisite power and authority to own, lease and operate its properties and to carry on its business as now being conducted and is duly qualified or registered as a foreign limited liability company to transact business and is in good standing under the laws of each jurisdiction where the character of its activities or the location of the properties owned or leased by it requires such qualification or registration, except where the failure to be so qualified or registered would, individually or in the aggregate, not, or could not reasonably be expected to, have a Company Material Adverse Effect. Seller has heretofore made available to Purchaser true, correct and complete copies of the organizational documents of the Company and each Company Subsidiary as currently in effect and the record books of the Company and each Company Subsidiary. Schedule B.1 contains a true and correct list of the jurisdictions in which the Company and each Company Subsidiary is qualified or registered to do business as a foreign limited liability company.

B-1

B.2 Authorization. Each of Seller and the Company has full power and authority to execute and deliver this Agreement and each of the Transaction Documents to which it is a party, to perform its obligations herein and therein, and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the other Transaction Documents by Seller and the Company and the performance by each of them of their respective obligations hereunder and thereunder and the consummation of the transactions provided for herein and therein have been duly and validly authorized by all necessary action on the part of Seller and the Company. No consent on the part of any of the members of Seller is necessary for Seller to execute and deliver this Agreement and the other Transaction Documents to which it is a party, to perform its obligations herein and therein, and to consummate the transactions contemplated hereby and thereby. This Agreement has been, and each of the Transaction Documents to which Seller or the Company are a party will be as of the Closing Date, duly executed and delivered by Seller and the Company, as the case may be, and do or will constitute valid and binding agreements of Seller and the Company, as the case may be, enforceable against it in accordance with their respective terms, except as may be limited by bankruptcy, insolvency or

other similar laws affecting the enforcement of creditors' rights in general and subject to general principles of equity.

B.3 Subsidiaries. Except as set forth on Schedule B.3, neither the Company nor any Company Subsidiary does currently own or have any obligation to acquire or redeem, directly or indirectly, any capital stock or other securities of, or interests in, any other Person. Each of J-R Technical Management, L.L.C., a Texas limited liability company, and J-R Technical Services Limited Partnership, L.L.P., a Texas limited partnership, are inactive and have no material assets or liabilities, debts, claims, commitments or obligations.

#### B.4 Membership Interests.

(a) Schedule B.4 hereto accurately and completely sets forth the ownership of the Company and each Company Subsidiary by listing thereon each holder of a membership interest in each of the foregoing companies as of the date hereof.

(b) All of the membership interests in the Company and each Company Subsidiary (i) will, at the Closing, be free and clear of any Encumbrances and defects of title whatsoever, (ii) are owned of record and beneficially by the Person or Persons identified in Schedule B.4, and (iii) were not offered, issued or acquired in violation of the preemptive rights of any Person or any agreement or laws, statutes, orders, decrees, rules, regulations and judgments of any Governmental Entities by which the Company or any Company Subsidiary at the time of acquisition was bound. There are no outstanding options, warrants, rights, calls, commitments, conversion rights, rights of exchange, claims of any character, agreements, obligations, or other plans or commitments, contingent or otherwise, relating to the membership interests of the Company or any Company Subsidiary, other than as contemplated by this Agreement. There are no outstanding contracts or other agreements or commitments of Seller, the Company, any Company Subsidiary or any other Person to purchase, redeem or otherwise acquire any membership interests of the Company or any Company Subsidiary. Upon admission of

B-2

Purchaser, and simultaneous withdrawal of Seller, as a member of the Company and delivery by Seller to Purchaser of the membership certificate representing the entire interest held by Seller in the Company, Purchaser will be the sole member of the Company and hold the entire interest in the Company.

(c) There are no distributions which have accrued but are unpaid in respect of the membership interests of the Company or any Company Subsidiary. Except as set forth on Schedule B.4, since June 27, 2003, the Company has not (x) amended its organizational documents, (y) declared, set aside, made or paid any distribution, whether consisting of money, property or any other thing of value, or (z) purchased or redeemed any of its membership interests.

B.5 Absence of Restrictions and Conflicts. Except as set forth on Schedule B.5, the execution, delivery and performance of this Agreement and each of the Transaction Documents to which Seller or the Company is a party, the consummation of the transactions contemplated hereby and thereby, and the fulfillment of and compliance with the terms and conditions herein and therein by the Company and Seller do not or will not (as the case may be), with or without the passing of time or the giving of notice or both, violate or conflict with, constitute a breach of or default under, result in the loss of any benefit under, require notice or consent or approval under, permit the acceleration of any obligation, give rise to any right of termination, cancellation or amendment with respect to, or result in the creation or imposition of any Encumbrance upon any property of the Company or any Company Subsidiary or upon any membership interest therein under, (a) any term or provision of the organizational documents of Seller, the Company or any Company Subsidiary, (b) any Contract to which the Company or any Company Subsidiary is a party, (c) any judgment, decree or order of any Governmental Entity to which Seller, the Company or any Company Subsidiary is a party or by which the Company or any Company Subsidiary or any of their respective properties are bound or (d) assuming compliance with the requirements under the HSR Act, any statute, law, rule, regulation or arbitration award applicable to Seller, the Company, or any Company Subsidiary, except in the case of the foregoing clauses (b), (c) and (d) for violations, conflicts, breaches or defaults that could not reasonably be expected to have a Company Material Adverse Effect. No consent, waiver, approval, order or authorization of, or registration, declaration or filing with, any governmental agency or public or regulatory unit, agency or authority is required with respect to Seller, the Company or any Company Subsidiary in connection with the execution, delivery or performance of this Agreement or the Transaction Documents or the consummation of the transactions contemplated hereby or thereby, except as required by the HSR Act or otherwise set forth on Schedule B.5.

#### B.6 Real Property.

(a) Schedule B.6(a) sets forth a true and correct legal description of the parcel of real property owned by the Company (together with all fixtures and improvements thereon, the "Owned Real Property"). Except as set forth on Schedule B.6(a), and except for such matters that, individually or in the aggregate, are not reasonably likely to have a Company Material Adverse Effect, the Company has good and marketable title to the

B-3

Owned Real Property free and clear of all Encumbrances other than Permitted Encumbrances.

(b) Schedule B.6(b) sets forth a true and correct description of the parcels of real property used in connection with the Business and leased by the Company and each Company Subsidiary (together with all fixtures and improvements thereon, the "Leased Real Property"; and collectively with the Owned Real Property, the "Real Property"), the owner of the Leased Real Property and the owner of the leasehold, subleasehold or occupancy interest for each parcel of the Leased Real Property. The Company or a Company Subsidiary, as the case may be, has a valid leasehold interest in its Leased Real Property, free and clear of any Encumbrances other than Permitted Encumbrances. Except as set forth on Schedule B.6(b), the leases of the Leased Real Property are in full force and effect, no notice of default has been given by any of the parties to the leases and no event has occurred that, with the giving of notice or the passage of time would constitute a default under any of such leases.

B.7 Title to Personal Property. Except as set forth in Schedule B.7, each of the Company and each Company Subsidiary has good and marketable title to, or a valid and binding leasehold or license interest in, all of its personal property and assets, free and clear of all Encumbrances other than Permitted Encumbrances. There are no defects in the physical condition or operability of such tangible personal property and assets impair the use of such property and assets as such property and assets are currently used, except for such defects which, individually or in the aggregate, would not be reasonably likely to have a Company Material Adverse Effect.

#### B.8 Financial Statements.

(a) Seller has delivered to Purchaser the audited consolidated balance sheet of Seller and its Subsidiaries at December 27, 2002 and December 28, 2001 and the audited consolidated statements of operations, member's capital and parent investment account and cash flows of Seller and its Subsidiaries for the years then ended, the unaudited consolidated balance sheet of Seller and its Subsidiaries as of June 27, 2003; and the unaudited consolidated statements of operations, member's capital and parent investment account, and cash flows of Seller and its Subsidiaries for the 6-month period ended June 27, 2003 (collectively, the "Financial Statements").

(b) The Financial Statements have been prepared in accordance with GAAP consistently applied throughout the periods indicated (except in the case of the Financial Statements as of June 27, 2003, for normal year-end adjustments and for the absence of information that would ordinarily be contained in notes to audited financial statements), have been prepared from, and are in accordance with, the books and records of Seller and its Subsidiaries, which books and records have been maintained in accordance with GAAP consistently applied throughout the periods indicated, and are maintained on a basis consistent with the past practice of Seller and its Subsidiaries. Each of the balance sheets included in such Financial Statements (including the related notes and schedules) fairly presents the financial position of Seller and its Subsidiaries as of the date of such balance sheet, and each of the statements of income and cash flows included in such Financial Statements (including any related notes and schedules)

B-4

fairly presents the results of operations and changes in cash flows, as the case may be, of Seller and its Subsidiaries for the periods set forth therein, in each case in accordance with GAAP consistently applied during the periods involved (subject to the parenthetical above with respect to the Financial Statements as of June 27, 2003). Since June 27, 2003, there has been no change in any of the accounting (including tax accounting) policies, practices or procedures of Seller, the Company or any Company Subsidiary.

(c) The Opening Balance Sheet has been prepared in accordance with GAAP consistently applied with the Financial Statements except for normal year-end adjustments and for the absence of information that would ordinarily be contained in the notes of audited financial statements, and subject to the adjustments described on Attachment III hereto. Subject to the foregoing, the Opening Balance Sheet fairly presents the financial position of Seller and its Subsidiaries as of September 26, 2003.

(d) Seller is a holding company, has no assets, other than the membership interests of the Company, and has no business operations.

B.9 No Undisclosed Liabilities. Except as disclosed in Schedule B.9, neither the Company nor any Company Subsidiary has any liabilities, debts, claims, commitments or obligations (whether absolute, accrued or contingent, liquidated or unliquidated, known or unknown or due to become due or otherwise) (collectively, "Liabilities"), which are not adequately reflected or provided for in the Opening Balance Sheet, except (i) Liabilities that are not (individually or in the aggregate) material to the Company or any Company Subsidiary, (ii) Liabilities that have been incurred since June 27, 2003 in the ordinary course of business consistent with past practice and (iii) Liabilities disclosed in Schedules B.11, B.13(i) and B.13(n).

B.10 Absence of Certain Changes. Since June 27, 2003 and except as set forth in Schedule B.10, there has not been:

(a) a Company Material Adverse Effect;

(b) any transaction or commitment made, or any Contract entered into, by the Company or any Company Subsidiary, other than a transaction or commitment made, or Contract entered into, in the ordinary course of business consistent with past practice and those contemplated by this Agreement;

(c) any sale or other disposition of assets in a single transaction or series of related transactions (other than any sales of inventories or services made in the ordinary course of business consistent with past practice);

(d) (A) any increase in the compensation, deferred compensation, or fringe

B-5

benefits of any officers or employees of the Company or any Company Subsidiary, other than nondiscretionary increases pursuant to Employee Plans or Benefit Arrangements, or (B) any granting by Company or any Company Subsidiary of any increase in severance, retention or termination pay, or (C) any entry by Company or any Company Subsidiary into, or material modification or amendment of, any employment, severance, retention, termination or indemnification Contract or any Employee Plan or Benefit Arrangement;

(e) any change by the Company or any Company Subsidiary in its accounting principles, methods or practices or in the manner it keeps its books and records;

(f) any labor dispute (other than routine individual grievances), or any lockouts, strikes, slowdowns or work stoppages by or with respect to the employees of the Company or any Company Subsidiary;

(g) any new collective bargaining agreement entered into by the Company or any Company Subsidiary, or any amendment to any collective bargaining agreement to which the Company or any Company Subsidiary is a party;

(h) any declaration, setting aside or payment of any non-cash dividend on, or other non-cash distribution in respect of, any of the Company's or any Company Subsidiary's membership interest, or any purchase, redemption or other acquisition by the Company or any Company Subsidiary of any of the Company's or any Company Subsidiary's membership interest or any other securities of the Company or any Company Subsidiary or any options, warrants, calls or rights to acquire any such membership interests or other securities;

(i) any split, combination, subdivision or reclassification of any of the Company's or any Company Subsidiary's membership interests or any change of any rights of the Company's or any Company Subsidiary's membership interests or other securities of the Company or any Company Subsidiary;

(j) any sale, assignment, lease, transfer or other disposition of any portion of the Company's or any Company Subsidiary's assets in a single transaction or series of related transactions in an amount in excess of \$100,000 in the aggregate or any waiver or release of any of the Company's or any Company Subsidiary's right of substantial value, involving an amount in excess of \$100,000 in the aggregate, other than in the ordinary course of business consistent with past practice;

(k) any receipt by the Company or any Company Subsidiary of any notice of termination of any Company or any Company Subsidiary Contract with required payments thereunder in excess of \$100,000 or which otherwise is material to the Company or any Company Subsidiary;

(l) any damage, destruction or loss (whether or not covered by insurance) to the Company's or any Company Subsidiary's property, in excess of \$100,000

B-6

individually or \$1,000,000 in the aggregate;

(m) any authorization, issuance, pledge, sale or transfer of any membership interests of the Company or any Company Subsidiary or other securities (including any securities convertible or exercisable into or exchangeable for any capital stock or other securities of, or any warrants, options or other rights to acquire any capital stock or other securities of, the Company or any Company Subsidiary);

(n) any capital expenditures or commitments therefor in excess of \$250,000 individually or \$1,500,000 in the aggregate;

(o) any capital investment by the Company or any Company Subsidiary in, any loan by the Company or any Company Subsidiary to, or any acquisition by the Company or any Company Subsidiary of, any of the securities or all or substantially all the assets of, any other Person (or series of related capital investments, loans and acquisitions involving the same Person or such Person's Affiliates) in an amount in excess of \$100,000 individually or \$1,000,000 in the aggregate;

(p) any acquisition by the Company of an entity or business

(whether by the acquisition of stock, the acquisition of assets, merger or otherwise), or any merger by the Company or any Company Subsidiary with or into or consolidation with any other Person;

(q) the entry by the Company or any Company Subsidiary of any employment, compensation or deferred compensation Contract or any amendment of any such existing Contract excluding offer letters providing for at-will employment arrangements that do not include severance;

(r) the settlement or compromise of any claim, action, suit, litigation, proceeding, arbitration, investigation, audit or controversy relating to Taxes; or

(s) the taking of any action or, to the knowledge of Seller, Company or any Company Subsidiary, omission to take any action within its control that would result in the occurrence of any of the foregoing.

B.11 Legal Proceedings. Except as set forth in Schedule B.11, there are no suits, actions, claims, arbitrations, proceedings or investigations pending or, to the Knowledge of Seller and the Company, threatened against, relating to or involving the Company, any Company Subsidiary or the assets of the Company or any Company Subsidiary before any Governmental Entity or other third party which, if adversely determined, would reasonably be expected to have a Company Material Adverse Effect or that involve injunctive or other non-monetary relief or proposed injunctive or other non-monetary relief or damages or claimed damage in excess of \$500,000 or unspecified damages or would otherwise be material to the Company or any Company Subsidiary. There are no judgments unsatisfied against the Company or any order,

B-7

stipulation decrees or injunctions to which the Company, any Company Subsidiary or any of their assets is subject.

B.12 Compliance with Law. Except as set forth in Schedule B.12, the Company and each Company Subsidiary is (and has been at all times since the Formation Date) in compliance with all Applicable Laws, except where the failure to comply with Applicable Law could not reasonably be expected to have a Company Material Adverse Effect. Except as set forth in Schedule B.12, (a) the Company and each Company Subsidiary has not been charged with and, to the Knowledge of Seller and the Company, the Company or any Company Subsidiary, is not now under investigation with respect to, a violation of any Applicable Law, (b) the Company and each Company Subsidiary is not a party to or bound by any order, judgment, decree, injunction, rule or award of any Governmental Entity and (c) the Company and each Company Subsidiary has filed all reports required to be filed with any Governmental Entity on or before the date hereof, except where the failure to file such report could not reasonably be expected to have a Company Material Adverse Effect.

B.13 Contracts, Government Contracts and Bids.

(a) Schedule B.13(a) sets forth a true, correct and complete list of (i) all Contracts of the Company and each Company Subsidiary with suppliers with remaining payment obligations that exceed \$1,000,000 and (ii) all Contracts of the Company and each Company Subsidiary for Indebtedness involving a current outstanding principal amount in excess of \$1,000,000; (iii) all Contracts containing non-compete covenants by the Company or any Company Subsidiary, (iv) Contracts containing any covenant: (A) limiting the right of the Company or any Company Subsidiary to engage in any material line of business or make use of any material Intellectual Property or (B) otherwise having an adverse effect on the right of the Company and the Company Subsidiaries to sell, distribute or manufacture any material products or services or to purchase or otherwise obtain any material software, components, parts or subassemblies, (v) all Contracts to which the Company and each Company Subsidiary is a party with customers with a contract value or revenues that exceeded \$10,000,000 per year, and (vi) all other Contracts not the subject matter of clauses (i) through (v) above that are material to the Company, any Company Subsidiaries or the Business. Except as set forth on Schedule B.13(a), (A) the Company or Company Subsidiary that is a party to each of the Contracts set forth on Schedule B.13(a) is not in default under such Contracts and there exists no event, condition or occurrence which, with or without notice, lapse of time or both, would constitute such a default by the Company or such Company Subsidiary and (B) to the Knowledge of Seller and the Company, each other party that is a party to a Contract set forth on Schedule B.13(a) is not in default thereunder and there exists no event, condition or occurrence which, with or without notice, lapse of time or both, would constitute such a default by such party.

(b) Except as disclosed on Schedule B.13(a), all Contracts set forth thereon, are valid and binding, in full force and effect and enforceable against the Company or the Company Subsidiaries, as the case may be, and to Seller and the Company's Knowledge,

B-8

the other parties thereto in accordance with their respective terms, subject to applicable bankruptcy, insolvency or other similar Laws relating to creditors' rights and general principles of equity.

(c) The Company has made available to Purchaser true, complete and correct copies of all written Contracts set forth on Schedule B.13(a),

together with all amendments thereof. To the Knowledge of the Company, the Company and the Company Subsidiaries are not parties to any material oral Contracts.

(d) Schedule B.13(d) sets forth a true, complete and correct list of the Government Contracts awarded to the Company or any Company Subsidiary and that are currently in effect. Except as set forth on Schedule B.13(d), the Government Contracts that are currently in effect are in full force and effect and free and clear of any Encumbrances, except for Permitted Encumbrances.

(e) Except as set forth on Schedule B.13(e), there are no outstanding Bids submitted by the Company or any Company Subsidiary to any Governmental Entity or any proposed prime contractor to a Governmental Entity.

(f) The Company and each Company Subsidiary has complied with all Applicable Laws in respect of the Government Contracts, including, without limitation, under the Federal Acquisition Regulation and the Foreign Corrupt Practices Act ("Government Contract Laws"), except where the failure to comply with Government Contract Laws could not reasonably be expected to have a Company Material Adverse Effect. The Company and each Company Subsidiary has fully complied with all material contract clauses, provisions and requirements incorporated expressly by reference or by operation of law in the Government Contracts and Bids for a Government Contract to the extent their performance thereunder is required as of the date hereof, except where the failure to so comply could not reasonably be expected to have a Company Material Adverse Effect. No Governmental Entity that is a party to a Government Contract has notified the Company or any Company Subsidiary in writing, or to the Knowledge of Seller and the Company orally, that the Company or any Company Subsidiary has breached or violated any Government Contract Laws, certification, representation or contract clause, provision or requirement in respect of any Government Contract. No default, termination, cure or "show cause" notice has been issued against the Company or any Company Subsidiary in respect of the Government Contracts. All representations and certifications made by the Company and each Company Subsidiary with respect to each of its Government Contracts and Bids for a Government Contract were accurate in all material respects as of the date made. No material cost incurred by the Company or any Company Subsidiary or any of their respective subcontractors in connection with any Government Contract has been questioned or disallowed. No material amount of money due to the Company or any Company Subsidiary has been (or, to the Knowledge of Seller and the Company has been threatened to be) withheld or setoff.

(g) Except as set forth on Schedule B.13(g), neither the Company nor any Company Subsidiary has undergone nor is the Company or any

B-9

Company Subsidiary presently undergoing any audit, and neither Seller nor the Company has any knowledge or reason to know of any basis for impending audits in the future, arising under or relating to any Government Contract. Neither Seller nor the Company knows or has any reason to know, of any reasons why any Government Contract will be terminated, including, without limitation, any terminations for default or convenience of the Governmental Entity.

(h) Except as set forth on Schedule B.13(h), to the Knowledge of Seller and the Company, none of the employees, consultants and agents of the Company or any Company Subsidiary is (or during the last five years has been) under administrative, civil or criminal investigation, indictment or information by any Governmental Entity; (ii) there is no pending audit or investigation of the Company, or, to the Knowledge of Seller and the Company, any of the Company's or any Company Subsidiary's officers, employees or representatives nor within the last five years has there been any audit or investigation of the Company or any Company Subsidiary, or, to the Knowledge of Seller and the Company, any of the Company's or any Company Subsidiary's officers, employees or representatives resulting in a material adverse finding with respect to any alleged irregularity, misstatement or omission arising under or relating to any Government Contract or Bid for a Government Contract; and (iii) during the last five years, neither the Company nor any Company Subsidiary has made any voluntary disclosure to the U.S. Government or any non-U.S. government with respect to any alleged irregularity, misstatement or omission arising under or relating to a Government Contract or Bid for a Government Contract.

(i) Except as disclosed on Schedule B.13(i), there are (i) no outstanding claims or disputes against the Company or any Company Subsidiary, either by any Governmental Entity or by any prime contractor, subcontractor, vendor or other third party arising under or relating to any Government Contract or Bid for a Government Contract, and (ii) no disputes between the Company or any Company Subsidiary and any Governmental Entity under the Contract Disputes Act of 1978, as amended, or any other Applicable Law or between Company and any prime contractor, subcontractor, vendor or other third party arising under or relating to any such Government Contract or Bid for a Government Contract and (iii) no facts which are known to Seller and the Company upon which any such claim or dispute may be based in the future.

(j) Except as set forth on Schedule B.13(j), neither the Company or any Company Subsidiary nor, to the Knowledge of Seller and the Company, any of their respective employees, consultants or agents is (or during the last five years has been) suspended or debarred from

doing business with the U.S. Government or any non-U.S. government or is (or during such period was) the subject of a finding of non-responsibility or ineligibility for U.S. Government or non-U.S. Government contracting.

(k) Except as set forth on Schedule B.13(k), neither the Company nor any Company Subsidiary is a party to any written teaming or similar agreement that pertains

B-10

to any Bid for a Government Contract or which contemplates any Bid for a prospective Government Contract.

(l) Neither the Company nor any Company Subsidiary is a party to any Contract containing any covenant limiting the freedom of the Company or any Company Subsidiary to compete with any Person in any geographic area.

(m) Except as set forth on Schedule B.13(m), neither the Company nor any Company Subsidiary is a party to any sales representative, commission, marketing representative or franchise agreements relating to the Business which are not terminable without material penalty to the Company, any Company Subsidiary or Purchaser upon 90 days' or less notice to the other party thereto.

(n) Except as set forth in Schedule B.13(n), there is no Contract (including a Government Contract) between the Company or any Company Subsidiary and a customer of the Company that has resulted in, or is expected to result in, a loss.

#### B.14 Tax Returns; Taxes.

(a) Except as otherwise disclosed in Schedule B.14(a):

(i) all Tax Returns with respect to Income Taxes and all other material Tax Returns of the Company and each Company Subsidiary due to have been filed through the date hereof in accordance with any Applicable Law have been duly filed on a timely basis and are correct and complete and accurately reflect the Taxes, income, gains, losses, deductions and credits of the Company in all material respects;

(ii) all Taxes, deposits or other payments which are due and payable with respect to the Company and each Company Subsidiary through the date hereof have been paid in full;

(iii) there are no extensions of time in effect with respect to the dates on which any Tax Returns were or are due to be filed by the Company or any Company Subsidiary;

(iv) since their formations, the Company and each of the Company Subsidiaries has been taxed as a disregarded entity for Income Tax purposes and no elections have been or will be made to treat the Company or any of the Company Subsidiaries as a corporation for any Income Tax purposes;

(v) no claim, assessment, deficiency or adjustment has ever been made or threatened by any authority in a jurisdiction where the Company and the Company Subsidiaries have not or do not file returns;

B-11

(vi) no Tax audits or administrative or judicial Tax proceedings are pending, being conducted or, to the Knowledge of Seller and the Company, threatened with respect to the Company or the Company Subsidiaries;

(vii) no material claims have been asserted in writing or, to the Knowledge of Seller and the Company, threatened with respect to the Company or the Company Subsidiaries;

(viii) there are no outstanding waivers or agreements by or on behalf of the Company or any Company Subsidiary for the extension of time for the assessment of any Taxes or deficiency thereof;

(ix) there are no material Encumbrances for Taxes (other than Encumbrances for Taxes which are not yet due and payable), nor are there any material Encumbrances for Taxes which are pending or, to the Knowledge of Seller and the Company, threatened; and

(x) all material liabilities for Taxes related to any taxable period ending on or before the date hereof have been properly accrued or are disclosed on the Opening Balance Sheet.

(b) Seller is not a foreign Person for purposes of Section 1445(b) (2) of the Code.

B.15 Officers and Consultants. Schedule B.15 contains a true and complete list of all of the officers of the Company and each Company Subsidiary, specifying their position, length of service and annual rate of compensation.

Except as set forth on Schedule B.15, neither the Company nor any Company Subsidiary is a party to or bound by any contracts, consulting agreements or termination or severance agreements in respect to any officer or former officer, consultant or independent contractor.

#### B.16 Employee Plans and Benefit Arrangements.

(a) Schedule B.16 contains a true and complete list of each Employee Plan or material Benefit Arrangement which provides benefits to employees or former employees of the Company or any Company Subsidiary or their dependents or beneficiaries. Each Employee Plan or Benefit Arrangement currently in effect is identified as a "current plan" on such schedule and any special tax status enjoyed by such plan is noted on such schedule and each Multiemployer Plan is identified as a "Multiemployer Defined Benefit Pension Plan."

(b) Except as set forth in Schedule B.16:

(i) with respect to each Employee Plan (other than a Multiemployer Plan) or Benefit Arrangement identified on Schedule B.16, Seller has heretofore

B-12

delivered or made available to Purchaser true and complete copies of the plan documents and any amendments thereto (or if the plan is not written, a written description thereof), any related trust or other funding vehicle, annual reports required to be filed with any Governmental Entity with respect to such plan, actuarial reports, funding and financial information returns and statements, plan summaries or summary plan descriptions, summary annual reports, booklets and personnel manuals and any other reports or summaries required under ERISA, the Code and all other Applicable Law with respect to such Employee Plan or Benefit Arrangement ("Applicable Benefit Laws"), and the most recent determination letter received from the Internal Revenue Service (or, if applicable, similar approvals of a foreign Governmental Entity) with respect to each such plan intended to qualify under Section 401 of the Code (or similar provisions for tax registered or tax-favored plans of foreign jurisdictions);

(ii) no Employee Plan (other than a Multiemployer Plan) is or was subject to Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA;

(iii) neither the Company nor any Company Subsidiary has incurred, and no facts exist which reasonably could be expected to result in, liability to the Company or any Company Subsidiary as a result of a termination, withdrawal or funding waiver or otherwise under Title IV of ERISA, Section 302 of ERISA or Section 412 of the Code with respect to an ERISA Affiliate Plan;

(iv) each Employee Plan (other than a Multiemployer Plan) or Benefit Arrangement has been established, registered, qualified, invested, operated and administered in all material respects in accordance with its terms and in compliance with all Applicable Benefit Laws, and neither the Company nor any Company Subsidiary has incurred, and no facts exist which have resulted or reasonably could be expected to result in, any material liability, tax, penalty or fee under any Applicable Benefit Laws (other than for the payment of premiums, contributions or benefits in the ordinary course of business consistent with past practice) to any Company or any Company Subsidiary or Company Employee with respect to any Employee Plan or Benefit Arrangement or any ERISA Affiliate Plan;

(v) all obligations regarding each Employee Plan (other than a Multiemployer Plan) or Benefit Arrangement either have been satisfied or the time for satisfying such obligations has not yet expired, and there are no outstanding defaults or violations by any party to any Employee Plan (other than a Multiemployer Plan) or Benefit Arrangement or ERISA Affiliate Plan that would give rise to a material liability, Tax penalty or fee to the Company;

(vi) no fact or circumstance exists that could reasonably be expected to adversely affect the tax-exempt status of an Employee Plan (other than a

B-13

Multiemployer Plan) that is intended to be tax-exempt, and each Employee Plan (other than a Multiemployer Plan) intended to be "qualified" within the meaning of Section 401(a) of the Code (other than a Multiemployer Plan) and the trusts maintained thereunder that are intended to be exempt from taxation under Section 501(a) of the Code has received a favorable determination or other letter indicating that it is so qualified covering all Tax law changes prior to the Economic Growth and Tax Relief Reconciliation Act of 2001;

(vii) no Employee Plan or Benefit Arrangement provides or has provided medical, surgical, hospitalization, death benefits (other than death benefits provided under a retirement plan) or similar benefits (whether or not insured) for current or former employees, directors, managers, members, officers, consultants, independent contractors, contingent workers or leased employees (or any of

their dependents, spouses or beneficiaries) of the Company, any Company Subsidiary or any predecessor in interest of the Company or any Company Subsidiary for periods extending beyond their retirement or other termination of service, other than continuation coverage mandated by Applicable Benefit Laws;

(viii) all contributions or premiums required to be made by Seller, the Company or any Company Subsidiary under the terms of each Employee Plan or Benefit Arrangement or by Applicable Benefit Laws have been made in a timely fashion in accordance with Applicable Benefit Laws and the terms of the Employee Plan or Benefit Arrangement, and all contributions or premiums for any period ending on or before the Closing Date that are not yet due have been made to each such Employee Plan or Benefit Arrangement or accrued in accordance with GAAP;

(ix) to the Knowledge of Seller and the Company, there have been no improper withdrawals, applications or transfers of assets from any Employee Plan or Benefit Arrangement or the trusts or other funding media relating thereto that have not been corrected, and neither the Company or any Company Subsidiary nor any of their agents has been in material breach of any fiduciary obligation with respect to the administration of any Employee Plan or Benefit Arrangement or the trusts or other funding media relating thereto;

(x) the execution, delivery and performance of, and consummation of the transactions contemplated by, this Agreement will not (1) entitle any current or former employee, director, manager, member, officer, consultant, independent contractor, contingent worker or leased employee (or any of their dependents, spouses or beneficiaries) of the Company or any Company Subsidiary to severance pay, unemployment compensation or any other payment, or (2) accelerate the time of payment or vesting, or increase the amount of compensation due any such employee, director, manager, member, officer, consultant, independent contractor, contingent worker or leased employee;

B-14

(xi) there are no pending or threatened claims, investigations, examinations, audits or other proceedings or actions by or on behalf of any Employee Plan or Benefit Arrangement, by any current or former employee, director, manager, officer, consultant, independent contractor, contingent worker or leased employee (or any of their beneficiaries) of the Company or any Company Subsidiary or by any Governmental Entities or otherwise, involving any such Employee Plan or Benefit Arrangement (other than routine claims for benefits or processing of domestic relations orders);

(xii) no amounts payable under any Employee Plan or Benefit Arrangement will fail to be deductible for federal Income Tax purposes by virtue of Section 280G of the Code;

(xiii) neither the Company nor any Company Subsidiary has any unfunded liabilities pursuant to any Employee Plan or Benefit Arrangement that is not intended to be qualified under Section 401(a) of the Code and is an "employee pension benefit plan" (as defined in Section 3(2) of ERISA), a nonqualified deferred compensation plan or an excess benefit plan;

(xiv) any individual who performs services for the Company or any of the Company Subsidiaries and who is not treated as an employee for federal income tax purposes by the Company or any Company Subsidiary is not an employee under Applicable Law for tax withholding purposes or Employee Plan or Benefit Arrangement purposes; and

(xv) to the Knowledge of Seller and the Company, with respect to each Employee Plan or Benefit Arrangement, that is or was a Multiemployer Plan: (i) neither the Company nor any ERISA Affiliate (or any of their respective predecessors) has, within the last six complete calendar years, incurred or had any reason to believe it could incur any withdrawal liability; no event has occurred which with the giving of notice could reasonably be expected to result in any liability under Section 4201 of ERISA as a result of a complete withdrawal (within the meaning of Section 4203 of ERISA) or a partial withdrawal (within the meaning of Section 4205 of ERISA); neither the Company nor any ERISA Affiliate (or any of their respective predecessors) has received any notice of any claim or demand for complete or partial withdrawal; (ii) neither the Company nor any ERISA Affiliate (or any of their respective predecessors) has received any notice or has any reason to believe that such Multiemployer Plan is in "reorganization" (within the meaning of Section 4241 of ERISA), that increased contributions may be required to avoid a reduction in plan benefits or the imposition of an excise tax, or that the Multiemployer Plan is or may become "insolvent" (within the meaning of Section 4241 of ERISA); (iii) no Multiemployer Plan is a party to any pending merger or asset or liability transfer under Part 2 of Subtitle E of Title IV of ERISA; (iv) the Pension Benefit Guaranty Corporation has not instituted proceedings against the Multiemployer Plan; (v)

B-15

neither the Company nor any ERISA Affiliate (nor any of their respective predecessors) has ever engaged in, or entered into any agreement with respect to, a transaction described in Section 4204 or 4212(c) of ERISA; and (vi) if the Company or ERISA Affiliate were to have a complete or partial withdrawal as of the Closing Date, no obligation to pay withdrawal liability would exist on the part of the Company or any ERISA Affiliate with respect to any Multiemployer Plan and no liability, direct or contingent, exists with regard to any Multiemployer Plan.

B.17 Labor Relations. Except as set forth in Schedule B.17 or as would not be reasonably likely to have a Company Material Adverse Effect, as of the date of this Agreement, (i) to the Knowledge of Seller and the Company, there are no activities or proceedings of any labor union to organize any non-unionized employees of the Company or any of the Company Subsidiaries; (ii) there are no unfair labor practice charges and/or complaints pending against the Company or any of the Company Subsidiaries before the National Labor Relations Board, or any similar foreign labor relations governmental bodies, or any current union representation questions involving employees of the Company or any Company Subsidiary; and (iii) there is no strike, slowdown, work stoppage or lockout, or, to the Knowledge of Seller and the Company, threat thereof, by or with respect to any employees of the Company or its Subsidiary. Except as set forth on Schedule B.17, the Company and the Company Subsidiaries are not parties to any collective bargaining agreements. Except as set forth on Schedule B.17, to the Knowledge of Seller and the Company, there are no controversies pending or threatened between the Company or its Subsidiary and any of their respective employees, except for such controversies that would not be reasonably likely to have a Company Material Adverse Effect.

B.18 Insurance Policies. Schedule B.18 contains a complete and correct list of all insurance policies carried by or for the benefit of the Company and each Company Subsidiary, specifying the insurer, amount of and nature of coverage, the risk insured against, the deductible amount (if any), the type of insurance (e.g. claims made, occurrence, etc.) and the date through which coverage will continue by virtue of premiums already paid. Except as disclosed on Schedule B.18, all such insurance has been in effect since the Formation Date. The Company and each Company Subsidiary maintains insurance with reputable insurers for the business and assets of the Company and each Company Subsidiary against all risks normally insured against, and in amounts normally carried, by businesses of similar size engaged in similar lines of business and such coverage is sufficient. All insurance policies and bonds with respect to the business and assets of the Company and each Company Subsidiary are in full force and effect and will be maintained by the Company or such Company Subsidiary, as the case may be, in full force and effect as they apply to any matter, action or event relating to the Company or such Company Subsidiary occurring through the Closing Date, and neither the Company nor any Company Subsidiary has reached or exceeded its policy limits for any insurance policies in effect at any time during the past five years.

B.19 Environmental, Health and Safety Matters. Except as set forth in Schedule B.19:

(a) the Company and each Company Subsidiary possesses, and is in full

B-16

compliance with, all material permits, licenses and government authorizations and has filed all notices that are required under all Environmental Laws, and the Company and each Company Subsidiary is in compliance with all applicable limitations, restrictions, conditions, standards, prohibitions, requirements, obligations, schedules and timetables contained in any Environmental Laws or contained in any law, regulation, code, plan, order, decree, judgment, notice or permit issued, entered, promulgated or approved thereunder, except where failure to file such notice or to comply with such limitations, restrictions, conditions, standards, prohibitions, requirements, obligations, schedules and timetables would not reasonably be expected to result in a Company Material Adverse Effect;

(b) neither the Company nor any Company Subsidiary has received notice of actual or threatened liability under CERCLA or any similar foreign, state or local statute or ordinance from any governmental agency or any third party and, to the Knowledge of the Company, there are no facts or circumstances which could form the basis for the assertion of any claim against the Company or any Company Subsidiary under any Environmental Laws including, without limitation, CERCLA or any similar local, state or foreign law with respect to any on-site or off-site location;

(c) neither the Company nor any Company Subsidiary has entered into or agreed to enter into, and neither the Company nor any Company Subsidiary contemplates entering into, any consent decree or order, and neither the Company nor any Company Subsidiary is subject to any judgment, decree or judicial or administrative order relating to compliance with, or the cleanup of Hazardous Materials under, any applicable Environmental Laws;

(d) neither the Company nor any Company Subsidiary has been found to be in violation of, nor been subject to any administrative or judicial proceeding pursuant to, applicable Environmental Laws or regulations either now or any time since the Formation Date;

(e) neither the Company nor any Company Subsidiary is subject to any claim, obligation, liability, loss, damage or expense of whatever

kind or nature, contingent or otherwise, incurred or imposed or based upon any provision of any Environmental Law or arising out of any act or omission of the Company or any Company Subsidiary, or the Company's or any Company Subsidiary's employees, agents or representatives or arising out of the ownership, use, control or operation by the Company or any Company Subsidiary of any plant, facility, site, area or property (including, without limitation, any plant, facility, site, area or property currently or previously owned or leased by the Company or any Company Subsidiary) from which any Hazardous Materials were released into the environment (the term "release" meaning any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, and the term "environment" meaning any surface or ground water, drinking water supply, soil, surface or subsurface strata or medium, or the ambient air);

B-17

(f) the Company has not paid any fines, penalties or assessments since the Formation Date with respect to environmental matters; and

(g) no Hazardous Substances have been released into the soil, surface water or ground water in amounts requiring investigation or cleanup pursuant to Environmental Law at the Owned Properties or, as a result of the Company's or any Company Subsidiary's operations, at the Leased Properties.

B.20 Intellectual Property; Software.

(a) Schedule B.20(a) sets forth a true and correct list of all Intellectual Property that is used by the Company or any Company Subsidiary, or that the Company or any Company Subsidiary claims an ownership interest, or that the Company or any Company Subsidiary is a licensee or licensor and the jurisdictions where each is registered (if any) (the "Company Intellectual Property"). Except as set forth on Schedule B.20(a), the Company and each Company Subsidiary, as the case may be, has good and marketable title to or possesses adequate licenses or other valid rights to use such Company Intellectual Property as it is used, has been used or is intended to be used, free and clear of all Encumbrances and has paid all maintenance fees, renewals or expenses related to such Intellectual Property. The Company Intellectual Property contains all Intellectual Property necessary to conduct the business of Company and Company Subsidiaries as such business currently is conducted.

(b) Schedule B.20(b) sets forth a true and complete list of all software owned by the Company or any Company Subsidiary.

(c) Except as required under the terms of a Government Contract, neither the Company nor any Company Subsidiary has granted rights in Company Intellectual Property to any third party.

(d) Neither Seller nor the Company has received any written claim from any third party alleging infringement of said third party's Intellectual Property which is based on the use of such by the Company or any of the Company Subsidiaries in connection with the conduct of the Business and which would reasonably be expected to have a Company Material Adverse Effect, except as otherwise set forth on Schedule B.20(d).

B.21 Transactions with Affiliates. Except as set forth in Schedule B.21, no director, manager, officer or member of Seller, the Company or any Company Subsidiary, or any person with whom any such director, manager, officer or member has any direct or indirect relation by blood, marriage or adoption, or any entity in which any such Person, owns any beneficial interest (other than a publicly held corporation whose stock is traded on a national securities exchange or in the over-the-counter market and less than five percent of the stock of which is beneficially owned by all such Persons in the aggregate) or any Affiliate of any of the foregoing or any current or former Affiliate of the Company has any interest in: (a) any contract, arrangement or understanding with, or relating to, the Business or the properties or assets of the Business; (b)

B-18

any loan, arrangement, understanding, agreement or contract for or relating to the Business or the properties or assets of the Business; or (c) any property (real, personal or mixed), tangible or intangible, used or currently intended to be used by the Company or any Company Subsidiary.

B.22 Customer and Supplier Relations. The Company and each Company Subsidiary maintains good relations with each of its customers, and, to the Knowledge of Seller and the Company, no event has occurred that would materially and adversely affect the Company's or any Company Subsidiary's relations with any such customer. Neither Seller, the Company nor any Company Subsidiary has received any notice to the effect that any current customer or supplier may or intends to terminate or materially alter its business relations with the Company or any Company Subsidiary, either as a result of the transactions contemplated by this Agreement or otherwise. Schedule B.22 sets forth the ten largest suppliers, all sole source suppliers and the ten largest customers, for the 12-month period ending on the date of this Agreement, of the Company and the Company Subsidiaries. During such 12-month period, none of the ten largest customers has canceled in whole or in part its Contract with the Company or any Company Subsidiary, as applicable, to purchase products or services (or, to the Knowledge of the Company, threatened to do any of the foregoing). During such

12-month period, none of the ten largest suppliers and none of the sole source suppliers has canceled in whole or in part its Contract to supply services or supplies to the Company or any Company Subsidiary (or, to the knowledge of Seller and Company, threatened to do any of the foregoing).

B.23 Licenses and Permits. The Company and each Company Subsidiary owns or possesses all of the notifications, licenses, permits (including, without limitation, environmental, construction and operation permits), franchises, certificates, approvals, exemptions classifications, registrations and other similar documents and authorizations, and applications therefor (collectively, the "Licenses") that are necessary to enable it to carry on the Business as presently conducted, except where the failure to so own or possess such License could not reasonably be expected to have a Company Material Adverse Effect.

B.24 Brokers, Finders and Investment Bankers. Except for Credit Suisse First Boston LLC, neither Seller, the Company or any Company Subsidiary, nor any of their Representatives, has employed any broker, finder or investment banker or incurred any liability for any investment banking fees, financial advisory fees, brokerage fees or finders' fees in connection with the Contemplated Transactions.

B.25 Warranties. Other than as may be imposed by generally Applicable Laws and except as disclosed on Schedule B.25, there are not any warranties, express or implied, written or oral, with respect to the products or services of the Company or any Company Subsidiary, and there are no claims pending or, to the Knowledge of Seller or the Company, threatened, with respect to any such warranty. Since the Formation Date, the Company has not recorded significant warranty expense charges. The Company has not established any reserves for warranties on the Opening Balance Sheet. Schedule B.25, includes a copy of the form of all written warranties furnished by the Company and the Company Subsidiaries to purchasers of any product sold or services provided by the Company or the Company Subsidiaries since the Formation Date.

B-19

B.26 Receivables. The receivables of the Company and each Company Subsidiary (including accounts receivable, loans receivable and advances) that are included in the Opening Balance Sheet have arisen only from bona fide transactions in the ordinary course of business consistent with past practice. Neither Seller nor the Company has any Knowledge of any facts or circumstances generally (other than general economic conditions) that would be likely to result in any material increase in the uncollectability of such receivables as a class in excess of the reserves therefor (if any) set forth on the Opening Balance Sheet. There has not been any material adverse change in the collectibility of such receivables during the past 12 months. Schedule B.26 sets forth a list of all receivables, which are more than 60 days past due, and of all receivables classified as doubtful accounts.

B.27 Order Backlog. A true and complete list of (a) the backlog in respect of all firm product and service purchase orders and contracts for the sale of goods or the delivery of services by the Company and each Company Subsidiary to Persons other than Governmental Entities, and (b) the backlog in respect of all firm funded product and service purchase orders and contracts for the sale of goods or the delivery of services by the Company to Governmental Entities (collectively, the "Backlog") pending as of the latest practical date prior to the date of this Agreement is set forth in Schedule B.27. The Backlog does not include any revenue from the sale of goods or the delivery of services by Company that has been recognized in the unaudited statement of income for the 6-month period ended June 27, 2003 included in the Financials Statements.

B.28 Inventories. Except as set forth on Schedule B.28 and net of reserves as included in the Opening Balance Sheet, inventories are of such quality as to meet the quality control standards of Company and each Company Subsidiary and any applicable governmental quality control standard and are usable in the ordinary course of business consistent with past practice.

B.29 Government Furnished Equipment. The Company has made available to Purchaser the most recent schedule delivered by the Company and each Company Subsidiary to the U.S. Government or any non-U.S. government, which identifies by description or by inventory number certain equipment and fixtures loaned, bailed or otherwise furnished to or held by the Company and each Company Subsidiary by or on behalf of the United States or any foreign country. Such schedule was accurate and complete on its date and, if dated on the Closing Date, would contain only those additions and omit only those deletions of equipment and fixtures that have occurred in the ordinary course of business consistent with past practice.

B.30 Assets. The assets of the Company and the Company Subsidiaries include all assets reasonably required for the conduct of the business of the Company and the Company Subsidiaries as such business is now being conducted.

B.31 Organizational Conflicts of Interest. Except as set forth on Schedule B.31, since the Formation Date, Seller, the Company and the Company Subsidiaries, have not, to Seller's and the Company's Knowledge, had access to non-public information nor provided systems engineering, technical direction, consultation, technical evaluation, source selection services or services of any type, nor prepared specifications or statements of work, nor engaged in any other

B-20

conduct that would create in any current Government procurement an Organizational Conflict of Interest, as defined in Federal Acquisition Regulation 9.501, with the Company or any Company Subsidiary.

B.32 Disclosure. This Agreement contains no untrue statement of a material fact or omits to state any material fact necessary in order to make the statements contained herein, in light of the circumstances under which such statements were made, not misleading.

B.33 Other Indebtedness. Except as set forth on Schedule B.33, none of the Company and the Company Subsidiaries has any Other Indebtedness.

B-21

#### EXHIBIT C

##### REPRESENTATIONS AND WARRANTIES OF PURCHASER

The representation and warranties of Purchaser contained in this Exhibit C (other than those contained in Section C-2) shall be deemed true and correct, and Purchaser shall not be deemed to have breached any such representation or warranty as a consequence of the existence of any fact, event or circumstance inconsistent with such representation or warranty, unless such fact, event or circumstance, individually or taken together with all other facts, events or circumstances inconsistent with any representation or warranty contained in this Exhibit C, has had or could reasonably be expected to have a Purchaser Material Adverse Effect, disregarding for these purposes (i) any qualification or exception for, or reference to, materiality in any such representation or warranty and (ii) any use of the terms "material," "materiality," "in all material respects" or similar terms or phrases in any such representation or warranty. The representations and warranties in Section C-2 shall not be qualified by the preceding sentence.

Except as set forth on the Schedule (it being understood that an item included on a Schedule referenced in any Section or subsection of this Exhibit C shall be deemed to relate to each other Section or subsection of this Exhibit C to the extent such relationship is reasonably apparent), and subject to the preceding paragraph, Purchaser hereby represents and warrants to Seller, as follows:

C.1 Organization. Purchaser is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as now being conducted.

C.2 Authorization. Purchaser has full corporate power and authority to execute and deliver this Agreement and each of the Transaction Documents to which Purchaser is a party, to perform its obligations under this Agreement and the Transaction Documents and to consummate the transactions contemplated by this Agreement and the Transaction Documents. The execution and delivery of this Agreement and each of the Transaction Documents to which Purchaser is a party by Purchaser, the performance by Purchaser of its obligations hereunder and thereunder, and the consummation of the transactions provided for herein and therein have been duly and validly authorized by all necessary corporate action on the part of Purchaser. This Agreement has been and, as of the Closing Date, the Transaction Documents to which Purchaser is a party will be, duly executed and delivered by Purchaser and do or will, as the case may be, constitute the valid and binding agreements of Purchaser, enforceable against Purchaser in accordance with their respective terms, subject to applicable bankruptcy, insolvency and other similar laws affecting the enforceability of creditors' rights generally, general equitable principles and the discretion of courts in granting equitable remedies.

C.3 Absence of Restrictions and Conflicts. The execution, delivery and performance of this Agreement and each of the Transaction Documents to which Purchaser is a party, the

C-1

consummation of the transactions contemplated hereby and thereby, and the fulfillment of and compliance with the terms and conditions of herein and therein by Purchaser do not or will not (as the case may be), with the passing of time or the giving of notice or both, violate or conflict with, constitute a breach of or default under, result in the loss of any benefit under, or permit the acceleration of any obligation under, (a) any term or provision of the charter or bylaws of Purchaser, (b) any material contract to which Purchaser is a party, (c) any judgment, decree or order of any Governmental Entity to which Purchaser is a party or by which Purchaser or any of its properties is bound or (d) assuming compliance with the requirements under the HSR Act, any statute, law, rule or regulation applicable to Purchaser, except in the case of the foregoing clauses (b), (c) and (d) for violations, conflicts, breaches or defaults that could not reasonably be expected to have a Purchaser Material Adverse Effect. No consent, approval, order or authorization of, or registration, declaration or filing with, any governmental agency or public or regulatory unit, agency or authority is required with respect to Purchaser in connection with the execution, delivery or performance of this Agreement or the Transaction Documents or the consummation of the transactions contemplated hereby or thereby except as required by the HSR Act.

C.4 Investment Representation. Purchaser is acquiring the membership interests of the Company for its own account for purposes of investment and not with a present view to the distribution thereof or dividing all or any part of its interest therein with any other Person. Purchaser acknowledges that the sale of the membership interests of the Company has not been registered under the Securities Laws and that the membership interests may not be transferred without

registration under or pursuant to an exemption from registration under the Securities Laws.

C.5 Legal Proceedings. There are no suits, actions, claims, arbitration proceedings or investigations pending or, to the Knowledge of Purchaser, threatened against Purchaser which, if adversely determined, would reasonably be expected to have a Purchaser Material Adverse Effect.

C.6 Brokers, Finders and Investment Bankers. Neither Purchaser nor any of its Representatives has employed any broker, finder or investment banker or incurred any liability for any investment banking fees, financial advisory fees, brokerage fees or finders' fees in connection with the Contemplated Transactions that would create any liability of Seller or the Company.

C-2

#### ATTACHMENT I

##### Legal Opinion of Counsel to Seller

1. Each of Seller and the Company is a limited liability company duly formed and in good standing and is validly existing under the laws of the State of Delaware. Each of Seller and the Company has the limited liability company power and authority to enter into and to perform its obligations under the Transaction Agreement and to consummate the Contemplated Transactions.

2. Each Company Subsidiary is a limited liability company duly formed and in good standing and is validly existing under the laws of the State of Delaware.

3. The execution and delivery by Seller and the Company of the Transaction Agreement and the performance by Seller and the Company of the Contemplated Transactions have been duly authorized by all necessary limited liability company action on the part of Seller and the Company. No consent on the part of any of the members of Seller is necessary for Seller to execute and deliver this Agreement and the other Transaction Documents to which it is a party, to perform its obligations herein and therein, and to consummate the transactions contemplated hereby or thereby.

4. The Transaction Agreement has been duly executed and delivered by Seller and the Company and constitutes the valid and legally binding obligation of Seller and the Company, enforceable against them in accordance with its terms.

5. Neither the execution or delivery by Seller and the Company of the Transaction Agreement nor the performance of their obligations thereunder nor the consummation by Seller and the Company of the Contemplated Transactions will violate any provision of the certificate of formation or limited liability company agreement of Seller or the Company.

6. Neither the execution or delivery by Seller and the Company of the Transaction Agreement nor the consummation by Seller and the Company of the Contemplated Transactions will require any consent, approval or authorization of, or any registration, declaration or filing with, the State of New York or the United States of America, or any of their respective agencies.

7. Upon admission of Purchaser, and simultaneous withdrawal of Seller, as a member of the Company and delivery by Seller to Purchaser of the membership certificate representing the entire interest held by Seller in the Company, Purchaser will be the sole member of the Company and hold Seller's entire interest in the Company.

#### ATTACHMENT II

##### Legal Opinion of Counsel to Purchaser

1. Purchaser is a corporation duly incorporated and in good standing and has a legal corporate existence under the laws of the State of Delaware. Purchaser has the corporate power and authority to enter into and to perform its obligations under the Transaction Agreement and to consummate the Contemplated Transactions.

2. The execution and delivery by Purchaser of the Transaction Agreement and the performance by Purchaser of the Contemplated Transactions have been duly authorized by all necessary corporate action on the part of Purchaser.

3. The Transaction Agreement has been duly executed and delivered by Purchaser and constitutes the valid and legally binding obligation of Purchaser, enforceable against it in accordance with its terms.

4. Neither the execution or delivery by Purchaser of the Transaction Agreement nor the performance of its obligations thereunder nor the consummation by Purchaser of the Contemplated Transactions will violate any provision of the certificate of incorporation or bylaws of Purchaser.

5. Neither the execution or delivery by Purchaser of the Transaction Agreement nor the consummation by Purchaser of the Contemplated Transactions will require any consent, approval or authorization of, or any registration, declaration or filing with, the State of New York or the United States of America, or any of their respective agencies.

ATTACHMENT III

OPENING BALANCE SHEET

1. Cash and equivalents are/will be excluded for the purposes of the Opening Balance Sheet and the Final Net Asset Amount calculation.
2. Unbilled contract receivables consist of unbilled government and commercial receivables for work performed prior to September 26, 2003.
3. Accounts receivables, net of allowance for doubtful accounts consist of billed government and commercial receivables for work performed prior to September 26, 2003.
4. Work in process represents cost and estimated earnings in excess of billings on uncompleted contracts. Specifically this represents (a) the difference between total contract costs incurred to date and amounts recognized in cost of sales under various long term contracts; (b) contract costs incurred on unapproved change orders where approval is probable; (c) cost incurred on contracts prior to September 26, 2003 for which required documentation and approval, necessary to invoice for work performed, had not been received by the Company from our government or commercial customers.
5. Inventories, net consist of parts used in aircraft maintenance and include consumables and new and used repairable parts. Consumable parts represent items that are expended through utilization in performance under contracts. Inventories of consumable and new parts used in the performance of contracts are valued at the lower of cost or market value, and cost is determined on the first-in, first-out basis. Used repairable parts, which are parts recovered in aircraft maintenance operations and repaired, are included in inventory at the average cost of comparable items. The cost of refurbishing repairable inventory is a current asset of the Company. A reserve is established for inventory items that are considered excess or obsolete.
6. Prepaid expenses & other current assets consist primarily of insurance premiums through the policy period expiring June 27, 2004.
7. Core inventory, net represents repairable inventory that contains a repairable "core" that may be refurbished and used to service contracts. In performance under a program, Company owned inventory is placed on an aircraft and customer parts are removed and refurbished. This process effectively rotates cores through the Company's inventory. In performance under the Company's contracts, customers are billed for the repair cost, but not the value of the core, as the Company permanently retains core values. As of September 26, 2003 there are no management plans to dispose of repairable inventory through a sale during the coming year. Therefore the core values of repairable inventory are included as non-current assets.
8. Property, plant and equipment include land, special mission modified aircraft, aircraft engines, leasehold improvements, vehicles and transportation equipment, computer equipment and software, furniture and fixtures and machinery and equipment required to support contracts, stated at cost less accumulated depreciation.
9. Intangible assets net consist of separately identifiable intangible assets and goodwill created in connection with the 2001 transaction and the December 2002 acquisition of Flight. Intangible assets net are/will be excluded for purposes of the Opening Balance Sheet and the Final Net Asset Amount calculation.
10. Drafts outstanding represent book overdrafts resulting from uncleared checks to third parties against Company bank accounts.
11. Accounts payable consists primarily of third party trade payables.
12. Accrued salaries, wages and benefits primarily consist of accrued payroll, vacation, and related payroll taxes.
13. Accrued expenses consists primarily of Customer advance payments (\$600,344), accrued legal reserves (\$905,000), accrued group health IBNR (\$629,654), accrued workers comp IBNR (\$5,556,882), accrued pension expense cost sharing with the predecessor owner (\$736,309), and accrued engine & fuel expenses for Flight (\$2,071,058). Excluded from the Opening Balance Sheet and the Final Net Asset Amount calculation are/will be accrued members tax distributions (\$11,860) and accrued interest expense on existing Bank Debt and Senior Subordinated debt (\$3,247,009).
14. Accrued contract loss represents management's estimate of the total future loss through 2004 on the C-21 CLS contract and the Raytheon Australia [aircraft serial number 611] special mission aircraft modification program. Current portion of the accrued contract loss is (\$6,864,698) and the long-term portion is (\$2,272,630).

15. All Indebtedness (as defined in this Agreement) has been/will be excluded from the Opening Balance Sheet and (to the extent paid or satisfied before or at the Closing) the Final Net Asset Amount calculation. If any Other Indebtedness (as defined in this Agreement) exists at the Closing, then such Other Indebtedness, other than the letters of credit listed on Schedule B.33 which will be replaced by Purchaser, will be included in the Final Net Asset Amount calculation.
16. Other short-term debt consists of the current portion of capitalized leases and the short-term component of a payable to the Air force for C-12 inventory purchases.
- As of September 26, 2003 the Company had no liabilities established for the costs associated with the 2003 S-1 preparation or expenses associated with the Contemplated Transaction with L-3. For purposes of the Final Net Asset Amount calculation, the Company will exclude all expenses (including but not limited to legal expenses, accounting expenses, investment banking services (from CSFB), and expenses incurred with the financial printers) in connection with the 2003 S-1 preparation and the Contemplated Transaction with L-3.
17. Derivative financial instrument represents two interest rate hedge agreements on the Company's existing Bank debt facility. These liabilities are/will be excluded from the Opening Balance Sheet and (to the extent paid or satisfied before or at the Closing) the Final Net Asset amount calculation.
18. Other long-term debt, net of current consists of the remaining liability for capitalized leases and the long-term component of a payable to the Air force for C-12 inventory purchases.
19. The Company had no other long-term liabilities as of September 26, 2003.
20. Members Capital account is/will be excluded from the Opening Balance Sheet and the Final Net Asset Amount calculation.

VERTEX AEROSPACE LLC  
 OPENING BALANCE SHEET  
 AS OF SEPTEMBER 26, 2003 (MANAGEMENT ACCOUNTS -  
 UNAUDITED)

	Notes	As of September 26, 2003	Adjustments	Net Assets
		-----	-----	-----
<b>ASSETS</b>				
Cash and Equivalents	1	\$12,354,281	(\$12,354,281)	\$0
Unbilled Contract Receivables	2	\$35,488,127	\$0	\$35,488,127
Accounts Receivables (A/R), net of allowance for doubtful accounts	3	\$54,878,789	\$0	\$54,878,789
Work in Process	4	\$11,373,482	\$0	\$11,373,482
Inventories, net	5	\$35,347,020	\$0	\$35,347,020
Prepaid expenses & other current assets	6	\$2,091,036	\$0	\$2,091,036
		-----	-----	-----
Total Current Assets		\$151,532,735	(\$12,354,281)	\$139,178,454
Core Inventory, net	7	\$29,212,122	\$0	\$29,212,122
Net Property, Plant & Equipment	8	\$49,436,187	\$0	\$49,436,187
Intangible Assets, net	9	\$146,016,275	(\$146,016,275)	\$0
Other Assets		\$0	\$0	\$0
		-----	-----	-----
Total Assets		\$376,197,319	(\$146,016,275)	\$217,826,763
		=====	=====	=====
<b>LIABILITIES AND EQUITY</b>				
Drafts Outstanding	10	\$0	\$0	\$0
Accounts Payable	11	(\$30,684,463)	\$0	(\$30,684,463)
Accrued Salaries/ Wages & benefits	12	(\$22,950,414)	\$0	(\$22,950,414)
Accrued Expenses	13	(\$13,758,117)	\$3,258,869	(\$10,499,248)
Accrued contract loss - current	14	(\$6,864,698)	\$0	(\$6,864,698)
Current Portion of Bank Tranche A Debt	15	(\$10,000,000)	\$10,000,000	\$0
Current Portion of Bank Tranche B Debt	15	(\$1,480,000)	\$1,480,000	\$0
Other Short Term Debt	16	(\$342,958)	\$0	(\$342,958)
		-----	-----	-----
Total Current Liabilities		(\$86,080,651)	\$14,738,869	(\$71,341,782)
Derivative Financial Instrument	17	(\$1,976,855)	\$1,976,855	\$0
Accrued Contract Loss, net of Current	14	(\$2,272,630)	\$0	(\$2,272,630)
Long Term Portion of Bank Tranche A Debt, net of current	15	(\$28,000,000)	\$28,000,000	\$0
Long Term Portion of Bank Tranche B Debt, net of current	15	(\$145,000,000)	\$145,000,000	\$0
Long Term Senior Sub-Debt	15	(\$81,760,305)	\$81,760,305	\$0

Other Long-term debt, net of current	18	(\$2,605,897)	\$0	(\$2,605,897)
Other Liabilities	19	\$0	\$0	\$0
		-----	-----	-----
TOTAL LIABILITIES		(\$347,696,338)	\$256,737,160	(\$76,220,309)
Raytheon Preferred		\$0	\$0	\$0
Members Capital	20	(\$28,500,981)	\$28,500,981	\$0
		-----	-----	-----
TOTAL EQUITY		(\$28,500,981)	\$28,500,981	\$0
		-----	-----	-----
TOTAL LIABILITIES & EQUITY		(\$376,197,319)	\$285,238,141	(\$76,220,309)
		=====	=====	=====
NET ASSETS			\$139,221,866	\$141,606,454

SUPPLEMENTAL INDENTURE TO BE DELIVERED  
BY GUARANTEEING SUBSIDIARIES

Supplemental Indenture (this "Supplemental Indenture"), dated as of February 25, 2004, among L-3 Communications Corporation (or its permitted successor), a Delaware corporation (the "Company"), each a direct or indirect subsidiary of the Company signatory hereto (each, a "Guaranteeing Subsidiary", and collectively, the "Guaranteeing Subsidiaries"), and The Bank of New York, as trustee under the indenture referred to below (the "Trustee").

W I T N E S S E T H  
- - - - -

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as of December 22, 2003 providing for the issuance of an unlimited amount of 6 1/8% Senior Subordinated Notes due 2014 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Company's Obligations (as defined in the Indenture) under the Notes and the Indenture on the terms and conditions set forth herein (the "Subsidiary Guarantee"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees as follows:

- (a) Such Guaranteeing Subsidiary, jointly and severally with all other current and future guarantors of the Notes (collectively, the "Guarantors" and each, a "Guarantor"), unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, regardless of the validity and enforceability of the Indenture, the Notes or the Obligations of the Company under the Indenture or the Notes, that:
  - (i) the principal of, premium, interest and Additional Interest, if any, on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption or

1

otherwise, and interest on the overdue principal of, premium, interest and Additional Amounts, if any, on the Notes, to the extent lawful, and all other Obligations of the Company to the Holders or the Trustee thereunder or under the Indenture will be promptly paid in full, all in accordance with the terms thereof; and

- (ii) in case of any extension of time for payment or renewal of any Notes or any of such other Obligations, that the same will be promptly paid in full when due in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise.

- (b) Notwithstanding the foregoing, in the event that this Subsidiary Guarantee would constitute or result in a violation of any applicable fraudulent conveyance or similar law of any relevant jurisdiction, the liability of such Guaranteeing Subsidiary under this Supplemental Indenture and its Subsidiary Guarantee shall be reduced to the maximum amount permissible under such fraudulent conveyance or similar law.

3. EXECUTION AND DELIVERY OF SUBSIDIARY GUARANTEES.

- (a) To evidence its Subsidiary Guarantee set forth in this Supplemental Indenture, such Guaranteeing Subsidiary hereby agrees that a notation of such Subsidiary Guarantee substantially in the form of Exhibit F to the Indenture shall be endorsed by an officer of such Guaranteeing Subsidiary on each Note authenticated and delivered by the Trustee after the date hereof.
- (b) Notwithstanding the foregoing, such Guaranteeing Subsidiary hereby agrees that its Subsidiary Guarantee set forth herein shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Subsidiary Guarantee.
- (c) If an Officer whose signature is on this Supplemental Indenture or on the Subsidiary Guarantee no longer holds that office at the

time the Trustee authenticates the Note on which a Subsidiary Guarantee is endorsed, the Subsidiary Guarantee shall be valid nevertheless.

- (d) The delivery of any Note by the Trustee, after the authentication thereof under the Indenture, shall constitute due delivery of the Subsidiary Guarantee set forth in this Supplemental Indenture on behalf of each Guaranteeing Subsidiary.
- (e) Each Guaranteeing Subsidiary hereby agrees that its Obligations hereunder shall be unconditional, regardless of the validity, regularity or enforceability of the Notes or the Indenture, the

2

absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

- (f) Each Guaranteeing Subsidiary hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that its Subsidiary Guarantee made pursuant to this Supplemental Indenture will not be discharged except by complete performance of the Obligations contained in the Notes and the Indenture.
- (g) If any Holder or the Trustee is required by any court or otherwise to return to the Company or any Guaranteeing Subsidiary, or any custodian, Trustee, liquidator or other similar official acting in relation to either the Company or such Guaranteeing Subsidiary, any amount paid by either to the Trustee or such Holder, the Subsidiary Guarantee made pursuant to this Supplemental Indenture, to the extent theretofore discharged, shall be reinstated in full force and effect.
- (h) Each Guaranteeing Subsidiary agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Obligations guaranteed hereby until payment in full of all Obligations guaranteed hereby. Each Guaranteeing Subsidiary further agrees that, as between such Guaranteeing Subsidiary, on the one hand, and the Holders and the Trustee, on the other hand:
  - (i) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Article 6 of the Indenture for the purposes of the Subsidiary Guarantee made pursuant to this Supplemental Indenture, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby; and
  - (ii) in the event of any declaration of acceleration of such Obligations as provided in Article 6 of the Indenture, such Obligations (whether or not due and payable) shall forthwith become due and payable by such Guaranteeing Subsidiary for the purpose of the Subsidiary Guarantee made pursuant to this Supplemental Indenture.
- (i) Each Guaranteeing Subsidiary shall have the right to seek contribution from any other non-paying Guaranteeing Subsidiary so long as the exercise of such right does not impair the rights of

3

the Holders or the Trustee under the Subsidiary Guarantee made pursuant to this Supplemental Indenture.

#### 4. GUARANTEEING SUBSIDIARY MAY CONSOLIDATE, ETC. ON CERTAIN TERMS.

- (a) Except as set forth in Articles 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into the Company or any other Guarantor or shall prevent any transfer, sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to the Company or any other Guarantor.
- (b) Except as set forth in Article 4 and 5 of the Indenture, nothing contained in the Indenture, this Supplemental Indenture or in the Notes shall prevent any consolidation or merger of any Guaranteeing Subsidiary with or into a corporation or corporations other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary), or successive consolidations or mergers in which a Guaranteeing Subsidiary or its successor or successors shall be a party or parties, or shall prevent any sale or conveyance of the property of any Guaranteeing Subsidiary as an entirety or substantially as an entirety, to a corporation other than the Company or any other Guarantor (in each case, whether or not affiliated with the Guaranteeing Subsidiary) authorized to acquire and operate the same; provided, however, that each

Guaranteeing Subsidiary hereby covenants and agrees that (i) subject to the Indenture, upon any such consolidation, merger, sale or conveyance, the due and punctual performance and observance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiaries, shall be expressly assumed (in the event that such Guaranteeing Subsidiary is not the surviving corporation in the merger), by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the corporation formed by such consolidation, or into which such Guaranteeing Subsidiary shall have been merged, or by the corporation which shall have acquired such property and (ii) immediately after giving effect to such consolidation, merger, sale or conveyance no Default or Event of Default exists.

- (c) In case of any such consolidation, merger, sale or conveyance and upon the assumption by the successor corporation, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Subsidiary Guarantee made pursuant to this Supplemental Indenture and the due and

4

punctual performance of all of the covenants and conditions of the Indenture and this Supplemental Indenture to be performed by such Guaranteeing Subsidiary, such successor corporation shall succeed to and be substituted for such Guaranteeing Subsidiary with the same effect as if it had been named herein as the Guaranteeing Subsidiary. Such successor corporation thereupon may cause to be signed any or all of the Subsidiary Guarantees to be endorsed upon the Notes issuable under the Indenture which theretofore shall not have been signed by the Company and delivered to the Trustee. All the Subsidiary Guarantees so issued shall in all respects have the same legal rank and benefit under the Indenture and this Supplemental Indenture as the Subsidiary Guarantees theretofore and thereafter issued in accordance with the terms of the Indenture and this Supplemental Indenture as though all of such Subsidiary Guarantees had been issued at the date of the execution hereof.

#### 5. RELEASES.

- (a) Concurrently with any sale of assets (including, if applicable, all of the Capital Stock of a Guaranteeing Subsidiary), all Liens, if any, in favor of the Trustee in the assets sold thereby shall be released; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. If the assets sold in such sale or other disposition include all or substantially all of the assets of a Guaranteeing Subsidiary or all of the Capital Stock of a Guaranteeing Subsidiary, then the Guaranteeing Subsidiary (in the event of a sale or other disposition of all of the Capital Stock of such Guaranteeing Subsidiary) or the Person acquiring the property (in the event of a sale or other disposition of all or substantially all of the assets of such Guaranteeing Subsidiary) shall be released from and relieved of its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto; provided that in the event of an Asset Sale, the Net Proceeds from such sale or other disposition are treated in accordance with the provisions of Section 4.10 of the Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate to the effect that such sale or other disposition was made by the Company or the Guaranteeing Subsidiary, as the case may be, in accordance with the provisions of the Indenture and this Supplemental Indenture, including without limitation, Section 4.10 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of the Guaranteeing Subsidiary from its Obligations under this Supplemental Indenture and its Subsidiary Guarantee made pursuant hereto. If the Guaranteeing Subsidiary is not released from its obligations under its Subsidiary Guarantee, it shall remain liable for the full amount

5

of principal of and interest on the Notes and for the other obligations of such Guaranteeing Subsidiary under the Indenture as provided in this Supplemental Indenture.

- (b) Upon the designation of a Guaranteeing Subsidiary as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Guaranteeing Subsidiary shall be released and relieved of its Obligations under its Subsidiary Guarantee and this Supplemental Indenture. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such designation of such Guaranteeing Subsidiary as an Unrestricted Subsidiary was made by the Company in accordance with the provisions of the Indenture, including without limitation Section 4.07 of the Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of such Guaranteeing Subsidiary from its Obligations under its Subsidiary Guarantee. Any Guaranteeing Subsidiary not released from its Obligations under its Subsidiary Guarantee shall remain liable for the full amount of principal of

and interest on the Notes and for the other Obligations of any  
Guaranteeing Subsidiary under the Indenture as provided herein.

- (c) Each Guaranteeing Subsidiary shall be released and relieved of its obligations under this Supplemental Indenture in accordance with, and subject to, Section 4.18 of the Indenture.

6. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guaranteeing Subsidiary, as such, shall have any liability for any Obligations of the Company or any Guaranteeing Subsidiary under the Notes, any Subsidiary Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such Obligations or their creation. Each Holder of the 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 SEC that such a waiver is against public policy.

7. SUBORDINATION OF SUBSIDIARY GUARANTEES; ANTI-LAYERING. No Guaranteeing Subsidiary shall 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 Guaranteeing Subsidiary and senior in any respect in right of payment to any of the Subsidiary Guarantees. Notwithstanding the foregoing sentence, the Subsidiary Guarantee of each Guaranteeing Subsidiary shall be subordinated to the prior payment in full of all Senior Debt of that Guaranteeing Subsidiary (in the same manner and to the same extent that the Notes are subordinated to Senior Debt), which shall include all guarantees of Senior Debt.

8. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

6

9. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

10. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

11. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Company.

7

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

Dated: February 25, 2004

L-3 COMMUNICATIONS CORPORATION

By:

-----  
Name:

Title:

Dated: February 25, 2004

APCOM, INC., a Maryland corporation  
BROADCAST SPORTS INC., a Delaware corporation  
ELECTRODYNAMICS, INC., an Arizona corporation  
HENSCHER INC., a Delaware corporation  
HYGIENETICS ENVIRONMENTAL SERVICES, INC., a  
Delaware corporation  
INTERSTATE ELECTRONICS CORPORATION, a California  
corporation  
KDI PRECISION PRODUCTS, INC., a Delaware  
corporation  
L-3 COMMUNICATIONS AEROMET, INC., an Oregon  
corporation  
L-3 COMMUNICATIONS VERTEX AEROSPACE LLC, a  
Delaware limited liability company  
L-3 COMMUNICATIONS AIS GP CORPORATION, a Delaware  
corporation  
L-3 COMMUNICATIONS AVIONICS SYSTEMS, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS AYDIN CORPORATION, a Delaware  
corporation  
L-3 COMMUNICATIONS CSI, INC., a California  
corporation  
L-3 COMMUNICATIONS ESSCO, INC., a Delaware  
corporation

L-3 COMMUNICATIONS FLIGHT INTERNATIONAL AVIATION  
LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS FLIGHT CAPITAL LLC, a Delaware  
limited liability company  
L-3 COMMUNICATIONS GOVERNMENT SERVICES, INC., a  
Virginia corporation  
L-3 COMMUNICATIONS ILEX SYSTEMS, INC., a Delaware  
corporation  
L-3 COMMUNICATIONS INTEGRATED SYSTEMS L.P., a  
Delaware limited partnership  
L-3 COMMUNICATIONS INVESTMENTS INC., a Delaware  
corporation  
L-3 COMMUNICATIONS KLEIN ASSOCIATES, INC., a  
Delaware corporation  
L-3 COMMUNICATIONS MAS (US) CORPORATION, a  
Delaware corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION CALIFORNIA, a California  
corporation  
L-3 COMMUNICATIONS SECURITY AND DETECTION SYSTEMS  
CORPORATION DELAWARE, a Delaware corporation  
L-3 COMMUNICATIONS SECURITY SYSTEMS CORPORATION,  
a Delaware corporation  
L-3 COMMUNICATIONS STORM CONTROL SYSTEMS, INC.,  
a California corporation

L-3 COMMUNICATIONS VECTOR INTERNATIONAL AVIATION  
LLC, a Delaware limited liability company  
L-3 COMMUNICATIONS WESTWOOD CORPORATION, a Nevada  
corporation  
MCTI ACQUISITION CORPORATION, a Maryland  
corporation  
MICRODYNE COMMUNICATIONS TECHNOLOGIES  
INCORPORATED, a Maryland corporation  
MICRODYNE CORPORATION, a Maryland corporation  
MICRODYNE OUTSOURCING INCORPORATED, a Maryland  
corporation  
MPRI, INC., a Delaware corporation  
PAC ORD INC., a Delaware corporation  
POWER PARAGON, INC., a Delaware corporation  
SHIP ANALYTICS, INC., a Connecticut corporation  
SHIP ANALYTICS INTERNATIONAL, INC., a Delaware  
corporation  
SHIP ANALYTICS USA, INC., a Connecticut  
corporation  
SPD ELECTRICAL SYSTEMS, INC., a Delaware  
corporation  
SPD SWITCHGEAR INC., a Delaware corporation  
SYCOLEMAN CORPORATION, a Florida corporation  
TROLL TECHNOLOGY CORPORATION, a California  
corporation  
WESCAM AIR OPS INC., a Delaware corporation  
WESCAM AIR OPS LLC, a Delaware limited liability  
company  
WESCAM HOLDINGS (US) INC., a Delaware corporation  
WESCAM INCORPORATED, a Florida corporation  
WESCAM LLC, a Delaware limited liability company  
WESCAM SONOMA INC., a California corporation  
WOLF COACH, INC., a Massachusetts corporation  
As Guaranteeing Subsidiaries

By: \_\_\_\_\_  
Name:  
Title:

Dated: February 25, 2004

THE BANK OF NEW YORK,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:



**L-3 Communications Holdings, Inc.  
and L-3 Communications Corporation  
Ratio of Earnings to Fixed Charges**

**Exhibit 12**

	L-3				
	Year Ended December 31,				
	2003	2002	2001	2000	1999
Earnings:					
Income before income taxes and cumulative effect of a change in accounting principle	\$433,813	\$314,023	\$186,222	\$134,079	\$ 95,430
Add:					
Interest expense	124,706	115,100	80,002	87,308	56,686
Amortization of debt expense	7,977	7,392	6,388	5,724	3,904
Interest component of rent expense	24,364	22,342	14,332	11,882	7,500
Earnings	<u>\$590,860</u>	<u>\$458,857</u>	<u>\$286,944</u>	<u>\$238,993</u>	<u>\$163,520</u>
Fixed charges:					
Interest expense	124,706	115,100	80,002	87,308	56,686
Amortization of debt expense	7,977	7,392	6,388	5,724	3,904
Interest component of rent expense	24,364	22,342	14,332	11,882	7,500
Fixed charges	<u>\$157,047</u>	<u>\$144,834</u>	<u>\$100,722</u>	<u>\$104,914</u>	<u>\$ 68,090</u>
Ratio of earnings to fixed charges	<u>3.8x</u>	<u>3.2x</u>	<u>2.8x</u>	<u>2.3x</u>	<u>2.4x</u>

**L-3 Communications Holdings, Inc. and Subsidiaries**  
**As of December 31, 2003**

L-3 Communications Holdings, Inc.

L-3 Communications Corporation

Aviation Communications & Surveillance Systems, LLC (70%)

ACSS – NZSC Limited (70%)

Honeywell TCAS Inc. (70%)

Electrodynamics, Inc.

Henschel Inc.

Hygienetics Environmental Services, Inc.

Interstate Electronics Corporation

KDI Precision Products, Inc.

L-3 Canada Acquisition Inc.

Wescam Inc.

1179023 Ontario Ltd

1374474 Ontario Inc.

1415645 Ontario Inc.

3052893 Nova Scotia Company

Applied Physics Specialties Limited

3033544 Nova Scotia Company

Wescam Asia Pte Ltd (50%)

Wescam Europe Limited

Wescam Financial (U.S.A.) LLC

L-3 Communications Aeromet, Inc.

L-3 Communications AIS GP Corporation

L-3 Communications Integrated Systems L.P. (1%+99%)

L-3 Communications AeroTech LLC

Army Fleet Support, LLC (40% +40%)

J-R Technical Management, L.L.C. (50%)

J-R Technical Services Limited Partnership, L.L.P.

(49.5%+1%\*50%)

L-3 Communications Flight Capital LLC

L-3 Communications Flight International Aviation LLC

L-3 Communications Vector International Aviation LLC

L3 Communications Australia Proprietary Limited

L-3 Communications Australia Pty Ltd

L-3 Communications Avionics Systems, Inc.

L-3 Communications Aydin Corporation

Aydin Foreign Sales Limited

L-3 Communications Global Network Solutions U.K. Ltd.

L-3 Communications Investments Inc.

L-3 Communications Canada Inc.

L-3 Communications MAS (Canada) Inc.

Spar Aerospace Limited

L-3 Communications ESSCO, Inc.

Electronic Space Systems International Corp.

ESSCO Collins Limited (99.99%)

L-3 Communications Government Services, Inc.

L-3 Communications Holding GmbH

L-3 Communications ELAC Nautik GmbH

ELAC Nautik Unterstützungskasse GmbH

Power Paragon (Deutschland) Holding GmbH (99% +1%)

EuroAtlas Gesellschaft für Leistungselektronik mbH

**L-3 Communications Holdings, Inc. and Subsidiaries — (continued)**  
**As of December 31, 2003**

JovyAtlas Elektrische Umformtechnik GmbH (99% +1%)

Narda Safety Test Solutions GmbH

PMM Costuzioni Eletttroniche Centro Misura

Radioelettriche S.r.l. (98%)

L-3 Communications Hong Kong Limited

L-3 Communications ILEX Systems, Inc.

L-3 Communications Klein Associates, Inc.

L-3 Communications Korea Corporation

L-3 Communications Malaysia Sdn. Bhd.

L-3 Communications MAS (US) Corporation

L-3 Communications Secure Information Technology, Inc.

L-3 Communications Security and Detection Systems Corporation California

L-3 Communications Security and Detection Systems Corporation Delaware

L-3 Communications Security Systems Corporation

L-3 Communications Singapore Pte Ltd

L-3 Communications Storm Control Systems, Inc.

L-3 Communications U.K. Ltd.

Storm Control Systems Limited

L-3 Communications Westwood Corporation

Logimetrics, Inc. (55%)

Logimetrics FSC, Inc. (55%)

mmTECH, INC. (55%)

L-Tres Comunicaciones Cost Rica, S.A.

Microdyne Corporation

Microdyne Communications Technologies Incorporated

MCTI Acquisition Corporation

Apcom, Inc.

L-3 Communications CSI, Inc.  
Microdyne Ltd.  
Microdyne Outsourcing Incorporated  
MPRI, Inc.  
Ship Analytics, Inc.  
Ship Analytics International, Inc.  
Ship Analytics USA, Inc.  
PacOrd Inc.  
Power Paragon, Inc.  
SPD Electrical Systems, Inc.  
SPD Switchgear Inc.  
SYColeman Corporation  
Wescam Holdings (US) Inc.  
Broadcast Sports Inc.  
Troll Technology Corporation  
Wescam Incorporated  
Wescam Air Ops Inc.  
Wescam Air Ops LLC  
Wescam Sonoma Inc.  
Wescam LLC  
Wolf Coach, Inc.

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**CONSENT OF INDEPENDENT AUDITORS**

We consent to the incorporation by reference to the Registration Statements of L-3 Communications Holdings, Inc. and subsidiaries (the "Company") on Form S-8 (File Nos. 333-59281, 333-64389, 333-78317, 333-64300 and 333-103752) and on Form S-3 (File Nos. 333-75558, 333-84826 and 333-99693) of our report dated January 27, 2004 on our audits of the consolidated financial statements of the Company as of December 31, 2003 and 2002 and for the three years ended December 31, 2003, which report is included in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP  
PricewaterhouseCoopers LLP  
New York, New York  
March 3, 2004

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## CERTIFICATIONS

I, Frank C. Lanza, certify that:

1. I have reviewed this annual report on Form 10-K of L-3 Communications Holdings, Inc. and L-3 Communications Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrants as of, and for, the periods presented in this report;
4. The registrants' other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrants and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrants, including their consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) evaluated the effectiveness of the registrants' disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) disclosed in this report any change in the registrants' internal control over financial reporting that occurred during the registrants' fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrants' internal control over financial reporting; and
5. The registrants' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrants' auditors and the audit committee of the registrants' board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrants' ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrants' internal control over financial reporting.

Date: March 4, 2004

/s/ Frank C. Lanza

Frank C. Lanza

Chairman and Chief Executive Officer

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# CERTIFICATIONS

I, Robert V. LaPenta, certify that:

1. I have reviewed this annual report on Form 10-K of L-3 Communications Holdings, Inc. and L-3 Communications Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrants as of, and for, the periods presented in this report;
4. The registrants' other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrants and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrants, including their consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) evaluated the effectiveness of the registrants' disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) disclosed in this report any change in the registrants' internal control over financial reporting that occurred during the registrants' fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrants' internal control over financial reporting; and
5. The registrants' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrants' auditors and the audit committee of the registrants' board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrants' ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrants' internal control over financial reporting.

Date: March 4, 2004

/s/ Robert V. LaPenta

Robert V. LaPenta

President and Chief Financial Officer

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**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of L-3 Communications Holdings, Inc. ("L-3 Holdings") and L-3 Communications Corporation ("L-3 Corporation"; together with L-3 Holdings referred to as "L-3") on Form 10-K for the year ending December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of Frank C. Lanza, Chairman and Chief Executive Officer of L-3 Holdings and L-3 Corporation, and Robert V. LaPenta, President and Chief Financial Officer of L-3 Holdings and L-3 Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of L-3.

/s/ Frank C. Lanza

Frank C. Lanza

Chairman and Chief Executive Officer

March 4, 2004

/s/ Robert V. LaPenta

Robert V. LaPenta

President and Chief Financial Officer

March 4, 2004

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