

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K/A

(MARK ONE):

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

For the fiscal year ended September 30, 1998

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

For the transition period from _____ to _____

Commission File Number: 0-22175

EMCORE CORPORATION
(Exact name of registrant as specified in its charter)

NEW JERSEY
(State or other jurisdiction of incorporation or organization)

22-2746503
(I.R.S. Employer Identification No.)

394 ELIZABETH AVENUE, SOMERSET, NJ 08873
(Address of principal executive offices) (zip code)

Registrant's telephone number, including area code: (732) 271-9090
Securities registered pursuant to Section 12(b) of the Act: NONE
Securities registered pursuant to Section 12(g) of the Act: COMMON STOCK, NO PAR VALUE

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 the 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.

The aggregate market value of common stock held by non-affiliates of the registrant as of December 23, 1998 was approximately \$100,427,286 (based on the closing sale price of \$18.25 per share).

The number of shares outstanding of the registrant's no par value common stock as of December 23, 1998 was 9,385,618.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 1999 Annual Meeting of Shareholders held February 16, 1999 are incorporated by reference in Part III of this Form 10-K/A.

CAUTIONARY STATEMENT IDENTIFYING IMPORTANT FACTORS
THAT COULD CAUSE THE COMPANY'S ACTUAL RESULTS TO DIFFER
FROM THOSE PROJECTED IN FORWARD LOOKING STATEMENTS:

In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, readers of this document are advised that it contains both statements of historical facts and forward looking statements.

This report includes forward-looking statements that reflect current expectations or beliefs of EMCORE Corporation concerning future results and events. The words "expects," "intends," "believes," "anticipates," "likely," "will," and similar expressions identify forward-looking statements. These forward-looking statements are subject to certain risks and uncertainties which could cause actual results and events to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, statements about future financial performance of the Company and the effect of the acquisition of MicroOptical Devices, Inc. ("MODE") on the Company's business; the uncertainty of additional funding; continued acceptance of the Company's MOCVD technologies, as well as the market success of microlaser VCSEL technologies; the Company's ability to achieve and implement the planned enhancements of products and services on a timely and cost effective basis and customer acceptance of those product introductions; product obsolescence due to advances in technology and shifts in market demand; competition and resulting price pressures; business conditions; economic and stock market conditions, particularly in the U.S., Europe and Japan, and their impact on sales of the company's products and services; risks associated with foreign operations, including currency and political risks; and such other risk factors as may have been or may be included from time to time in the Company's reports filed with the Securities and Exchange Commission.

PART I

ITEM 1. BUSINESS

COMPANY OVERVIEW

EMCORE designs, develops, and manufactures compound semiconductor materials and is a leading developer and manufacturer of the tools and manufacturing processes used to fabricate compound semiconductor wafers and devices. EMCORE's products and technology enable its customers, both in the United States and internationally, to manufacture commercial volumes of high-performance electronic devices using compound semiconductors. EMCORE has recently established a number of strategic relationships through joint ventures, long-term supply agreements and an acquisition in order to facilitate the development and manufacture of new products in targeted growth markets. EMCORE's products are used for a wide variety of applications in the communications (satellite, data, telecommunications and wireless), consumer and automotive electronics, computers and peripherals, and lighting markets. EMCORE's customers include AMP Incorporated, Hewlett Packard, General Motors, Hughes-Spectrolab, Lucent Technologies, Inc., Siemens AG and 12 of the largest electronics manufacturers in Japan.

INDUSTRY OVERVIEW

Recent advances in information technologies have created a growing need for efficient, high-performance electronic systems that operate at very high frequencies, have increased storage capacity and computational and display capabilities, and can be produced cost-effectively in commercial volumes. In the past, electronic systems manufacturers have relied on advances in silicon semiconductor technology to meet many of these demands. However, the newest generation of high-performance electronic and optoelectronic applications require certain functions that are generally not achievable using silicon-based components.

Compound semiconductors have emerged as an enabling technology to meet the complex requirements of today's advanced information systems. Many compound semiconductor materials have unique physical properties that allow electrons to move at least four times faster than through silicon-based devices. Advantages of compound semiconductor devices over silicon devices include:

- operation at higher speeds;
- lower power consumption;
- less noise and distortion; and
- optoelectronic properties that enable these devices to emit and detect light.

Compound semiconductor devices can be used to perform individual functions as discrete devices, such as solar cells, HB LEDs, VCSELs, MR sensors and RF materials. Compound semiconductor devices can also be combined into integrated circuits, such as transmitters, receivers and alpha-numeric displays. Although compound semiconductors are more expensive to manufacture than silicon-based devices, electronics manufacturers are increasingly integrating compound semiconductor devices into their products in order to achieve higher performance in applications targeted for a wide variety of markets. These include satellite communications, data communications, telecommunications, wireless communications, consumer and automotive electronics, computers and peripherals, and lighting.

The following factors have resulted in an increased demand for compound semiconductor products and systems that enable electronic systems manufacturers to reach the market faster with large volumes of high-performance products and applications:

- rapid build-out of satellite communications systems;
- widespread deployment of fiber optic networks and the increasing use of optical systems within these networks;
- launch of new wireless services and wireless high speed data systems;
- increasing use of infrared emitters and optical detectors in computer systems;
- emergence of advanced consumer electronics applications, such as DVDs and flat panel displays;
- increasing use of high-performance electronic devices in automobiles; and

- the anticipated conversion to HB LEDs from incandescent, halogen and compact fluorescent lighting.

The following chart summarizes the principal markets, examples of applications for compound semiconductor devices, products incorporating these devices and certain benefits and characteristics of these devices.

MARKET	REPRESENTATIVE APPLICATIONS	PRODUCTS	BENEFITS/CHARACTERISTICS
Satellite communications	Power modules for satellites Satellite to ground communication	Solar cells RF materials	Radiation tolerance Conversion of more light to power than silicon Reduced launch costs Increased bandwidth
Data communications	High-speed fiber optic networks and optical links (including Gigabit Ethernet, asynchronous transfer mode, or ATM, and FibreChannel networks)	VCSEL components and arrays HB LEDs Lasers RF materials	Increased network capacity Increased data transmission speeds Increased bandwidth
Telecommunications	High capacity fiber optic trunk lines	VCSEL components and arrays Lasers RF materials	Increased data transmission speeds Increased bandwidth
Wireless communications	Cellular telephones Pagers PCS handsets Direct broadcast systems	HB LEDs RF materials	Improved display visibility Improved signal to noise performance Lower power consumption Increased network capacity Reduced network congestion Extended battery life
Consumer electronics	DVDs Radios Telephones Calculators CD-Roms	HB LEDs VCSEL components and arrays Integrated circuits Lasers	Improved display visibility High-speed data transmission Low power requirements
Automotive electronics	Engine sensors Dashboard displays Indicator lights Antilock brake systems	MR sensors HB LEDs	Reduced weight Lower power consumption Lower emissions
Computers and peripherals	Local area networks Chip-to-chip and board-to-board optical links	VCSEL components and arrays Transceivers	Increased data transmission speeds Increased bandwidth
Lighting	Flat panel displays Solid state lighting Outdoor signage and display Digital readout signals	HB LEDs Miniature lamps	Lower power consumption Longer life

COMPOUND SEMICONDUCTOR PROCESS TECHNOLOGY

Compound semiconductors are composed of two or more elements and usually consist of a metal such as gallium, aluminum or indium and a non-metal such as arsenic, phosphorous or nitrogen. The resulting compounds include gallium arsenide, indium phosphide, gallium nitride, indium antimonide and indium aluminum phosphide. The performance characteristics of compound semiconductors are dependent on the composition of these compounds. Many of the unique properties of compound semiconductor devices are

achieved by the layering of different compound semiconductor materials in the same device. This layered structure creates an optimal configuration to permit the conversion of electricity into light.

Accordingly, the composition and properties of each layer and the control of the layering process, or epitaxy, are fundamental to the performance of advanced electronic and optoelectronic compound semiconductor devices. The variation of thickness and composition of layers determines the intensity and color of the light emitted or detected and the efficiency of power conversion. The ability to vary the intensity, color and efficiency of light generation and detection enables compound semiconductor devices to be used in a broad range of advanced information systems.

Compound semiconductor device manufacturers predominantly use four methods to deposit compound materials: molecular beam epitaxy, vapor phase epitaxy, liquid phase epitaxy and metal organic chemical vapor deposition (MOCVD). The use of molecular beam epitaxy technology can yield wafers having high thickness uniformity. Compound semiconductor materials fabricated using liquid phase epitaxy or vapor phase epitaxy technologies often have high electronic and optical properties. However, due to the nature of the underlying processes, these methods are not easily scaled up to high volume production, which is necessary for the commercial viability of compound semiconductor devices. All of the methods used to manufacture compound semiconductor devices pose technical, training and safety challenges that are not present in the manufacture of silicon devices. These production systems typically require expensive reactant materials, the use of certain toxic chemicals, and tight control over numerous manufacturing parameters. The key differences between MOCVD and the three other methods is that compound semiconductor wafers fabricated using MOCVD generally possess a better combination of uniformity and optical and electronic properties and are easier to produce in high volumes than wafers manufactured by the three more traditional methods. Currently, MOCVD technology is being used to manufacture a broad range of compound semiconductor devices.

Historically, manufacturers who use compound semiconductor devices in their products have met research, pilot production and capacity needs with in-house systems and technologies. However, as the need for the production of commercial volumes of high-performance compound semiconductor devices and the variety of these devices grows, manufacturers are often unable to meet these requirements using in-house solutions. In response to these growing demands for higher volumes of a broad range of higher performance devices, manufacturers are increasingly turning to outside vendors to meet their needs for compound semiconductor wafers and devices.

THE EMCORE SOLUTION

EMCORE provides its customers with a broad range of compound semiconductor products and services intended to meet its customers' diverse technology requirements. EMCORE has developed extensive materials science expertise, process technology and MOCVD production systems to address these needs and believes that its proprietary TurboDisc deposition technology makes possible one of the most cost-effective production processes for the commercial volume manufacture of high-performance compound semiconductor wafers and devices. This platform technology provides the basis for the production of various types of compound semiconductor wafers and devices and enables EMCORE to address the critical need of manufacturers to cost-effectively get to market faster with high volumes of new and improved high-performance products. EMCORE's compound semiconductor products and services include:

- materials and process development;
- design and development of devices;
- MOCVD production systems; and
- manufacture of wafers and devices in high volumes.

Customers can take advantage of EMCORE's vertically integrated approach by purchasing custom-designed wafers and devices from EMCORE or manufacturing their own devices in-house using a TurboDisc production system configured to their specific needs.

STRATEGY

EMCORE's objective is to capitalize on its position in MOCVD process technology and production systems to become the leading supplier of compound semiconductor wafers, devices and production systems. The key elements of EMCORE's strategy include:

Apply Core Technology Across Multiple Applications. EMCORE continually leverages its proprietary core technology to develop compound semiconductor products for multiple applications in a variety of markets. These activities include developing new products for targeted applications as well as expanding existing products into new applications. For example, EMCORE's MR sensors, currently used by General Motors as crank shaft sensors, also have other potential product applications, including as sensors in brushless motors and antilock brakes. Other existing products which EMCORE intends to introduce in new applications include VCSELS for communications products and HB LEDs for broader lighting applications.

Target High Growth Opportunities. EMCORE's strategy is to target high growth opportunities where performance characteristics and high volume production efficiencies can give compound semiconductors a competitive advantage over other devices. Historically, while technologically superior, compound semiconductors have not been widely deployed because they are more expensive to manufacture than silicon-based semiconductors and other existing solutions. EMCORE believes that as compound semiconductor production costs are reduced, new customers will be compelled to use these solutions because of their higher performance characteristics. For example, EMCORE has reduced the average cost of compound semiconductor solar cells to the point that they are replacing silicon-based solar cells because of the compound semiconductor solar cells' higher overall efficiency and lower weight.

Partner with Key Industry Participants. EMCORE seeks to identify and develop long-term relationships with leading companies in targeted industries. EMCORE develops these relationships in a number of ways including through long-term high-volume supply agreements, joint ventures, and distribution and other arrangements. For example, EMCORE has agreed to enter into, subject to certain conditions, a joint venture with General Electric Lighting for the development and marketing of white light and colored HB LED products for automotive, traffic, flat panel display and other lighting applications, and has entered into a long term supply agreement with AMP Incorporated for VCSELS to be used in its transceivers for Gigabit Ethernet and other applications. EMCORE intends to actively seek similar strategic relationships with other key customers and industry participants in order to further expand its technological and production base.

Continue Investment to Maintain Technology Leadership. Through substantial investment in research and development, EMCORE seeks to expand its leadership position in compound semiconductor production systems, wafers and devices. EMCORE works with its customers to identify specific performance criteria and uses this information to enhance the performance of its production systems and to further expand its process and materials science expertise, including the development of new low cost, high-volume wafers and devices for its customers. In addition, EMCORE's development efforts are focused on continually lowering the production costs of its solutions. EMCORE's joint venture with Union Miniere Inc. represents an initiative to explore means to use germanium to improve product performance, identify new product applications and lower the cost and complexity of production of EMCORE's wafers and devices.

PRODUCTS

PRODUCTION SYSTEMS

EMCORE is a leading supplier of MOCVD compound semiconductor production systems, with more than 230 systems shipped as of March 31, 1999. According to VLSI Research, Inc., in 1997 EMCORE's share of the MOCVD production systems market was over 25%. EMCORE believes that its TurboDisc systems offer significant ownership advantages over competing systems and that the high throughput capabilities of its TurboDisc systems make possible superior reproducibility of thickness, composition, electronic properties and layer accuracy required for electronic and optoelectronic devices. Each system can be customized for the customer's throughput, wafer size and process chemistry requirements. EMCORE's

production systems also achieve a high degree of reliability with an average time available for production, based on customer data, of approximately 95%.

EMCORE believes its TurboDisc systems enable the lowest cost of ownership for the manufacture of compound semiconductor materials. The major components of the cost of ownership include yield, throughput, direct costs and capital costs. Yield primarily relates to material uniformity, which is a function of the precision of the physical and chemical processes by which atomic layers are deposited. Throughput, the volume of wafers produced per unit of time, includes both the time required for a process cycle and the handling time between process steps. Direct costs include consumables used in manufacturing and processing and the clean room space required for the equipment. Capital costs include the cost of acquisition and installation of the process equipment.

EMCORE's proprietary TurboDisc technology utilizes a unique high speed rotating disk in a stainless steel growth chamber with integrated vacuum-compatible loading chambers. To produce a wafer, a bare substrate, such as gallium arsenide, sapphire or germanium, is placed on a wafer carrier in the TurboDisc growth chamber and subjected to high temperatures. Based on a predetermined formula, metal organic gases are released into the growth chamber. These gases decompose on the hot, rapidly spinning wafer. Semiconductor materials are then deposited on the substrate in a highly uniform manner. The resulting wafer thus carries one or more ultra-thin layers of compound semiconductor material such as gallium arsenide, gallium nitride, or indium aluminum phosphide. The TurboDisc technology not only produces uniformity of deposition across the wafer, but also offers flexibility for diverse applications with improved material results and increased production rates. The unique precision control of reactant gas flow in the TurboDisc technology platform allows users to scale easily from research to commercial volumes with substantially reduced time and effort. Upon removal from the growth chamber, the wafer is transferred to a device processing facility for various steps such as photolithography, etching, masking, metallization and dicing. Upon completion of these steps, the devices are then sent for packaging by the customer or other third parties and inclusion in the customer's product.

EMCORE offers the following family of TurboDisc systems:

MODEL	LIST PRICE	APPLICATION
Explorer	\$350,000 -- \$450,000	Research
Discovery	\$600,000 -- \$1,100,000	Development/Pilot Production
Enterprise	\$1,300,000 -- \$2,500,000	Volume Production

EMCORE's next generation of TurboDisc products is being designed to provide a number of innovations including:

- new reactor design to improve efficiency;
- cassette-to-cassette wafer handling to increase automation;
- digital control system to reduce noise;
- real-time process control and data acquisition on WindowsNT platform;
- modular component design to ease outsourcing and upgrading; and
- improved temperature control.

WAFERS AND DEVICES

Since its inception, EMCORE has worked closely with its customers to design and develop materials processes for use in production systems for its customers' end-use applications. EMCORE has leveraged its process and materials science knowledge base to manufacture a broad range of compound semiconductor wafers and devices such as solar cells, HB LEDs, VCSELs, MR sensors and RF materials.

Within most of these product lines, EMCORE has established strategic relationships through joint ventures, long-term supply agreements and an acquisition. A summary of these relationships is found below.

PRODUCT LINE	PRODUCTS AND STRATEGIC RELATIONSHIPS		APPLICATION
	COMPANY	NATURE OF RELATIONSHIP	
Solar Cells	Space Systems/Loral Lockheed Martin Missiles and Space Union Miniere Inc.	Long-term supply agreement Strategic partner Long-term germanium sourcing agreement from Union Miniere	Solar panels in communications satellite power systems.
HB LEDs	General Electric Lighting	GELcore joint venture (pending) for the development, marketing and distribution of white light and colored HB LED products	Traffic lights Miniature lamps Automotive lighting Flat panel displays Other lighting applications
	Uniroyal Technology Corporation	Uniroyal Optoelectronics Joint venture for the manufacture of HB LED wafers and package-ready devices	
VCSELS	AMP Incorporated	Strategic alliance and long-term supply agreement	Optical links (including Gigabit Ethernet ATM, and FibreChannel networks)
	Micro Optical Devices, Inc.	Acquisition	
MR sensors	Optek Technology, Inc.	Emtech joint venture for packaging and marketing of MR sensors	Antilock brake systems Brushless motors Engine timing sensors
	General Motors	Long-term supply agreement	Cam and crank shaft sensors
Germanium research and development	Union Miniere Inc.	UMCore joint venture	Exploring alternative uses for germanium substrates

Solar Cells. Compound semiconductor solar cells are used to power satellites because they are more resistant to radiation levels in space, convert substantially more light to power and therefore weigh less per unit of power than silicon-based solar cells. These characteristics increase satellite life, increase payload capacity and reduce launch costs. EMCORE is currently involved in four solar cell projects:

- In November 1998, EMCORE signed a four-year purchase agreement with Space Systems/Loral, a wholly owned subsidiary of Loral Space & Communications. Under this agreement, which is contingent upon our compliance with Loral's product specification requirements, EMCORE will supply compound semiconductor high efficiency gallium arsenide solar cells for Loral's satellites. Subject to satisfactorily completing these product qualification requirements, EMCORE has received an initial purchase order from Space Systems/Loral.
- In August 1998, EMCORE and Union Miniere Inc., a mining and materials company, entered into a long term supply agreement for germanium, which EMCORE uses to fabricate solar cells. In addition to their solar cell relationship, in November 1998, EMCORE formed UMCORE, a joint venture with Union Miniere to explore and develop alternate uses for germanium using EMCORE's material science and production platform expertise and Union Miniere's access to and experience with germanium. UMCORE commenced research and development operations in January 1999.
- In September 1998, EMCORE entered into an agreement with Lockheed Martin Missiles and Space, a strategic business unit of Lockheed Martin Corporation, to provide technical management and support of a Cooperative Research and Development Agreement between Lockheed Martin and Sandia National Laboratory for the advancement and commercialization of a new compound semiconductor high efficiency solar cell. Pursuant to this strategic agreement, (1) Lockheed Martin will grant EMCORE a sub-license for all related intellectual property developed on behalf of or in conjunction with Lockheed Martin, and (2) EMCORE and Lockheed Martin will jointly qualify and validate the high efficiency solar cells for operational satellite use.
- In the summer of 1998, EMCORE received a \$2.2 million contract under the U.S. Air Force's Broad Agency Announcement Program for the development of high-efficiency advanced solar cells.

HB LEDs. High-brightness light-emitting diodes (HB LEDs) are solid state compound semiconductor devices that emit light. The global demand for HB LEDs is experiencing rapid growth because LEDs have a long useful life (approximately 10 years), consume approximately 10% of the power consumed by incandescent or halogen lighting and improve display visibility. In February 1998, EMCORE and Uniroyal Technology Corporation formed Uniroyal Optoelectronics, a joint venture to manufacture, sell and distribute HB LED wafers and package-ready devices.

In January 1999, EMCORE signed a transaction agreement with General Electric Lighting to form GELCORE, a joint venture to develop and market HB LED lighting products. General Electric Lighting and EMCORE have agreed that this joint venture will be the exclusive vehicle for each party's participation in solid state lighting. GELCORE seeks to combine EMCORE's materials science expertise, process technology and compound semiconductor production systems with General Electric Lighting's brand name recognition and extensive marketing and distribution capabilities. GELCORE's long-term goal is to develop products to replace traditional lighting.

VCSELS. VCSELS are semiconductor lasers that emit light in a cylindrical beam. Leading electronic systems manufacturers are integrating VCSELS into a broad array of end-market applications including Internet access, digital cross-connect telecommunications switches, DVD, and fiber optic switching and routing, such as Gigabit Ethernet. VCSELS offer significant advantages over traditional laser diodes, including:

- greater control over beam size and wavelength;
- reduced manufacturing complexity and packaging costs;
- lower power consumption; and
- higher frequency performance.

In December 1997, EMCORE acquired MODE, a development stage company, primarily dedicated to the research and development of enabling VCSEL technologies. In February 1998, EMCORE announced Gigalase, its first commercial high speed VCSEL laser. In September 1998, EMCORE signed a four-year purchase agreement with AMP Incorporated to provide VCSELS for a family of optical transceivers for the Gigabit Ethernet, FibreChannel and ATM markets. In December 1998, EMCORE announced its second VCSEL product, Gigarray, a micro-optical laser array.

MR Sensors. MR sensors are compound semiconductor devices that possess sensing capabilities. MR sensors improve vehicle performance through more accurate control of engine and crank shaft timing, which allows for improved spark plug efficiency and reduced emissions. In January 1997, EMCORE initiated shipments of compound semiconductor MR sensors using technology licensed to EMCORE from General Motors. This license allows EMCORE to manufacture and sell products using this technology to anyone. As of September 30, 1998, EMCORE has delivered over five million devices to General Motors Powertrain for crank and cam speed and position sensing applications for three engine builds.

In October 1998, EMCORE formed Emtech, a joint venture with Optek Technology, Inc., a packager and distributor of optoelectronic devices, to market an expanded line of MR sensors to the automotive and related industries. This joint venture seeks to combine EMCORE's strength in producing devices with Optek's strength in packaging and distributing devices to offer off-the-shelf products and expand market penetration.

RF materials. Radio frequency materials are compound semiconductor materials which transmit and receive communications. Compound semiconductor RF materials have a broader bandwidth and superior performance at high frequencies than silicon-based materials. EMCORE currently produces RF materials for use as power amplifiers in cellular phone handsets. In addition, EMCORE is exploring opportunities to market these materials for additional uses in fiber optics and satellite communications. EMCORE believes that its ability to produce high volumes of RF materials at a low cost will facilitate their adoption in new applications and new products.

CUSTOMERS

EMCORE's customers include many of the largest semiconductor, telecommunications, consumer goods and computer manufacturing companies in the world. In fiscal 1998, sales to Hughes-Spectrolab accounted for 17.3% of EMCORE's revenues, and sales to General Motors accounted for 12.8% of EMCORE's revenues. A number of EMCORE's customers are listed below. In addition, EMCORE has sold its products to 12 of the largest electronics manufacturers in Japan.

AMP Incorporated	Motorola
The Boeing Company	Northrop Grumman
General Motors	Philips AG
Hewlett Packard	Polaroid
Honeywell	Rockwell International
Hughes-Spectrolab	Samsung
Hyundai Electronics	Sharp U.S.A.
IBM	Siemens AG
LG Semiconductor	Texas Instruments
L.M. Ericsson AB	Thomson CSF
Lucent Technologies	Westinghouse Electric

EMCORE has a comprehensive total quality management program with special emphasis on total customer satisfaction. EMCORE seeks to encourage active customer involvement with the design and operation of its production systems. To accomplish this, EMCORE conducts user group meetings among its customers in Asia, Europe and North America. At annual meetings, EMCORE's customers provide valuable feedback on key operations, process oriented services, problems and recommendations to improve EMCORE products. This direct customer feedback has enabled EMCORE to constantly update and improve the design of its systems and processes. Changes that affect the reliability and capabilities of EMCORE's systems are embodied in new designs to enable current and future customers to utilize systems which EMCORE believes are high quality and cost-efficient.

MARKETING AND SALES

EMCORE markets and sells its wafers, devices and systems through its direct sales force in Europe, North America and Taiwan and through representatives and distributors elsewhere in Asia. To market and service its products in China, Japan and Singapore, EMCORE relies on a single marketing, distribution and service provider, Hakuto. EMCORE's agreements with Hakuto have a term of 10 years, expiring March 2008. Hakuto has exclusive distribution rights for certain of EMCORE's products in Japan. Hakuto has marketed and serviced EMCORE's products since 1988, is a minority shareholder in EMCORE, and the President of Hakuto is a member of EMCORE's board of directors. EMCORE recently opened sales offices in Taiwan and California in order to be closer to its customers.

EMCORE's sales and marketing staff, senior management and technical staff work closely with existing and potential customers to provide compound semiconductor solutions for its customers' needs. The sales process begins by understanding the customer's requirements and then attempting to match these requirements with the optimal solution. EMCORE seeks to match the customer's requirements to an existing design or a modification of a standard design, such as a change in platform or process design. When necessary, EMCORE will work with the customer to develop the appropriate design process and to configure and manufacture the production system to meet the customer's needs. Also, EMCORE will produce samples to demonstrate conformance to the customer's specifications. For production systems, the amount of time from the initial contact with the customer to the customer's placement of an order is typically two to nine months or longer. EMCORE's sales cycle for wafers and devices usually runs three to nine months, during which time EMCORE develops the formula of materials necessary to meet the customer's specifications and qualifies the materials, which may also require the delivery of samples. EMCORE believes that the high level of marketing, management and engineering support involved in this process is beneficial in developing competitive differentiation and long-term relationships with its customers.

The following chart contains a breakdown of EMCORE's worldwide revenues and percentages by geographic region. Historically, EMCORE has received all payments for products and services in U.S. dollars.

REGION	FISCAL YEARS ENDED SEPTEMBER 30,					
	1996 (\$/%)		1997 (\$/%)		1998 (\$/%)	
	(\$ IN MILLIONS)					
United States.....	\$16.0	57.6%	\$27.7	57.9%	\$26.7	61.0%
Asia.....	8.2	29.5	14.6	30.6	15.5	35.4
Europe.....	3.6	12.9	5.5	11.5	1.6	3.6
Total.....	\$27.8	100.0%	\$47.8	100.0%	\$43.8	100.0%

SERVICE AND SUPPORT

EMCORE maintains a worldwide service and support network responsible for on-site maintenance and process monitoring on either a contractual or time-and-materials basis. Customers may purchase annual service contracts under which EMCORE is required to maintain an inventory of replacement parts and to service the equipment upon the request of the customer. EMCORE also sells replacement parts from inventory for customer needs. EMCORE pursues a program of system upgrades for customers to increase the performance of older systems. EMCORE generally does not offer extended payment terms to its customers and generally adheres to a warranty policy of one year. Consistent with industry practice, EMCORE maintains an inventory of components for servicing systems in the field and it believes that its inventory is sufficient to satisfy foreseeable short-term customer requirements. EMCORE recently opened a warehouse depot in Taiwan to provide improved service to its Asian customers.

RESEARCH AND DEVELOPMENT

To maintain and improve its competitive position, EMCORE's research and development efforts are focused on designing new proprietary processes and products, improving the performance of existing systems, wafers and devices and reducing costs in the product manufacturing process. EMCORE has dedicated 16 TurboDisc systems for both research and production which are capable of processing virtually all compound

semiconductor materials. The research and development staff utilizes x-ray, optical and electrical characterization equipment which provide instant data allowing for shortened development cycles and rapid customer response. EMCORE's recurring research and development expenses were approximately, \$16.5 million in fiscal 1998, \$9.0 million in fiscal 1997 and \$5.4 million in fiscal 1996. EMCORE also incurred a one-time, non-cash research and development expense in fiscal 1998 in the amount of \$19.5 million in connection with the acquisition of MODE. EMCORE expects that it will continue to expend substantial resources on research and development.

EMCORE also competes for research and development funds. In view of the high cost of development, EMCORE solicits research contracts that provide opportunities to enhance its core technology base or promote the commercialization of targeted products. EMCORE presently has three contracts under the Small Business Innovative Research programs or similar government sponsored programs. From inception until September 30, 1998, government and other external research contracts have provided approximately \$13.2 million to support EMCORE's research and development efforts. EMCORE is also positioned to market technology and process development expertise directly to customers who require it for their own product development efforts.

INTELLECTUAL PROPERTY AND LICENSING

EMCORE's success and competitive position both for production systems and wafers and devices depend significantly on its ability to maintain trade secrets and other intellectual property protections. Our strategy is to rely more on trade secrets than patents. A "trade secret" is information that has value to the extent it is not generally known, not readily ascertainable by others through legitimate means, and protected in a way that maintains its secrecy. Reliance on trade secrets is only an effective business practice insofar as trade secrets remain undisclosed and a proprietary product or process is not reverse engineered or independently developed. In order to protect its trade secrets, EMCORE takes certain measures to ensure their secrecy, such as executing non-disclosure agreements with its employees, joint venture partners, customers and suppliers.

To date, EMCORE has been issued 11 U.S. patents and others are either pending or under review. These U.S. patents will expire between 2005 and 2013. None of these U.S. patents claim any material aspect of the current or planned commercial versions of EMCORE's systems, wafers or devices. EMCORE relies on trade secrets rather than patents to protect its intellectual property because it believes publishing patents would make it easier for others to reverse engineer EMCORE's proprietary processes.

EMCORE is a licensee of certain VCSEL technology and associated patent rights owned by Sandia Corporation. The Sandia license grants EMCORE:

- exclusive rights (subject to certain rights granted to Department of Energy and AT&T Corporation) to develop, manufacture and sell products containing Sandia VCSEL technologies for barcode scanning and plastic optical fiber communications applications under five U.S. patents that expire between 2007 and 2015;
- nonexclusive rights with respect to all other applications of these patents; and
- nonexclusive rights to employ a proprietary oxidation fabrication method in the manufacture of VCSEL products under a sixth U.S. patent that expires in 2014. Our exclusivity with respect to the barcode scanning and plastic optical fiber communications applications expires in 2003 or such earlier time as we fail to meet certain development and marketing criteria. EMCORE's success and competitive position as a producer of VCSEL products depends on the continuation of its rights under the Sandia license, the scope and duration of those rights and the ability of Sandia to protect its proprietary interests in the underlying technology and patents.

In 1992, we received a royalty-bearing, non-exclusive license under a patent held by Rockwell International Corporation which relates to an aspect of the manufacturing process used by our TurboDisc systems. In October 1996, we initiated discussions with Rockwell to receive additional licenses to permit us to use this technology to manufacture and sell compound semiconductor wafers and devices. In November 1996, we suspended these negotiations because of litigation surrounding the validity of the Rockwell patent. We also ceased making royalty payments to Rockwell under the license during the pendency of the litigation. In

January 1999, the case was settled and a judgment was entered in favor of Rockwell. As a result, we may be required to pay royalties to Rockwell for certain of our past sales of wafers and devices to our customers who did not hold licenses directly from Rockwell. If we are required to pay significant royalties in connection with these sales our business, financial condition and results of operations may be materially and adversely affected. In addition, until the patent expires in January 2000, we may require additional licenses from Rockwell under the Rockwell patent in order to continue to manufacture and sell wafers and devices. The failure to obtain or maintain licenses to manufacture these wafers and devices on commercially reasonable terms may materially and adversely affect our business, financial condition and results of operations.

ENVIRONMENTAL REGULATIONS

EMCORE is subject to federal, state and local laws and regulations concerning the use, storage, handling, generation, treatment, emission, release, discharge and disposal of certain materials used in its research and development and production operations, as well as laws and regulations concerning environmental remediation and employee health and safety. The production of wafers and devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsene. If EMCORE's control systems are unsuccessful in preventing release of these or other hazardous materials, EMCORE could experience a substantial interruption of operations. EMCORE has retained an environmental consultant to advise it in complying with applicable environmental and health and safety laws and regulations, and believes that it is currently, and in the past has been, in substantial compliance with all such laws and regulations.

BACKLOG

As of September 30 1998, EMCORE had an order backlog of \$22.6 million compared to backlog of \$24.4 million as of September 30, 1997. EMCORE includes in backlog only customer purchase orders that have been accepted by EMCORE and for which shipment dates have been assigned within the 12 months to follow and research contracts that are in process or awarded. Wafer and device agreements extending longer than one year in duration are included in backlog only for the ensuing 12 months. EMCORE receives partial advance payments or irrevocable letters of credit on most production system orders. EMCORE recognizes revenue from the sale of its systems and materials upon shipment. For research contracts with the U.S. government and commercial enterprises with durations greater than six months, EMCORE recognizes revenue to the extent of costs incurred plus a portion of estimated gross profit, as stipulated in such contracts, based on contract performance.

MANUFACTURING

EMCORE's manufacturing operations are located at EMCORE's headquarters in Somerset, New Jersey and in Albuquerque, New Mexico and include systems engineering and production, wafer fabrication, and design and production of devices. Many of EMCORE's manufacturing operations are computer monitored or controlled to enhance reliability and yield. EMCORE manufactures its own systems and outsources some components and sub-assemblies, but performs all final system integration, assembly and testing. EMCORE fabricates wafers and devices at its facilities in Somerset, New Jersey and Albuquerque, New Mexico and has a combined clean room area totaling approximately 12,000 square feet. EMCORE's joint venture with Uniroyal Technology Corporation expects to begin manufacturing HB LED wafers and package-ready devices at its Tampa, Florida manufacturing facility by summer of 1999. In May 1998, EMCORE received ISO 9001 and QS 9002 quality certification for its Somerset, New Jersey facility. EMCORE is pursuing ISO 9001 quality certification for its Albuquerque, New Mexico facilities.

Outside contractors and suppliers are used to supply raw materials and standard components and to assemble portions of end systems from EMCORE specifications. EMCORE depends on sole, or a limited number of, suppliers of components and raw materials. EMCORE generally purchases these single or limited source products through standard purchase orders. EMCORE also seeks to maintain ongoing communications with its suppliers to guard against interruptions in supply and has, to date, generally been able to obtain sufficient supplies in a timely manner and maintains inventories it believes are sufficient to meet its near term needs. EMCORE implemented a vendor program through which it inspects quality and reviews suppliers and prices in order to standardize purchasing efficiencies and design requirements to maintain as low a cost of sales

as possible. However, operating results could be materially and adversely affected by a stoppage or delay of supply, receipt of defective parts or contaminated materials, and increase in the pricing of such parts or EMCORE's inability to obtain reduced pricing from its suppliers in response to competitive pressures.

COMPETITION

The markets in which EMCORE competes are highly competitive. EMCORE competes with several companies for sales of MOCVD systems including Aixtron GmbH, Nippon-Sanso K.K. and Thomas Swann Ltd. The primary competitors for EMCORE's wafer foundry include Epitaxial Products Inc., Kopin Corporation and Quantum Epitaxial Designs, Inc. EMCORE's principal competitors for sales of VCSEL-related products include Honeywell, Inc. and Mitel Corporation. The principal competitors for MR sensors are Honeywell, Inc., Matsushita Electric Industrial Co. Ltd., Siemens AG and Asahi. The principal competitors for HB LEDs and EMCORE's joint venture with Uniroyal Technology Corporation and the pending joint venture with General Electric Lighting include the Phillips Electronics and Hewlett Packard Company joint venture, Siemens AG's Osram GmbH subsidiary, Nichia Chemical Industries and Toshiba Corporation. EMCORE also faces competition from manufacturers that implement in-house systems for their own use. In addition, EMCORE competes with many research institutions and universities for research contract funding. EMCORE also sells its products to current competitors and companies with the capability of becoming competitors. As the markets for EMCORE's products grow, new competitors are likely to emerge, and present competitors may increase their market share.

EMCORE believes that the primary competitive factors in the markets in which EMCORE's products compete are yield, throughput, performance, breadth of product line, customer satisfaction, customer commitment to competing technologies and, in the case of production systems, capital and direct costs and size of installed base. Competitors may develop enhancements to or future generations of competitive products that offer superior price and performance factors. EMCORE believes that in order to remain competitive, it must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide.

EMPLOYEES

At September 30, 1998, EMCORE had 308 full-time employees. None of EMCORE's employees are covered by a collective bargaining agreement. EMCORE considers its relationship with its employees to be good.

ITEM 2. PROPERTIES

The following chart contains certain information regarding each of EMCORE's principal facilities. Each of these facilities contains office space, marketing and sales, and research and development space. EMCORE also leases office space in Hsinchu, Taiwan and Santa Clara, California. In addition to EMCORE's facilities, Uniroyal Optoelectronics, a joint venture between EMCORE and Uniroyal Technology Corporation, leases a 75,000 square foot office and manufacturing facility in Tampa, Florida.

LOCATION	PURPOSE	SQUARE FEET	TERMS
Somerset, New Jersey	Headquarters, manufacturing of systems, wafers and MR sensors	75,900	Lease expires in 2000(1)
Albuquerque, New Mexico	Manufacturing of solar cells	50,000(2)	Owned
Albuquerque, New Mexico	Manufacturing of VCSELS	27,500	Leases expire in 1999(1) and 2001(1)

(1) These leases all have options to renew by EMCORE, subject to cost of living adjustments.

(2) EMCORE plans a three-phase construction project to expand the facility from an initial 50,000 square feet in October 1998 to 70,000 square feet by 2002.

ITEM 3. LEGAL PROCEEDINGS

EMCORE is not aware of any pending or threatened litigation against it that could have a material adverse effect on its business, financial condition and results of operations.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

PART II.

ITEM 5.

MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS

The Company's Common Stock is quoted on the NASDAQ National Market under the symbol "EMKR". The following table sets forth the quarterly high and low sales prices for the Company's Common Stock since its initial public offering in March 6, 1997.

FISCAL 1997

Second Quarter.....	\$12 3/4	\$ 9 1/4
Third Quarter.....	\$19 1/2	\$11

Fourth Quarter.....	\$25 1/4	\$16
FISCAL 1998		
First Quarter.....	\$23 3/8	\$15 1/2
Second Quarter.....	\$19 5/8	\$11
Third Quarter	\$16 3/4	\$ 9
Fourth Quarter	\$13 1/2	\$ 6
FISCAL 1999		
First Quarter (through December 23, 1998).....	\$18 1/4	\$ 7 1/4

As of December 23, 1998 date there were 1,595 shareholders of record.

The Company has never declared or paid dividends on its Common Stock since its formation. The Company currently does not intend to pay dividends on its Common Stock in the foreseeable future so that it may reinvest its earnings in the development of its business. The payment of dividends, if any, in the future will be at the discretion of the Board of Directors.

RECENT SALES OF UNREGISTERED SECURITIES

On November 30, 1998, the Company sold an aggregate of 1,550,000 shares of Series I Preferred Stock (the "Private Placement") to Hakuto, UMI and UTC for an aggregate consideration of \$21.7 million before deducting costs and expenses of the offering of approximately \$500,000. The shares of Series I Preferred Stock are convertible, at any time, at the option of the holders thereof, unless previously redeemed, into shares of Common Stock at an initial conversion price of \$14.00 per share of Common Stock, subject to adjustment in certain cases. The Series I Preferred Stock is redeemable, in whole or in part, at the option of the Company at any time the Company's stock has traded at or above \$28.00 per share for 30 consecutive trading days, at a price of \$14.00 per share, plus accrued and unpaid dividends, if any, to the redemption date. In addition, the Series I Preferred Stock is subject to mandatory redemption by the Company on November 17, 2003. The Company believes the sale of the shares of Series I Preferred Stock is exempt from registration pursuant to Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act").

On June 22, 1998 the Company issued 227,747 warrants to purchase common stock of the Company to Thomas Russell, Chairman of the Board of Directors of the Company and 56,937 warrants to purchase common stock of the Company to Reuben Richards, President, Chief Executive Officer and a director of the Company. The warrants are exercisable at a price of \$11.375 and expire on May 1, 2001. These warrants are callable at the Company's option at \$.85 per warrant at such time as the Company's Common Stock has traded at or above 150% of the exercise price for a period of 30 days. These warrants were granted in exchange for the guarantee by these executives of the 1998 Agreement entered into by the Company on June 22, 1998 with the Bank. The credit facility is being used to finance general corporate purposes, including, but not limited to, the construction of a facility in Albuquerque, New Mexico. The term of the credit facility is 18 months and the interest rate is at LIBOR plus 0.75%. The Company received a fairness opinion from its investment bank, Hempstead & Company, that this transaction was fair from a financial point of view to the Company's non-participating shareholders. The Company believes the issuance of the warrants is exempt from registration pursuant to Section 4(2) of the Securities Act.

On December 5, 1997, the Company issued 1,461,866 shares of Common Stock, 200,966 common stock purchase options and 47,118 common stock purchase warrants in exchange for all of the outstanding capital stock of MODE. The purchase price was approximately \$32.8 million and was recorded under the purchase method of accounting. The Company believes the issuance of Common Stock, options and warrants in connection with the acquisition of MODE is exempt from registration pursuant to Section 4(2) of the Securities Act.

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data for the five fiscal years ended September 30, 1998 of EMCORE is qualified by reference to and should be read in conjunction with the Financial Statements and the Notes thereto, and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus. The Statement of Operations Data set forth below with respect to fiscal 1996, 1997 and 1998 and the Balance Sheet Data as of September 30, 1997 and 1998 are derived from EMCORE's audited financial statements included elsewhere in this Form 10-K/A. The Statement of Operations Data for fiscal 1994 and 1995 and the Balance Sheet Data as of September 30, 1994, 1995 and 1996 are derived from audited financial statements not included herein.

On December 5, 1997, the Company acquired MODE in a stock transaction accounted for under the purchase method of accounting for a purchase price of \$32.8 million. In connection with this transaction, the Company recorded a non-recurring, non-cash charge of \$19.5 million for acquired in-process research and development, which affects the comparability of the Company's operating results and financial condition.

	FISCAL YEARS ENDED SEPTEMBER 30,				
	1994	1995	1996	1997	1998(*)
	(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)				
					RESTATED
STATEMENT OF OPERATIONS DATA:					
Revenues.....	\$9,038	\$18,137	\$27,779	\$47,753	\$ 43,760
Cost of sales.....	5,213	9,927	18,607	30,094	24,675
Gross profit.....	3,825	8,210	9,172	17,659	19,085
Operating expenses:					
Selling, general, and administrative.....	2,645	4,452	6,524	9,347	14,082
Goodwill amortization.....	--	--	--	--	3,638
Research and development:					
Recurring.....	1,064	1,852	5,401	9,001	16,495
One-time acquired in-process.....	--	--	--	--	19,516
Total operating expenses.....	3,709	6,304	11,925	18,348	53,731
Operating income (loss).....	116	1,906	(2,753)	(689)	(34,646)
Stated interest expense, net.....	286	255	297	519	974
Imputed warrant interest expense, non-cash.....	--	--	126	3,988	601
Equity in net loss of unconsolidated affiliate.....	--	--	--	--	198
Other expense.....	--	10	--	--	--
Total other expense.....	286	265	423	4,507	1,773
(Loss) income before income taxes.....	(170)	1,641	(3,176)	(5,196)	(36,419)
Provision for income taxes.....	--	125	--	137	--
(Loss) income before extraordinary item.....	(170)	1,516	(3,176)	(5,333)	(36,419)
Extraordinary loss.....	--	--	--	286	--
Net (loss) income.....	<u>\$ (170)</u>	<u>\$ 1,516</u>	<u>\$ (3,176)</u>	<u>\$ (5,619)</u>	<u>\$ (36,419)</u>
PER SHARE DATA:					
Weighted average shares used in calculating basic and diluted per share data.....	58	1,701	2,994	4,669	8,775
Net (loss) income per basic and diluted shares before extraordinary item.....	<u>\$(2.93)</u>	<u>\$ 0.89</u>	<u>\$(1.06)</u>	<u>\$(1.14)</u>	<u>\$(4.15)</u>
Net (loss) income per basic and diluted shares.....	<u>\$(2.93)</u>	<u>\$ 0.89</u>	<u>\$(1.06)</u>	<u>\$(1.20)</u>	<u>\$(4.15)</u>

AS OF SEPTEMBER 30,

	1994	1995	1996	1997	1998(*)
	(IN THOUSANDS)				
BALANCE SHEET DATA:					
Working capital (deficiency).....	\$ 1,041	\$ 2,208	\$ 1,151	\$12,156	\$(2,017)
Total assets.....	5,415	10,143	20,434	39,463	73,220
Long-term liabilities.....	3,000	3,000	8,947	7,577	26,514
Redeemable preferred stock.....	16,274	--	--	--	--
Shareholders' (deficit) equity.....	(96)	1,509	522	21,831	19,580

(*) as restated - See Note 20

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INTRODUCTION

Subsequent to the issuance of the Company's Annual Report on Form 10-K for the year ended September 30, 1998, the Company's management revised the amount of the purchase price which was allocated to in-process research and development in accounting for the acquisition of MicroOptical Devices, Inc. ("MODE") in December 1997. The revised allocation is based upon methods prescribed in a letter from the Securities and Exchange Commission ("SEC") sent to the American Institute of Certified Public Accountants. The letter sets forth the SEC's views regarding the valuation methodology to be used in allocating a portion of the purchase price to acquired in-process research and development ("IPR&D") at the date of acquisition.

The revised valuation is based on management's estimates of the net cash flows associated with expected operations of MODE and gives explicit consideration to the SEC's views on acquired IPR&D as set forth in its letter to the American Institute of Certified Public Accountants.

As a result of the revised allocation, the Company's financial statements for the year ended September 30, 1998 have been restated from amounts previously reported to reduce the amount of the acquired in-process research and development expensed by \$9.8 million and to increase goodwill by \$9.8 million. The amount allocated to goodwill includes approximately \$0.5 million related to the value of MODE's workforce. The change had no impact on net cash flows used by operations.

The Securities and Exchange Commission ("SEC") issued new guidance on its views regarding the methodologies used to determine the allocation of purchase price in a purchase business combination, involving amounts allocated to in-process research and development ("IPRD"). Generally accepted accounting principles require that amounts allocated to IPRD be expensed upon consummation of an acquisition accounted for as a purchase. As a result of this new guidance the Company has modified the methods used to value IPRD acquired related to MODE. The revised valuation is based on management's best estimates at the date of acquisition of the net cash flows associated with expected operations of MODE and gives explicit consideration to the SEC's views on acquired IPRD as set forth in its letter to the American Institute of Certified Public Accountants.

The information included in Item 6, "Selected Financial Data," and in the discussion following reflect the effects of this restatement.

OVERVIEW

EMCORE designs, develops and manufactures compound semiconductor materials and is a leading developer and manufacturer of the tools and manufacturing processes used to fabricate compound semiconductor wafers and devices. Prior to fiscal 1997, EMCORE's revenues consisted primarily of the sales of compound semiconductor production systems. In fiscal 1997, EMCORE expanded its product offerings to include the design and high-volume production of compound semiconductor wafers and package-ready devices. EMCORE's vertically-integrated product offering allows it to provide a complete compound semiconductor solution to its customers. EMCORE assists its customers with device design, process development and optimal configuration of TurboDisc production systems.

Systems-related revenues include sales of EMCORE's TurboDisc production systems as well as spare parts and services. The book-to-ship time period on systems is approximately four to six months, and the average selling price is in excess of \$1.0 million. Materials revenues include wafers, devices and process development technology. The materials sales cycle is generally shorter than for systems and average selling prices vary significantly based on the products and services provided. Generally, EMCORE achieves a higher gross profit on its materials related products.

EMCORE recognizes revenue upon shipment. For systems, EMCORE incurs certain installation and warranty costs subsequent to shipment which are estimated and accrued at the time the sale is recognized. EMCORE reserves for estimated returns and allowances at the time of shipment. For research contracts with the U.S. government and commercial enterprises with durations greater than six months, EMCORE recognizes revenue to the extent of costs incurred plus a pro rata portion of estimated gross profit as stipulated in these contracts, based on contract performance. EMCORE's research contracts require the development or evaluation of new materials applications and have a duration of six to 36 months. Contracts with a duration of six months or less are accounted for on the completed contract method. A contract is considered complete when all costs have been incurred and the research reporting requirements to the customer have been met.

EMCORE has recently established a number of strategic relationships through joint ventures, long-term supply agreements and an acquisition as summarized below.

- In January 1999, EMCORE signed an agreement with General Electric Lighting to form GELcore, a joint venture to develop and market white light and colored HB LEDs lighting products. GELcore's long-term goal is to develop HB LED products to replace traditional lighting. We anticipate investing approximately \$7.8 million in GELcore upon formation of the joint venture and will second various personnel to the joint venture to

assist in the development and marketing of its products. These personnel and the related costs will be charged to the joint venture. In addition, GELcore will hire its own administrative and management personnel. As such, the impact on EMCORE's operations will be limited to the seconded employees who will continue to be managed by EMCORE personnel.

- In November 1998, EMCORE signed a long term purchase agreement with Space Systems/Loral, a wholly owned subsidiary of Loral Space & Communications. Under this agreement, which is contingent upon EMCORE's compliance with Loral's product specification requirements, EMCORE will supply compound semiconductor high-efficiency gallium arsenide solar cells for Loral's satellites. EMCORE anticipates completing this qualification in June 1999. Subject to the product qualification, EMCORE received an initial purchase order for \$5.25 million of solar cells. EMCORE expects to service this agreement through our newly completed facility in Albuquerque, New Mexico. This facility presently employs approximately 40 people, including sales, marketing, administrative and manufacturing personnel.
- In November 1998, EMCORE formed UMCORE, a joint venture with Union Miniere Inc., a mining and materials company, to explore and develop alternate uses for germanium using EMCORE's materials science and production platform expertise and Union Miniere's access to and experience with germanium. EMCORE has invested \$600,000 in UMCORE which, together with an equal amount funded by Union Miniere, is expected to fund the operations of UMCORE through fiscal 1999.

EMCORE will second various personnel to the joint venture to assist in the development of products. Thereafter, any additional funding will be contributed equally.

- In October 1998, EMCORE formed Emtech, a joint venture with Optek Technology, Inc., a packager and distributor of optoelectronic devices, to market an expanded line of magneto resistive sensors to the automotive and related industries. This joint venture combines EMCORE's expertise in the manufacture of magneto resistive die and Optek's expertise in packaging these die. This combination will allow us to offer customers off-the-shelf products. No additional personnel are anticipated to meet the obligations to the joint venture.
- In September 1998, EMCORE entered into an agreement with Lockheed Martin to provide technical management and support for the commercialization of a new high-efficiency solar cell. It is anticipated that we will provide high efficiency solar cells to Lockheed Martin upon completion of the research and development agreement. EMCORE's new facility in Albuquerque, New Mexico, will provide the support necessary to meet our obligations under this agreement.
- EMCORE also signed a four-year purchase agreement with AMP Incorporated to provide high speed VCSELS, for use in transceivers for high speed networks that link computers. The contract requires AMP to purchase a minimum of 80% of their VCSEL needs from EMCORE. EMCORE's MODE facility in Albuquerque, New Mexico, will produce the devices under this contract.
- In February 1998, EMCORE and Uniroyal Technology Corporation formed Uniroyal Optoelectronics, a joint venture to manufacture, sell and distribute HB LED wafers and package-ready devices. This joint venture commenced operations in July 1998. EMCORE has invested \$5.5 million in Uniroyal Optoelectronics. Uniroyal Optoelectronics is hiring its own administrative and management personnel. The impact on EMCORE's operations will be limited to a few seconded employees who will continue to be managed by EMCORE personnel.
- To expand its technology base into the data communications and telecommunications markets, on December 5, 1997, EMCORE acquired MODE in a stock transaction accounted for under the purchase method of accounting for a purchase price of \$32.8 million. These operations are located in Albuquerque, New Mexico and currently employ approximately 40 people including sales, marketing, administrative and manufacturing personnel.

Because we do not have a controlling economic and voting interest in the Uniroyal, Union Miniere, Optek and General Electric Lighting joint ventures, EMCORE will account for these joint ventures under the equity method of accounting and, as such, our share of profits and losses will be included below the operating income line in our statement of operations.

EMCORE sells its products and has generated a significant portion of its sales to customers outside the United States. In fiscal 1996, 1997 and 1998, international sales constituted 42.5%, 42.0% and 39.1%, respectively, of revenues. In fiscal 1998, a majority of EMCORE's international sales were made to customers in Asia, particularly in Japan. EMCORE's sales revenues from Europe have fluctuated because most of our sales of TurboDisc systems are to a limited number of customers, who do not purchase these systems regularly. EMCORE anticipates that international sales will continue to account for a significant portion of revenues. Historically, we have received all payments for products and services in U.S. dollars. We do not anticipate that Europe's Euro-currency conversion will have a material effect on our financial condition or results of operations.

The information below summarizes EMCORE's export sales by geographic area. EMCORE's export sales to the Far East and Europe are as follows:

YEAR ENDED SEPTEMBER 30, -----	ASIA ----	EUROPE -----	TOTAL -----
1996.....	\$ 8,209,309	\$3,588,066	\$11,797,375
1997.....	14,583,981	5,478,186	20,062,167
1998.....	15,527,169	1,584,851	17,112,020

RESULTS OF OPERATIONS:

The following table sets forth the Statement of Income Data of the Company expressed as a percentage of total revenues for the fiscal years ended September 30, 1996, 1997 and 1998.

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998(*)
Revenues	100.0%	100.0%	100.0%
Cost of Sales	67.0	63.0	56.4
Gross profit	33.0	37.0	43.6
Operating expenses:			
Selling, general and administrative	23.5	19.6	32.2
Goodwill			8.3
Research and development	19.4	18.8	
One-time acquired in-process			37.7
Recurring			44.6
Operating loss	(9.9)	(1.4)	(79.2)
Stated interest expense, net	1.1	1.1	2.2
Imputed warrant interest expense, non-cash	0.4	8.4	1.4
Equity in net loss of associated companies	--	--	0.4
Loss before income taxes and extraordinary item	(11.4)	(10.9)	(83.2)
Provision for income taxes	--	0.3	--
Net loss before extraordinary item	(11.4)	(11.2)	(83.2)
Extraordinary item	--	(0.6)	--
Net loss before extraordinary item	(11.4)%	(11.8)%	(83.2)%

(*) as restated, see Note 20 to the consolidated financial statements.

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1997 AND 1998

REVENUES

Revenues. EMCORE's revenues decreased 8.4% from \$47.8 million for the fiscal year ended September 30, 1997 to \$43.8 million for the fiscal year ended September 30, 1998. The revenue decrease represented a shift in product mix during the year. Equipment related revenues decreased approximately 22.3% while materials related revenues increased approximately 26.5%. The decrease in equipment revenues was primarily attributable to the financial issues in the Asian economies as well as a general slowdown in the semiconductor equipment market overall. While materials related revenues did experience a 26.5% increase, the General Motors three month strike adversely affected revenue, as shipments to General Motors were halted during the strike. Revenues relating to

TurboDisc systems were \$34.1 million for the fiscal year ended September 30, 1997 and \$26.5 million for the fiscal year ended September 30, 1998. Revenues relating to wafers and devices were \$13.7 million for the fiscal year ended September 30, 1997 and \$17.3 million for the fiscal year ended September 30, 1998. As a percentage of revenues, TurboDisc systems accounted for 71.4% for the fiscal year ended September 30, 1997 and 60.5% for the fiscal year ended September 30, 1998. As a percentage of revenues, wafers and devices accounted for 28.6% for the fiscal year ended September 30, 1997 and 39.5% for the fiscal year ended September 30, 1998. International sales accounted for approximately 42.0% and 39.1% of revenues for the fiscal years ended September 30, 1997 and 1998, respectively.

Cost Of Sales/Gross Profit. Cost of sales includes direct material and labor costs, allocated manufacturing and service overhead, and installation and warranty costs. Gross profit increased from 37.0% of revenue to 43.6% of revenue for the fiscal years ended September 30, 1997 and 1998, respectively. The gross profit percentage increase was attributable to a shift in product mix towards higher gross margin materials related revenues.

Selling, General and Administrative. Selling, general and administrative expenses increased by 50.7% from \$9.3 million for the year ended September 30, 1997, to \$14.1 million for the year ended September 30, 1998. The increase was largely due to sales personnel headcount increases to support both domestic and foreign markets and general headcount additions to sustain the internal administrative support necessary for EMCORE's expanded product lines and new locations. During fiscal 1998, EMCORE wrote-off a \$1.0 million receivable due from an Asian customer which was deemed to be uncollectible. As a percentage of revenue, selling, general and administrative expenses increased from 19.6% of revenue during fiscal 1997 to 32.2% of revenue for fiscal 1998. EMCORE believes that selling, general and administrative expenses will decrease as a percentage of revenues in fiscal 1999 as revenues increase.

Goodwill Amortization. In connection with the purchase of MODE, EMCORE recorded goodwill of \$13.2 million which is being amortized over 36 months. Goodwill amortization expense amounted to \$3.6 million for the year ended September 30, 1998. Net goodwill at September 30, 1998 was \$9.5 million.

Research and Development. Recurring research and development expenses increased by 83.3% from \$9.0 million for the year ended September 30, 1997, to \$16.5 million for the year ended September 30, 1998. The increase was primarily attributable to EMCORE's acquisition of MODE and increased staffing and equipment costs necessary to enhance current products and develop new product offerings. Products introduced or under development include HB LEDs, high efficiency solar cells, new generation TurboDisc production systems, VCSELs and other optoelectronic devices. For the year ended September 30, 1998, EMCORE incurred \$1.1 million of research and development costs associated with MODE's in-process (at the date of acquisition) research and development projects. As a percentage of revenue, research and development expenses increased from 18.8% of revenue during fiscal 1997 to 37.7% of revenue for fiscal 1998. To maintain growth and market leadership in epitaxial technology, EMCORE expects to continue to invest a significant amount of its resources in research and development.

In connection with the MODE acquisition, EMCORE incurred a one-time charge for the write-off of acquired in-process research and development amounting to \$19.5 million.

The acquisition of MODE, a development stage company, constituted a significant and strategic investment for EMCORE. The principal investment consideration was to acquire and gain access to MODE's micro-optical technology, which was under development at the time. EMCORE plans to use MODE's micro-optical laser technology in new products for data communications and telecommunications applications. As of

the date of acquisition, MODE was engaged in the following six significant VCSEL research and development projects:

- Gigalase -- a high speed (modulation), near-infrared single optical laser component for serial silica fiber optic applications.
- Visilase -- a visible, red light, single optical laser component to be used for fiber optic links and optical storage and identification.
- Gigarray -- an array of optical lasers to be used in transmission in parallel optical interconnects.
- Microscan -- an integrated near-infrared optical laser, visible laser and focusing element.
- Optical Laser Source Module (OLSM) -- incorporates optical lasers and fast detector specialized circuitry and electronics.
- Optical Laser Array Source Module (OLASM) -- incorporates optical lasers, array detection and specialized circuitry and electronics.

The value assigned to each project and the estimated time and cost to reach technological feasibility was as follows (in \$000's):

	GIGALASE	VISILASE	GIGARRAY	MICROSCAN	OLSM	OLASM
	-----	-----	-----	-----	-----	-----
Value Assigned	\$6,509	\$2,004	\$7,214	\$2,691	\$ 934	\$ 639
Original estimated time to complete	1.5 man years	3 man years	1 man year	3.5 man years	8 man years	4 man years
Original estimated cost to complete	\$124	\$249	\$83	\$290	\$663	\$332
Revised estimated time to complete	Completed 2/98	Completed 5/98	Completed 12/98	3.5 man years	8 man years	4 man years
	in production	not in production	in production			
Revised cost to complete	Completed	Completed	Completed	\$314	\$717	\$358

The fair value assumptions relating to pricing, product margins and expense levels were based upon management's experience with its own operations and the compound semiconductor industry as a whole. In developing EMCORE's future estimated revenues and costs, new product introductions were expected to commence in calendar 1998 and net cash flows were expected to commence in calendar 1999 and 2000. In determining fair value of the acquired projects, a risk-adjusted discount rate of 20% was utilized. The Company has capitalized approximately \$0.5 million for MODE's workforce, which is included in Goodwill.

If all of MODE's in-process projects are not successfully completed and if management's estimated product pricing and growth rates are not achieved, EMCORE may not realize the product, market and financial benefits expected from the MODE acquisition.

Operating Loss. During fiscal 1998, operating loss increased from a loss of \$0.7 million for the fiscal year ended September 30, 1997, to a loss of \$34.6 million for the year ended September 30, 1998. The change in operating loss was primarily due to the \$19.5 million one-time charge for in-process research and development written off in connection with the purchase of MODE. Additionally, recurring research and development expense increased by \$7.5 million from the prior year, as a result of increased research and development activities at MODE and in our core business. In addition, the General Motors three month strike adversely affected operating performance as shipments to General Motors were halted during the strike. General Motors is among EMCORE's largest customers. EMCORE was unable to furlough or reduce their workforce during the strike and thereby incurred charges without the benefit of related revenues.

Other Expense. Other expenses decreased, particularly due to the reduced imputed warrant interest expense associated with EMCORE's subordinated debt and debt issuance guarantee cost. During fiscal 1996, EMCORE issued detachable warrants along with subordinated notes to certain of its existing shareholders. In fiscal year 1997, EMCORE also issued detachable warrants in return for a \$10.0 million demand note facility guarantee by the Chairman of the Board of EMCORE, who provided collateral for the facility. EMCORE subsequently assigned a value to these detachable warrants issued using the Black-Scholes option pricing model. EMCORE recorded the subordinated notes at a carrying value that is subject to periodic accretions,

using the interest method, and reflected the facility's detachable warrant value as debt issuance cost which was written off in its entirety in fiscal 1997. The consequent expense of these subordinated note accretion amounts and the now terminated facility's debt issuance cost is charged to "imputed warrant interest, non-cash," and amounted to approximately \$4.0 million and \$370,000 for the fiscal years ended September 30, 1997 and 1998, respectively. In June 1998, EMCORE issued 284,684 warrants to its Chairman and its Chief Executive Officer for providing a guarantee in connection with the 1998 Agreement, an \$8.0 million 18 month credit facility with First Union National Bank. EMCORE assigned a value to these warrants using the Black-Scholes option pricing model. As a result, EMCORE will record imputed warrant interest, non-cash of approximately \$1.3 million over the life of the credit facility.

Income Taxes. EMCORE's effective income tax rate was 0.0% in fiscal 1998, 2.5% in fiscal 1997 and 0.0% in fiscal 1996. The lower effective rate in fiscal 1998 and 1996, relative to fiscal 1997, was attributable to a federal income tax benefit offset by net operating loss and expenses not utilized or deductible for tax purposes.

As of September 30, 1998, EMCORE has net operating loss carryforwards for regular tax purposes of approximately \$22.0 million which expire in the years 2003 through 2013. EMCORE believes that the consummation of certain equity transactions and a significant change in the ownership during fiscal year 1995 has constituted a change in control under Section 382 of the Internal Revenue Code. Due to the change in control, EMCORE's ability to use its federal net operating loss carryovers and federal research credit carryovers to offset future income and income taxes, respectively, are subject to annual limitations under Internal Revenue Code Section 382 and 383.

EMCORE believes that the acquisition of MODE and the consummation of certain other equity transactions has constituted a change in control in fiscal 1998 under Section 382 of the Internal Revenue Code. As such, federal net operating loss carryovers and research credit carryovers incurred subsequent to EMCORE's fiscal 1995 change in control (as described above) will also be subject to annual limitations under Internal Revenue Code Sections 382 and 383.

Extraordinary Item. In the fiscal year ended September 30, 1997, EMCORE repaid \$2.0 million of its outstanding subordinated notes due May 1, 2001. In connection with this discharge of EMCORE's subordinated notes, an extraordinary loss of \$286,000 was recognized in fiscal 1997 relating to such early extinguishment of debt.

Net Loss. Net loss increased from \$5.6 million for the fiscal year ended September 30, 1997, to \$36.4 million for the fiscal year ended September 30, 1998. This increase was primarily attributable to the aforementioned acquisition of MODE and subsequent write-off of in-process research and development of \$19.5 million as well as an increase in recurring research and development expense of approximately \$7.5 million. In addition, the General Motors three month prolonged strike adversely affected operating performance.

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1996 AND 1997

Revenues. EMCORE's revenues for fiscal 1997 increased 71.9% from \$27.8 million to \$47.8 million for the fiscal year ended September 30, 1997. The revenue increase was primarily attributable to increased demand for compound semiconductor production systems and package-ready devices, as well as the introduction of compound semiconductor wafer products. Revenues relating to TurboDisc systems were \$23.8 million for the fiscal year ended September 30, 1996 and \$34.1 million for the fiscal year ended September 30, 1997. Revenues relating to wafers and devices were \$4.0 million for the fiscal year ended September 30, 1996 and \$14.7 million for the fiscal year ended September 30, 1997. As a percentage of revenues, TurboDisc systems accounted for 85.6% for the fiscal year ended September 30, 1996 and 71.4% for the fiscal year ended September 30, 1997. As a percentage of revenues, wafers and devices accounted for 14.4% for the fiscal year ended September 30, 1996 and 28.6% for the fiscal year ended September 30, 1997. International sales accounted for approximately 42.5% and 42.0% of revenues for the fiscal years ended September 30, 1996 and 1997, respectively.

Cost Of Sales/Gross Profit. Cost of sales includes direct material and labor costs, allocated manufacturing and service overhead, and installation and warranty costs. Gross profit increased from 33.0% of revenue to

37.0% of revenue for the fiscal years ended September 30, 1996 and 1997, respectively. The gross profit percentage increase was attributable to higher margins on wafer, device and licensing revenues.

Selling, General And Administrative. Selling, general and administrative expenses increased by 43.3% from \$6.5 million for the year ended September 30, 1996, to \$9.3 million for the year ended September 30, 1997. The increase was largely due to increases in sales personnel headcount to support both domestic and foreign markets and general headcount additions to sustain the internal administrative support necessary for EMCORE's increased business as well as higher expenses attributable to increased revenues. As a percentage of revenue, selling, general and administrative expenses decreased from 23.5% of revenue during fiscal 1996 to 19.6% of revenue for fiscal 1997.

Research And Development. Research and development expenses increased by 66.6% from \$5.4 million for the year ended September 30, 1996, to \$9.0 million for the year ended September 30, 1997. The increase was primarily attributable to increased staffing and equipment costs necessary to enhance current products and research and development activities related to wafers and package-ready devices. As a percentage of revenue, research and development expenses decreased from 19.4% of revenue during fiscal 1996 to 18.8% of revenue for fiscal 1997. To maintain growth and market leadership in epitaxial technology, EMCORE expects to continue to invest a significant amount of its resources in research and development.

Operating Loss. During fiscal 1997, operating loss decreased \$2.1 million from a loss of \$2.8 million for the fiscal year ended September 30, 1996, to a loss of \$0.7 million for the year ended September 30, 1997. The change in operating loss was primarily due to higher revenues generating greater overall gross profit.

Other Expense. During fiscal 1996, EMCORE issued detachable warrants along with subordinated notes to certain of its existing shareholders. In the first quarter of fiscal year 1997, EMCORE also issued detachable warrants in return for the \$10.0 million facility guarantee by the Chairman of the Board of EMCORE, who provided collateral for the Facility. EMCORE subsequently assigned a value to these detachable warrants issued using the Black-Scholes option pricing model. EMCORE recorded the subordinated notes at a carrying value that is subject to periodic accretions, using the interest method, and reflected the facility's detachable warrant value as debt issuance cost. The consequent expense of these subordinated note accretion amounts and the now terminated facility's debt issuance cost is charged to "Imputed warrant interest, non-cash," related to the warrant issuances in connection with the \$10.0 million facility, and amounted to approximately \$126,000 and \$4.0 million for the fiscal years ended September 30, 1996 and 1997, respectively.

Borrowings totaling \$8.0 million under the facility were utilized to fund capital expenditures in connection with the build-out of EMCORE's manufacturing facility during the six months ended March 31, 1997. The resultant interest expense was the primary reason for the increase in "Stated interest expense" for the year ended September 30, 1997. The outstanding \$8.0 million under this demand note facility was repaid in March 1997.

Extraordinary Item. EMCORE repaid \$10.0 million of its outstanding debt with proceeds from its initial public offering. The entire \$8.0 million outstanding of its Facility was repaid and \$2.0 million was used to repay a portion of EMCORE's outstanding subordinated notes due May 1, 2001. In connection with this discharge of EMCORE's subordinated notes, an extraordinary loss of \$286,000 was recognized in fiscal 1997 relating to such early extinguishment of debt.

Net Loss. Net loss increased \$2.4 million from \$3.2 million for the fiscal year ended September 30, 1996, to \$5.6 million for the fiscal year ended September 30, 1997. This increase was primarily attributable to the aforementioned \$4.0 million of non-cash imputed warrant interest associated with certain financing transactions.

OTHER SELECTED SEPTEMBER 30, 1998 INFORMATION

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents increased by approximately \$800,000 from \$3.7 million at September 30, 1997, to \$4.5 million at September 30, 1998. For the year ended September 30, 1998, net cash used by operations amounted to \$1.6 million, primarily due to the Company's net losses excluding the acquired in-process research and development non-cash charge and increase in inventories which was partially offset by the Company's non-cash depreciation and amortization charges, its increase in accounts payable and advanced billings, and its decrease in accounts receivable.

For the year ended September 30, 1998, net cash used in investment activities amounted to \$22.2 million primarily due to the purchase and manufacture of new equipment for the Company's wafer and package ready device product lines and clean room modifications and enhancements, as well as its purchase of land and construction of a facility in Albuquerque, New Mexico to be used for the manufacture of wafers and package ready devices.

On March 31, 1997, the Company entered into the 1997 Agreement, a \$10.0 million revolving loan which bears interest at the rate of prime plus 50 basis points (8.75% at September 30, 1998). As a result of the net loss for the quarters ended June 30, 1998 and September 30, 1998, the Company was not in compliance with the 1997 Agreement fixed charge coverage ratio covenant. The Company received a waiver from the bank regarding this non-compliance. The Company and the Bank amended the 1997 Agreement as of November 30, 1998 to, among other things, extend the expiration until October 1, 1999 and modify certain financial covenants. In addition, pursuant to the amendment of the 1997 Agreement, Thomas Russell, the Chairman of the Board of the Company became the guarantor of this debt as the Company did not meet certain financial covenants by May 15, 1999. On June 22, 1998, the Company entered into the 1998 Agreement, an \$8.0 million loan agreement with the Bank, which expires December 31, 1999. The 1998 Agreement bears interest at a rate equal to one-month LIBOR plus three-quarters of one percent per annum (6.4% at September 30, 1998). As of September 30, 1998, the Company had borrowed approximately \$10.0 million under the 1997 Agreement and \$8.0 million under the 1998 Agreement.

On September 17, 1998, the Company borrowed \$7.0 million from its Chairman, Thomas J. Russell. The loan bears interest at the prime rate plus 200 basis points (10.25% as of September 30, 1998) per annum. In addition, on October 23, 1998 the Company borrowed an additional \$1.5 million from its Chairman on identical terms. The entire \$8.5 million, borrowed from Thomas J. Russell was repaid from the proceeds of the Private Placement. The Company received a waiver from the Bank regarding the repayment of this debt.

Net cash provided by financing activities for the year ended September 30, 1998 amounted to approximately \$24.6 million, primarily due to the Company's proceeds of approximately \$18.0 million from borrowings under the 1997 and 1998 Agreements and the \$7.0 million note to the Company's Chairman.

The Company's operations are subject to a number of risks, including but not limited to a history of net losses from operations, future capital needs, dependence on key personnel, competition and risk of technological obsolescence, governmental regulations and approvals, research and development results, continued development of its compound semiconductor manufacturing and marketing capabilities and a concentration of international sales in Asia. The Company's operations for the year ended September 30, 1998, were primarily funded through borrowings under existing credit facilities and short-term advances from the Company's Chairman - aggregating \$7.0 million as of September 30, 1998. The Company's Chairman has from time to time provided credit enhancements in the form of debt guarantees and has loaned the Company funds to support its expansion and capital equipment requirements. The Company's Chief Executive Officer has also provided credit enhancements in the form of debt guarantees for the Company. Subsequent to September 30, 1998, the Company completed the Private Placement, resulting in proceeds of \$21.2 million. The Company repaid its Chairman \$8.5 million (including \$1.5 million advanced to the Company subsequent to September 30, 1998), invested approximately \$5.6 million in two unconsolidated ventures, reduced bank debt by \$2 million and the balance of approximately \$5.0 million will be used for general working capital purposes. In addition, the Company's \$10.0 million credit facility was extended to October 1, 1999.

On February 1, 1999, EMCORE entered into a \$5.0 million short-term note with First Union. The note is due and payable in May 1999. The note bears interest at a rate equal to one-month LIBOR plus three-quarters of one percent per annum. On January 27, 1999, EMCORE borrowed \$3.0 million from its Chairman, Thomas J. Russell. The loan bears interest at 8% per annum. The loan was repaid from borrowings under the First Union \$5.0 million note. EMCORE's Chairman has committed to provide up to \$30.0 million of long-term financing to EMCORE through July 1, 2000. This financing commitment terminates if the Company completes a secondary offering of approximately \$40 million.

On April 29, 1999, EMCORE borrowed \$2.5 million from its Chairman of an interest rate of prime plus two percent per annum. On May 7, EMCORE repaid this loan from borrowings under the \$19.0 million short-term note, described below.

On April 29, 1999, EMCORE entered into a \$19.0 million short-term loan agreement with First Union. This agreement represented a consolidation of the \$8.0 million loan agreement dated June 22, 1998 and the \$5.0 million loan agreement dated February 1, 1999 plus an additional \$6.0 million of availability. This agreement is due and payable October 1, 1999 and bears interest at a rate equal to one-month LIBOR plus three quarters of one percent per annum (5.75% at May 13, 1999). On May 7, 1999, EMCORE used borrowings under the agreement to repay the \$2.5 million borrowed from EMCORE's chairman.

EMCORE's planned capital expenditures are expected to total approximately \$26 million during fiscal 1999, including approximately \$13.4 million in expenditures related to investments in joint ventures. Capital spending in 1999 also is expected to include upgrading manufacturing facilities, continued investment in analytical and diagnostic of research and development equipment, upgrading and purchasing computer equipment and the manufacture of TurboDisc systems for in-house use. As of September 30, 1998, we had approximately \$2 million of commitments for capital expenditures. These commitments were received and paid for during the quarter ended December 31, 1998.

The Company's operating plans include, among other things attempting to improve (i) operating cash flow through increased sales of compound semiconductor systems, wafers and package-ready devices and (ii) managing its cost structure in relation to its anticipated level of revenues. The Company believes that its current liquidity, together with available credit facilities, the proceeds from the Private Placement and the Chairman's commitment, should be sufficient to meet its cash needs for working capital through fiscal 1999. However, if the proceeds from the Private Placement, cash generated from operations, the Chairman's commitment and cash on hand are not sufficient to satisfy the Company's liquidity requirements, the Company will seek to obtain additional equity or debt financing. Additional funding may not be available when needed or on terms acceptable to the Company. If the Company is required to raise additional financing and if adequate funds are not available or are not available on acceptable terms, the ability to continue to fund expansion, develop and enhance products and services, or otherwise respond to competitive pressures would be severely limited. Such a limitation could have a material adverse effect on the Company's business, financial condition or operations.

YEAR 2000 COMPLIANCE

Many currently installed computer systems and software products are coded to accept or recognize only two digit entries in the date code field. These systems and software products will need to accept four digit entries to distinguish 21st century dates from 20th century dates. As a result, computer systems and/or software used by many companies and governmental agencies may need to be upgraded to comply with such Year 2000 requirements or risk system failure or miscalculations causing disruptions of normal business activities.

State Of Readiness. EMCORE has made a preliminary assessment of the Year 2000 readiness of its operating financial and administrative systems, including the hardware and software that support such systems. EMCORE's assessment plan consists of

- (1) quality assurance testing of its internally developed proprietary software;
- (2) contacting third-party vendors and licensors of material hardware, software and services that are both directly and indirectly related to EMCORE's business;
- (3) contacting vendors of third-party systems;
- (4) assessing repair or replacement requirements;
- (5) implementing repair or replacement; and
- (6) creating contingency plans in the event of Year 2000 failures.

Our compound semiconductor wafers and devices are date insensitive and, therefore, do not have any Year 2000 issues associated with them. Our TurboDisc production systems have several components that could give rise to Year 2000 compliance concerns. We have preliminarily assessed the Year 2000 issues associated with these components and have found that they have either been certified by the vendor to be compliant or are date insensitive.

Our principal concern has been the status of our operating, financial and administrative systems. These systems include accounting and production control software at our New Jersey, MODE and EmcoreWest facilities. All software has been certified as Year 2000 compliant by the vendors, except our New Jersey office's accounting software. However, the software's manufacturer has a new version of the software that is Year 2000 compliant. We are planning this upgrade. The upgrade will be installed and tested by June 1999. There are other information technology systems and non-information technology systems that could give rise to Year 2000 concerns. These include scientific and engineering applications, desktop applications (such as Microsoft Word and Excel) and facilities controls such as HVAC and security. A review of these systems leads us to believe that the systems are Year 2000 compliant, are not critical to business operations, are used on a limited basis or are date insensitive.

We are continuing the evaluation of the Year 2000 compliance of all our systems and have developed an enterprise-wide database that we will use to document these Year 2000 issues. EMCORE plans to complete its evaluation by September 30, 1999 including Year 2000 simulation on its systems during the second and third quarter of calendar 1999 to test systems readiness.

Costs. To date, EMCORE has not incurred any material expenditures in connection with identifying, evaluating or addressing Year 2000 compliance issues. Most of EMCORE expenses have related to, and are expected to continue to relate to, the operating costs associated with time spent by employees in the evaluation process and Year 2000 compliance matters generally.

The exact costs related to Year 2000 compliance are difficult to determine. Several known costs relating to our information technology systems are:

- Updating New Jersey's accounting system, 2 man-weeks or \$4,000, and
- Reviewing software and completing Year 2000 database, 1 man-month or \$8,000.

We will be able to make a reasonable determination of the remediation costs for Year 2000 compliance after we have completed our Year 2000 evaluation. At present EMCORE believes that the costs for bringing our in-house information technology systems into compliance should not exceed \$200,000.

EMCORE does not anticipate that remediation expenses will be material. If the remediation expenses are higher than anticipated EMCORE's business, financial condition and results of operations could be materially and adversely affected.

Risks. EMCORE is not currently aware of any Year 2000 compliance problems relating to its systems that would have a material adverse effect on EMCORE's business, results of operations and financial condition. There can be no assurance that, upon completion of its evaluation, EMCORE will not discover Year 2000 compliance problems in its systems that will require substantial revision. In addition, there can be no assurance that third-party software, hardware or services incorporated into EMCORE's material systems will not need to be revised or replaced, all of which could be time-consuming and expensive. The failure of EMCORE to fix or replace its internally developed proprietary software or third-party software, hardware or services on a timely basis could result in lost revenues, increased operating costs, the loss of customers and other business interruptions, any of which could have a material adverse effect on EMCORE's business, result of operations and financial condition. Moreover, the failure to adequately address Year 2000 compliance issues in its internally developed proprietary software could result in claims of mismanagement, misrepresentation or breach of contract and related litigation, which could be costly and time-consuming to defend. In addition, the failure of governmental agencies, utility companies, third-party service providers and others outside of EMCORE's control to be Year 2000 compliant could result in systemic failure beyond EMCORE's control such as a telecommunications or electrical failure, which could have a material adverse effect on EMCORE's business, results of operations and financial condition.

Contingency Plan. As discussed above, EMCORE is engaged in an ongoing Year 2000 assessment and has not yet developed any contingency plans. The results of EMCORE's Year 2000 simulation testing and the responses received from third-party vendors and service providers will be taken into account in determining the nature and extent of any contingency plans.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 1997, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS No. 131"), which establishes standards for reporting information about operating segments in annual financial statements. It also establishes standards for related disclosures about products and services, geographic areas and major customers. SFAS No. 131 is effective for fiscal years beginning after December 15, 1997. EMCORE will be required to adopt this standard in its fiscal year ending September 30, 1999. The adoption of SFAS No. 131 is not expected to have an impact on EMCORE's results of operations, financial position or cash flows.

In March 1998, the American Institute of Certified Public Accountants ("AICPA") issued Statement of Position ("SOP") 98-1, "Accounting for the Cost of Computer Software Developed or Obtained for Internal Use" ("SOP 98-1"). SOP 98-1 is effective for financial statements for years beginning after December 14, 1998. SOP 98-1 provides guidance over accounting for computer software developed or obtained for internal use including the requirement to capitalize specified costs and amortization of such costs. EMCORE does not expect the adoption of this standard to have a material effect on results of operations, financial position or cash flows.

In June of 1998, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." This statement establishes accounting and reporting standards for derivative instruments and requires recognition of all derivatives as assets or liabilities in the statement of financial position and measurement of these instruments at fair value. The statement is effective for fiscal years beginning after June 15, 1999. Management believes that adopting this statement will not have a material impact on the financial position, results of operations, or cash flows of the Company.

In April 1998, the AICPA issued Statement of Position 98-5, "Reporting on the Costs of Start-Up Activities" ("SOP 98-5"). SOP 98-5, which is effective for fiscal years beginning after December 15, 1998, provides guidance on the financial reporting of start-up costs and organization costs. It requires costs of start-up activities and organization costs to be expensed as incurred. As EMCORE has expensed these costs historically, the adoption of this standard is not expected to have a significant impact on EMCORE's results of operations, financial position or cash flows.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During fiscal 1998, the Company was not a party to any derivative contracts, hedging or other market risk transactions.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

EMCORE CORPORATION
CONSOLIDATED BALANCE SHEETS

	AS OF SEPTEMBER 30,	
	1997	1998 (AS RESTATED SEE NOTE 20)
Current assets:		
Cash and cash equivalents.....	\$ 3,653,145	\$ 4,455,836
Restricted cash.....	312,500	62,500
Accounts receivable, net of allowance for doubtful accounts of approximately \$697,000 and \$611,000 at September 30, 1997 and September 30, 1998, respectively.....	8,439,704	7,437,822
Accounts receivable -- related parties.....	2,500,000	500,000
Inventories, net.....	7,185,626	12,445,326
Costs in excess of billings on uncompleted contracts.....	--	77,531
Prepaid expenses and other current assets.....	120,393	130,075
Total current assets.....	22,211,368	25,109,090
Property, plant and equipment, net.....	16,797,833	36,209,831
Goodwill, net.....	--	9,519,000
Investments in unconsolidated affiliates.....	--	291,504
Other assets, net.....	453,608	2,090,219
Total assets.....	\$ 39,462,809	\$ 73,219,644
Current liabilities:		
Note payable -- related party.....	\$ --	\$ 7,000,000
Accounts payable.....	4,050,216	12,022,628
Accrued expenses.....	3,867,589	4,197,405
Advanced billings.....	1,998,183	3,180,370
Capitalized lease obligation -- current.....	15,030	673,036
Other current liabilities.....	124,279	52,778
Total current liabilities.....	10,055,297	27,126,217
Long-term debt:		
Bank loans.....	--	17,950,000
Subordinated notes, net.....	7,499,070	7,808,772
Capitalized lease obligation, net of current portion.....	77,870	754,517
Other liabilities.....	--	--
Total liabilities.....	17,632,237	53,639,506
Shareholders' equity:		
Preferred stock, \$.0001 par value, 5,882,353 shares authorized, no shares outstanding in both periods.....	--	--
Common stock, no par value, 23,529,411 shares authorized, 6,000,391 and 9,375,952 issued and outstanding September 30, 1997 and September 30, 1998, respectively.....	45,816,774	87,443,237
Accumulated deficit.....	(23,777,658)	(60,196,454)
Notes receivable from warrant issuances and stock sales.....	(208,544)	(7,666,645)
Total shareholders' equity.....	21,830,572	19,580,138
Total liabilities and shareholders' equity.....	\$ 39,462,809	\$ 73,219,644

The accompanying notes are an integral part of these consolidated financial statements.

EMCORE CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998 (AS RESTATED SEE NOTE 20)
Revenues:			
Systems and materials.....	\$24,066,506	\$46,591,662	\$ 42,820,791
Services.....	3,712,379	1,160,910	939,192
Total revenues.....	27,778,885	47,752,572	43,759,983
Cost of sales:			
Systems and materials.....	16,121,938	29,309,898	24,148,783
Services.....	2,484,482	784,117	526,706
Total cost of sales.....	18,606,420	30,094,015	24,675,489
Gross profit.....	9,172,465	17,658,557	19,084,494
Operating expenses:			
Selling, general and administrative.....	6,524,482	9,346,329	14,082,438
Goodwill amortization.....			3,637,941
Research and development -- recurring.....	5,401,413	9,001,188	16,494,888
Research and development -- one-time acquired in-process, non-cash.....	--	--	19,516,000
Total operating expenses.....	11,925,895	18,347,517	53,731,267
Operating loss.....	(2,753,430)	(688,960)	(34,646,773)
Other expenses:			
Stated interest, net of interest income of \$71,000, \$237,000, and \$448,000 for the years ended September 30, 1996, 1997 and 1998, respectively.....	297,093	519,422	972,992
Imputed warrant interest expense, non-cash.....	125,791	3,988,390	600,536
Equity in net loss of unconsolidated affiliate.....	--	--	198,495
Loss before income taxes and extraordinary item.....	(3,176,314)	(5,196,772)	(36,418,796)
Provision for income taxes.....	--	137,000	--
Net loss before extraordinary item.....	(3,176,314)	(5,333,772)	(36,418,796)
Extraordinary item -- loss on early extinguishment of debt.....	--	285,595	--
Net loss.....	\$(3,176,314)	\$(5,619,367)	\$(36,418,796)
Per share data:			
Weighted average basic and diluted shares used in per share data calculations.....	2,994,466	4,668,822	8,775,270
Net loss per basic and diluted share before extraordinary item.....	\$ (1.06)	\$ (1.14)	\$ (4.15)
Net loss per basic and diluted share.....	\$ (1.06)	\$ (1.20)	\$ (4.15)

The accompanying notes are an integral part of these consolidated financial statements.

EMCORE CORPORATION

 CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
 FOR THE YEARS ENDED SEPTEMBER 30, 1996, 1997, 1998

	COMMON STOCK		ACCUMULATED DEFICIT	SHAREHOLDERS' NOTES RECEIVABLE	TOTAL SHAREHOLDERS' EQUITY
	SHARES	AMOUNT			
BALANCE AT SEPTEMBER 30, 1995.....	2,994,461	\$16,637,566	\$(14,981,977)	\$ (146,107)	\$ 1,509,482
Issuance of common stock purchase warrants.....	--	2,340,000			2,340,000
Notes receivable due from shareholders in connection with issuance of detachable warrants.....				(151,579)	(151,579)
Net loss.....			(3,176,314)		(3,176,314)
BALANCE AT SEPTEMBER 30, 1996.....	2,994,461	18,977,566	(18,158,291)	(297,686)	521,589
Issuance of common stock purchase warrants.....		3,601,455			3,601,455
Issuance of common stock in initial public offering, net of issuance cost of \$3,110,345.....	2,875,000	22,764,655			22,764,655
Issuance of common stock on exercise of warrants....	94,124	384,027			384,027
Issuance of common stock on exercise of stock options.....	34,965	53,640			53,640
Redemptions of notes receivable from shareholders...				31,842	31,842
Forgiveness of notes receivable from shareholder....				57,300	57,300
Compensatory stock issuances.....	1,841	35,431			35,431
Net loss.....			(5,619,367)		(5,619,367)
BALANCE AT SEPTEMBER 30, 1997.....	6,000,391	45,816,774	(23,777,658)	(208,544)	21,830,572
Issuance of common stock purchase warrants.....		1,309,546			1,309,546
Issuance of common stock on exercise of warrants in exchange for notes receivable.....	1,827,966	7,458,101		(7,458,101)	--
Issuance of common stock and common stock purchase options and warrants in connection with the acquisition of MODE.....	1,461,866	32,329,000			32,329,000
Stock option exercise.....	35,809	83,486			83,486
Stock purchase warrant exercise.....	5,660	23,092			23,092
Issuance of common stock on exercise of warrants in exchange for subordinated notes.....	17,605	71,841			71,841
Compensatory stock issuances.....	26,655	351,397			351,397
Net loss (as restated).....			(36,418,796)		(36,418,796)
BALANCE AT SEPTEMBER 30, 1998 (as restated).....	9,375,952	87,443,237	(60,196,454)	(7,666,645)	19,580,138

The accompanying notes are an integral part of these consolidated financial statements.

EMCORE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998 (AS RESTATED SEE NOTE 20)
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss.....	\$ (3,176,314)	\$ (5,619,367)	\$(36,418,796)
Adjustments to reconcile net loss to net cash provided by (used for) operating activities:			
Acquired in-process research and development, non-cash....	--	--	19,516,000
Depreciation and amortization.....	1,871,016	3,187,755	8,767,105
Provision for doubtful accounts.....	146,418	515,000	1,118,000
Provision for inventory valuation.....	105,000	120,000	120,000
Detachable warrant accretion and debt issuance cost amortization.....	125,792	3,988,390	600,536
Extraordinary loss on early extinguishment of debt.....	--	285,595	--
Equity in net loss of an unconsolidated affiliate.....	--	--	198,495
Compensatory stock issuances.....	--	35,431	351,397
Write-off note receivable due from shareholder.....	--	57,300	--
Change in assets and liabilities:			
Accounts receivable -- trade.....	(1,041,956)	(5,929,533)	1,882
Accounts receivable -- related party.....	--	(2,500,000)	2,000,000
Inventories.....	(4,410,566)	339,414	(5,243,187)
Costs in excess of billings on uncompleted contracts.....	(2,882)	19,322	(77,531)
Prepaid expenses and other current assets.....	(26,784)	(60,458)	12,632
Other assets.....	(468,565)	27,568	(623,775)
Accounts payable.....	3,398,078	(2,029,154)	7,949,760
Accrued expenses.....	777,899	1,880,943	(970,148)
Advanced billings.....	1,122,667	(1,308,279)	1,182,187
Billings in excess of costs on uncompleted contracts.....	(306,359)	--	--
Unearned service revenue.....	12,315	111,964	(71,501)
Total adjustments.....	1,302,073	(1,258,742)	34,831,852
Net cash and cash equivalents used for operating activities.....	(1,874,241)	(6,878,109)	(1,586,944)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property, plant, and equipment.....	(7,090,869)	(11,631,642)	(22,132,071)
Acquisition, cash acquired.....	--	--	192,799
Investments in unconsolidated affiliates.....	--	--	(490,000)
(Funding) payments of restricted cash.....	--	(312,500)	250,000
Net cash and cash equivalents used for investing activities.....	(7,090,869)	(11,944,142)	(22,179,272)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from initial public offering, net of issuance cost of \$3,110,345.....	--	22,764,655	--
Proceeds (payments) under bank loans.....	--	8,000,000	17,950,000
Proceeds (payments) from notes payable, related party, net.....	--	--	7,000,000
Proceeds from subordinated note issuance.....	11,009,600	--	--
Payments on demand note facility and subordinated debt....	--	(10,000,000)	--
Proceeds from exercise of stock purchase warrants.....	--	85,121	23,092
Proceeds from exercise of stock options.....	--	53,640	83,486
Payments on capital lease obligations.....	(3,000,000)	(5,723)	(487,671)
Reduction in notes receivable from shareholders.....	--	210,317	--
Net cash and cash equivalents provided by financing activities.....	8,009,600	21,108,010	24,568,907
Net (decrease) increase in cash and cash equivalents.....	(955,510)	2,285,759	802,691
Cash and cash equivalents at beginning of period.....	2,322,896	1,367,386	3,653,145
Cash and cash equivalents at end of period.....	\$ 1,367,386	\$ 3,653,145	\$ 4,455,836

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998 (AS RESTATED SEE NOTE 20)
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for interest.....	\$ 276,000	\$ 600,000	\$ 1,347,000
Cash paid for income taxes.....	55,000	--	--
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Common stock issued on the exercise of warrants in exchange for subordinated notes.....	--	--	\$ 71,841
Issuance of common stock on the exercise of warrants in exchange for notes receivable.....	--	--	\$ 7,458,101
Issuance of common stock, and common stock purchase options and warrants in connection with the acquisition of MicroOptical Devices, Inc.....	--	--	\$ 32,329,003

Reference is made to Note 8 -- Debt Facilities -- for disclosure relating to certain non-cash warrant issuance.

The accompanying notes are an integral part of these consolidated financial statements.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS

NOTE 1. DESCRIPTION OF BUSINESS

EMCORE is a designer and developer of compound semiconductor materials and process technology and a manufacturer of production systems used to fabricate compound semiconductor wafers. Compound semiconductors are used in a broad range of applications in wireless communications, telecommunications, computers, and consumer and automotive electronics. The Company has recently capitalized on its technology base by expanding into the design and production of compound semiconductor wafers and package-ready devices and under specific arrangements has licensed certain process technologies. During fiscal 1998, the Company completed the acquisition of a development stage company focused on the research and development of optical laser technologies (see Note 3). The Company offers its customers a complete, vertically-integrated solution for the design, development and production of compound semiconductor wafers and devices.

Basis of Presentation and Liquidity. The accompanying financial statements have been prepared on a going concern basis. The Company for the year ended September 30, 1998, experienced an 8% decline in revenue of approximately \$4.0 million and a substantial operating loss amounting to approximately \$34.6 million (approximately \$15.1 million excluding the effect of acquired in-process research and development) and had a working capital deficiency of \$2.0 million.

The Company's operations are subject to a number of risks, including but not limited to a history of net losses from operations, future capital needs, dependence on key personnel, competition and risk of technological obsolescence, governmental regulations and approvals, technology research and development results, continued development of its compound semiconductor manufacturing and marketing capabilities and a concentration of international sales in Asia. The Company's operations for the year ended September 30, 1998 were primarily funded through borrowings under existing credit facilities and short-term advances from the Company's Chairman -- aggregating \$7.0 million as of September 30, 1998. The Company's Chairman has from time to time provided credit enhancements in the form of debt guarantees and has loaned the Company funds to support its expansion and capital equipment requirements. The Company's Chief Executive Officer has also provided credit enhancement in the form of debt guarantees for the Company. On November 30, 1998, the Company completed a preferred stock private placement (the "Private Placement" see Note 17), resulting in net proceeds of \$21.2 million. The Company repaid its Chairman \$8.5 million (including \$1.5 million advanced to the Company subsequent to September 30, 1998), invested approximately \$5.6 million in two unconsolidated ventures, used \$2 million to repay debt and the balance is being used for general working capital purposes. In addition, the Company's \$10.0 million credit facility was extended to October 1, 1999. The Company's Chairman has committed to provide the Company with \$30 million of long-term financing through July 1, 2000. The Chairman's financing commitment terminates if the Company completes a secondary offering of approximately \$40.0 million. The Company's operating plans include, among other things attempting to improve (i) operating cash flow through increased sales of compound semiconductor systems, wafers and package-ready devices and (ii) managing its cost structure in relation to its anticipated level of revenues. The Company believes that its current liquidity, together with available credit facilities and the proceeds from the Private Placement, should be sufficient to meet its cash needs for working capital through fiscal 1999. If the working capital generated from the Private Placement and cash generated from operations is not sufficient to satisfy the Company's liquidity requirements, the Company will seek to obtain additional equity or debt financing. Additional funding may not be available when needed or on terms acceptable to the Company. If the Company is required to raise additional financing and if adequate funds are not available or are not available on acceptable terms, the ability to continue to fund expansion, develop and enhance products and services, or otherwise respond to competitive pressures would be severely limited. Such a limitation could have a material adverse effect on the Company's business, financial condition or operations and the financial statements do not include any adjustment that could result therefrom.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation. The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. The equity method of accounting is used for unconsolidated affiliates in which the Company's equity is at least 20% and not more than 50%. All significant intercompany transactions are eliminated upon consolidation.

Cash and Cash Equivalents. The Company considers all highly liquid short-term investments purchased with an original maturity of three months or less to be cash equivalents. The Company had approximately \$2.3 million and \$3.0 million in cash equivalents at September 30, 1997 and 1998, respectively. As of September 30, 1998, the Company had restricted cash in the amount of \$62,500 due to a contractual obligation.

Inventories. Inventories are stated at the lower of FIFO (first-in, first-out) cost or market. Reserves are established for slow moving or obsolete inventory based upon historical and anticipated usage.

Property and Equipment. Property and equipment are stated at cost. Significant renewals and betterments are capitalized. Maintenance and repairs which do not extend the useful lives of the respective assets are expensed. Depreciation is recorded using the straight-line method over the estimated useful lives of the applicable assets, which range from three to five years. Leasehold improvements are amortized using the straight-line method over the term of the related leases or the estimated useful lives of the improvements, whichever is less. Depreciation expense includes the amortization of capital lease assets. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation accounts are adjusted accordingly, and any resulting gain or loss is recorded in current operations.

Long-Lived Assets. The carrying amount of assets is reviewed on a regular basis for the existence of facts or circumstances, both internally and externally, that suggest impairment. To date no such impairment has been indicated. The Company determines if the carrying amount of a long-lived asset is impaired based on anticipated undiscounted cash flows before interest. In the event of an impairment, a loss is recognized based on the amount by which the carrying amount exceeds fair value of the asset. Fair value is determined primarily using the anticipated cash flows before interest, discounted at a rate commensurate with the risk involved.

Deferred Costs. Included in other assets are deferred costs related to obtaining product patents and debt issuance costs and an investment in an unconsolidated affiliate. Total amortization expense amounted to approximately \$128,000, \$40,000 and \$79,000 for the years ended September 30, 1996, 1997 and 1998, respectively. During the year ended September 30, 1998, the Company issued 284,684 common stock purchase warrants in exchange for the guaranteeing of a credit facility by the Company's Chairman and Chief Executive Officer. The warrants were assigned a value of \$1,310,000 which is being amortized over the eighteen month term of the facility. The warrants were valued by the Company based upon its application of the Black Scholes Option Pricing Model ("Black Scholes"). Amortization expense related to such warrant issuance amounted to approximately \$219,000 for fiscal 1998.

Goodwill. Goodwill is amortized using the straight-line method over three years. The Company, as applicable, evaluates whether there has been a permanent impairment in the value of goodwill. Any impairment would be recognized when the sum of expected undiscounted cash flows derived from the acquired business is less than its carrying value.

Income Taxes. The Company recognizes deferred taxes by the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred income taxes are recognized for differences between the financial statement and tax bases of assets and liabilities at enacted statutory tax rates in effect for the years in which the differences are expected to reverse. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. In addition, valuation allowances are

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

established when necessary to reduce deferred tax assets to the amounts expected to be realized. The primary sources of temporary differences are depreciation and amortization of intangible assets.

Revenue and Cost Recognition -- Systems, Components and Service Revenues. Revenue from systems sales is recognized upon shipment, when title passes to the customer. Subsequent to product shipment, the Company incurs certain installation costs at the customer's facility and warranty costs which are estimated and accrued at the time the sale is recognized. Component sales and service revenues are recognized when goods are shipped or services are rendered to the customer. Service revenue under contracts with specified service terms is recognized as earned over the service period in accordance with the terms of the applicable contract. Costs in connection with the procurement of the contracts are charged to expense as incurred.

Revenue and Cost Recognition -- Contract Revenue. The Company's research contracts require the development or evaluation of new materials applications and have a duration of six to thirty-six months. For research contracts with the U.S. Government and commercial enterprises with durations greater than six months, the Company recognizes revenue to the extent of costs incurred plus the estimated gross profit as stipulated in such contracts, based upon contract performance. Contracts with a duration of six months or less are accounted for on the completed contract method. A contract is considered complete when all costs, except insignificant items, have been incurred, and the research reporting requirements to the customer have been met. Contract costs include all direct material and labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, tools, repairs and depreciation costs, as well as coverage of certain general and administrative costs. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Revenues from contracts amounted to approximately \$3,295,000, \$614,000 and \$438,000 for the years ended September 30, 1996, 1997 and 1998, respectively.

Research and Development. Research and development costs related to the development of both present and future products and Company-sponsored materials application research are charged to expense as incurred. In connection with the acquisition of MicroOptical Devices, Inc. ("MODE"), the Company recorded a charge of \$19,516,000 for acquired in-process research and development.

Fair Value of Financial Instruments. The Company estimates the fair value of its financial instruments based upon discounted cash flow analyses using the Company's incremental borrowing rate on similar instruments as the discount rate. As of September 30, 1998, the fair value of the Company's subordinated notes exceeded the carrying value of such instruments by approximately \$830,000. As of September 30, 1998, the carrying values of the Company's cash and cash equivalents, receivables, accounts payable and variable rate based debt as reflected on the Company's accompanying balance sheet approximates fair value.

Use of Estimates. The preparation of financial statements in conformity with generally accepted accounting principles 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. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates. The Company's most significant estimates relate to acquired in-process research and development, accounts receivable and inventory valuation reserves, warranty and installation accruals, estimates of cost and related gross profits on certain research contracts and the valuation of long-lived assets.

Net Loss Per Share. The Company accounts for earnings per share under the provisions of Statement of Financial Accounting Standards No. 128 "Earnings per Share" ("SFAS No. 128"). Basic and diluted earnings per share calculated pursuant to SFAS No. 128 have been restated for all periods presented to give effect to the Securities and Exchange Commission's Staff Accounting Bulletin No. 98 which eliminated certain computational requirements of Staff Accounting Bulletin No. 64.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

Basic earnings per common share was calculated by dividing net loss by the weighted average number of common stock shares outstanding during the period. Diluted earnings per share was calculated by dividing net loss by the sum of the weighted average number of common shares outstanding plus all additional common shares that would have been outstanding if potentially dilutive common shares had been issued. The following table reconciles the number of shares utilized in the Company's earnings per share calculations.

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998
Net loss.....	\$(3,176,314)	\$(5,619,367)	\$(36,418,796)
Loss per common share -- basic.....	\$ (1.06)	\$ (1.20)	\$ (4.15)
Loss per common share -- diluted.....	\$ (1.06)	\$ (1.20)	\$ (4.15)
Common shares -- basic.....	2,994,466	4,668,822	8,775,270
Effect of dilutive securities:			
Stock options and warrants.....	--	--	--
Common shares -- diluted.....	2,994,466	4,668,822	8,775,270

The effect of outstanding common stock purchase options and warrants have been excluded from the Company's earnings per share calculation since the effect of such securities is anti-dilutive.

Reclassifications. Prior period balances have been reclassified to conform with the current period financial statement presentation.

Recent Accounting Pronouncements

In June 1997, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 131 "Disclosures about Segments of an Enterprise and Related Information" ("SFAS No. 131"), which establishes standards for reporting information about operating segments in annual financial statements. It also establishes standards for related disclosures about products and services, geographic areas and major customers. The Company will be required to adopt this standard in its fiscal year ended September 30, 1999. The adoption of SFAS No. 131 will not have an impact on the Company's results of operations, financial position or cash flows.

In March 1998, the American Institute of Certified Public Accountants ("AICPA") issued Statement of Position ("SOP") 98-1, "Accounting for the Cost of Computer Software Developed or Obtained for Internal Use" ("SOP 98-1"). SOP 98-1 is effective for financial statements for years beginning after December 15, 1998. SOP 98-1 provides guidance over accounting for computer software developed or obtained for internal use, including the requirement to capitalize specified costs and amortization of such costs. The Company does not expect the adoption of this standard to have a material effect on its results of operations, financial position or cash flows.

In April 1998, AICPA issued SOP 98-5, "Reporting on the Costs of Start-Up Activities" ("SOP 98-5"). SOP 98-5, which is effective for fiscal years beginning after December 15, 1998, provides guidance on the financial reporting of start-up costs and organization costs. It requires costs of start up activities and organization costs to be expenses as incurred. The adoption of this standard is not expected to have a significant impact on its results of operations, financial position or cash flows.

In June of 1998, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." This statement establishes accounting and reporting standards for derivative instruments and requires recognition of all derivatives as assets or liabilities in the statement of financial position and measurement of these instruments at fair value. The statement is effective for fiscal years beginning after June 15, 1999. Management believes that adopting this statement will not have a material impact on the financial position, results of operations, or cash flows of the Company.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 3. ACQUISITION

On December 5, 1997, the Company acquired all of the outstanding capital stock of MODE in exchange for 1,461,866 shares of EMCORE common stock, 200,966 common stock purchase options (exercise prices ranging from \$0.43 to \$0.59), and 47,118 common stock purchase warrants (exercise prices ranging from \$4.32 to \$5.92). The purchase price was approximately \$32,829,000 including direct acquisition costs of approximately \$500,000. The acquisition of MODE was recorded using the purchase method of accounting. Accordingly, the results of operations of the acquired business and the fair values of the acquired tangible and intangible assets and assumed liabilities have been included in the Company's financial statements as of December 5, 1997. The allocation of the fair value of the net assets acquired is as follows:

Net tangible assets.....	\$ 156,000
Goodwill.....	13,157,000
Acquired in process research and development.....	19,516,000

Total purchase price.....	\$32,829,000
	=====

The common stock issued in connection with the MODE acquisition was valued based upon the average closing price of the Company's common stock for the five days before and after the announcement date of the acquisition. The assumed MODE options and warrants were valued using Black-Scholes and such values amounted to approximately \$3,761,000 and \$793,000, respectively.

The MODE options have a term of 10 years from the date of grant, with such options expiring at various dates through July 2007. The options vest, with continued service, over a four-year period; 25% in year one and 75% equally over the remaining 36 months. The warrants have a term of 10 years from the date of grant, were exercisable upon grant, and expire at various dates through May 2007.

MODE was a development stage company (incorporated in August 1995) and had 18 employees at the date of acquisition. MODE's activities were substantially dedicated towards the research and development of optical laser devices at the date of acquisition.

Management is responsible for estimating the fair value of the acquired in-process research and development. As of the date of acquisition, MODE had six primary micro-optical laser research and development projects in-process, which had not reached technological feasibility. MODE's in-process research and development related to new technologies, the fair value assumptions relating to pricing, product margins and expense levels were based upon management's experience with its own operations and the compound semiconductor industry as a whole.

The Company allocated \$475,000 of the purchase price to the acquired workforce of MODE which is included in the approximately \$13.2 million of goodwill discussed above. The amount allocated to goodwill is being amortized over a period of three years.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

The following unaudited pro forma basis financial information reflects the combined results of operations of the Company and MODE, as if MODE had been acquired as of October 1, 1996 and October 1, 1997, respectively, but does not reflect the non-recurring write-off of the acquired in-process research and development. The summary includes the impact of certain adjustments, such as goodwill amortization and the number of shares outstanding.

	YEAR ENDED SEPTEMBER 30,	
	1997	1998
	(UNAUDITED)	
Revenue.....	\$ 48,313,000	\$ 43,860,000
Net loss before extraordinary item.....	(12,219,000)	(18,344,000)
Net loss.....	(12,505,000)	(18,344,000)
Net loss basic and diluted per share.....	\$(2.04)	\$(2.09)

The unaudited pro forma results of operations are not necessarily indicative of what actually would have occurred if the acquisition had occurred on October 1, 1996. In addition, the unaudited pro forma results of operations are not intended to be a projection of future results that might be achieved from the combined entity. The foregoing pro forma results of operations does not reflect the non-recurring write-off of acquired in-process research and development.

NOTE 4. CONCENTRATION OF CREDIT RISK

The Company sells its compound semiconductor products domestically and internationally. The Company's international sales are generally made under letter of credit arrangements.

For the years ended September 30, 1996, 1997 and 1998, the Company sold 42.5%, 42.0% and 39.1% of its products to foreign customers, respectively.

The Company's world-wide sales to major customers were as follows:

	AS OF SEPTEMBER 30,		
	1996	1997	1998
Customer A.....	\$ 6,558,930	\$ 4,872,540	\$ 7,563,137
Customer B.....	1,773,864	7,158,619	5,602,120
Customer C.....	--	2,500,000	2,501,500
Customer D.....	1,530,000	3,085,000	178,856
Customer E.....	2,075,722	--	--
Total.....	\$11,938,516	\$17,616,159	\$15,845,613
	=====	=====	=====

The Company performs material application research under contract with the U.S. Government or as a subcontractor of U.S. Government funded projects.

The Company performs ongoing credit evaluations of its customers' financial condition and collateral is not requested. The Company maintains reserves for potential credit losses based upon the credit risk of specified customers, historical trends and other information. To reduce credit risk and to fund manufacturing costs, the Company requires periodic prepayments or irrevocable letters of credit on most production system orders. During the quarter ended June 30, 1998, the Company wrote off outstanding receivables of approximately \$1.0 million which was due from an Asian customer. Prior to this event, the Company's credit losses generally had not exceeded its expectations.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

The Company has maintained cash balances with certain financial institutions in excess of the \$100,000 insured limit of the Federal Deposit Insurance Corporation.

NOTE 5. INVENTORIES

The components of inventories consisted of the following:

	AS OF SEPTEMBER 30,	
	1997	1998
Raw materials.....	\$6,513,379	\$11,346,487
Work-in-process.....	672,247	1,091,971
Finished goods.....	--	6,868
Total.....	<u>\$7,185,626</u>	<u>\$12,445,326</u>

NOTE 6. PROPERTY, PLANT AND EQUIPMENT

Major classes of property and equipment are summarized below:

	AS OF SEPTEMBER 30,	
	1997	1998
Land.....	\$ --	\$ 1,028,902
Building.....	--	7,493,385
Equipment.....	19,190,770	28,367,324
Furniture and fixtures.....	2,300,146	3,255,680
Leasehold improvements.....	6,085,256	9,948,121
Fixed assets under capital leases.....	98,623	2,042,728
	27,674,795	52,136,140
Less: accumulated depreciation and amortization.....	(10,876,962)	(15,926,309)
Total.....	<u>\$ 16,797,833</u>	<u>\$ 36,209,831</u>

At September 30, 1998, minimum future lease payments due under the capital leases are as follows:

PERIOD ENDING SEPTEMBER 30,	
1999.....	\$ 796,648
2000.....	741,345
2001.....	62,478
2002.....	25,336
2003 and thereafter.....	--
Total minimum lease payments.....	1,625,807
Less: amount representing interest (average rate of 9.8%)...	(198,254)
Net minimum lease payments.....	1,427,553
Less: current portion.....	(673,036)
Long-term portion.....	<u>\$ 754,517</u>

The provisions for depreciation and amortization expense on owned property and equipment amounted to approximately \$1,743,000, \$3,148,000 and \$4,683,000 for the years ended September 30, 1996, 1997 and 1998,

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

respectively. Accumulated amortization on assets accounted for as capital lease amounted to approximately \$366,000 as of September 30, 1998.

Included in equipment above are ten systems and twenty systems with a combined net book value of approximately \$5.1 million and \$9.8 million at September 30, 1997 and 1998, respectively. Such systems are utilized for the production of compound semiconductor wafers and package-ready devices for sale to third parties, systems demonstration purposes, system sales support, in-house materials applications, internal research and contract research funded by third parties.

NOTE 7. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	AS OF SEPTEMBER 30,	

	1997	1998
Accrued payroll, vacation and other employee expenses.....	\$1,659,428	\$2,113,765
Installation and warranty costs.....	1,411,120	704,114
Interest.....	272,445	346,250
Other.....	524,596	1,033,276
	-----	-----
Total.....	\$3,867,589	\$4,197,405
	=====	=====

NOTE 8. DEBT FACILITIES

1998 Agreement:

On June 22, 1998, the Company entered into an \$8.0 million loan agreement with First Union National Bank (the "1998 Agreement"), which expires December 31, 1999. The 1998 Agreement bears interest at a rate equal to one-month LIBOR plus three-quarters of one percent per annum (or 6.4%) at September 30, 1998. As of September 30, 1998, \$8.0 million was outstanding under the 1998 Agreement and is due and payable on December 31, 1999. The 1998 Agreement is guaranteed by both the Company's Chairman and Chief Executive Officer. In exchange for guaranteeing the facility, the Chairman and the Chief Executive Officer were granted an aggregate of 284,684 common stock purchase warrants exercisable at \$11.375 per share until May 1, 2001. These warrants are callable at the Company's option at \$0.85 per warrant at such time as the Company's Common Stock has traded at or above 150% of the exercise price for a period of thirty days.

The Company assigned a value of \$1,310,000 to the warrants issued to the guarantors. This valuation was based upon the Company's application of Black Scholes. This value is accounted for as debt issuance cost and will be amortized over the eighteen month life of the 1998 Agreement.

1997 Agreement:

On March 31, 1997, the Company entered into a \$10.0 million loan agreement (the "1997 Agreement"). The Agreement bears interest at the rate of Prime plus 50 basis points (8.75% and 9.0% at September 30, 1998 and 1997, respectively). As of September 30, 1998 the Company had \$9,950,000 outstanding under this facility. As of September 30, 1997, there were no amounts outstanding under this facility.

As a result of the net loss for the quarters ended June 30, 1998 and September 30, 1998, the Company was not in compliance with the 1997 Agreement fixed charged coverage ratio covenant. The Company received a waiver from the bank regarding this non-compliance. The Company's 1997 Agreement was subsequently further extended through October 1, 1999. The 1997 Agreement's financial covenants were modified under the second amendment, and management believes that the Company will be able to comply

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

with such requirements throughout fiscal 1999. In addition, the Company's Chairman has guaranteed such debt in the event the Company does not meet certain financial covenants.

Subordinated Notes:

On May 1, 1996, the Company issued subordinated notes (the "Subordinated Notes") in the amount of \$9,500,000 to its existing shareholders, \$1,000,000 of which were exchanged for notes receivable from officers and certain employees with identical payment and interest provisions. The Subordinated Notes are scheduled to mature on May 1, 2001, and have a stated interest rate of 6.0% which is payable semi-annually on May 1 and November 1. In addition, the noteholders were issued 2,328,432 common stock purchase warrants with an exercise price of \$4.08 per share which expire on May 1, 2001. The warrants are exercisable after November 1, 1996, and are callable at the Company's option, after May 1, 1997, at \$0.85 per warrant. The Company has the legal right of offset with respect to the notes receivable from officers and certain key employees, and it is their full intention to offset the corresponding notes receivable and payable upon maturity. As such, the Company reflected \$848,000 of the officers' and employees' notes receivable as a contra liability, reducing the Company's Subordinated Notes balance. The remaining \$152,000 note receivable has been reflected as a contra equity note receivable balance, representing the portion of the employee note receivable associated with common stock purchase warrants issued to such employees. The Company received cash proceeds of \$8,500,000 in connection with this Subordinated Notes issuance.

On September 1, 1996, the Company issued a subordinated note in the amount of \$2,500,000 to the Company's then majority shareholder with terms identical to the Subordinated Notes issued on May 1, 1996. In addition, under the terms of this issuance, 245,098 common stock purchase warrants were issued to purchase common stock at \$10.20 per share and which expire September 1, 2001. These warrants are exercisable after March 1, 1997, and are callable at the Company's option after September 1, 1997, at \$0.85 per warrant.

The Company assigned a value of \$1,440,000 to the May 1, 1996 detachable warrants and \$900,000 to the September 1, 1996 detachable warrants. These valuations were based upon the Company's application of Black Scholes and the Company's assessment of the underlying valuation factors, as well as an assessment of the terms of the Subordinated Notes. The carrying value of the Subordinated Notes will be subject to periodic accretions, using the interest method, in order for the carrying amount to equal the Company's obligation upon maturity. As a result, the May 1, 1996 and September 1, 1996 Subordinated Notes have an effective interest rate of approximately 9.3% and 15.0%, respectively. For the years ended September 30, 1998, 1997 and 1996, imputed warrant interest related to the Subordinated Notes amounted to \$370,000, \$388,000 and \$126,000, respectively.

Demand Note Facilities:

On September 17, 1998, the Company borrowed \$7.0 million from its Chairman. The loan bears interest at the rate of Prime plus 200 basis points (10.25% as of September 30, 1998), per annum. In addition, on October 23, 1998 the Company borrowed an additional \$1.5 million from its Chairman on identical terms. The entire sum of \$8.5 million borrowed plus interest was repaid from the proceeds of the Private Placement (see Note 17).

On October 25, 1996, the Company entered into a \$10.0 million demand note facility (the "Facility"). The Facility bore interest at the rate of LIBOR plus 75 basis points, had a term of one year and was due and payable on demand. The Facility was guaranteed by the Chairman of the Company's Board of Directors who provided collateral for the Facility. In December 1996, in return for guaranteeing the facility, the Company granted the Chairman 980,392 common stock purchase warrants at \$10.20 per share which expire September 1, 2001. These warrants are exercisable after July 1, 1997, and are callable at the Company's option after December 1, 1997 at \$0.85 per warrant. The Facility was terminated in conjunction with the Company's initial public offering.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

The Company assigned a value of \$3,600,000 to the warrants issued to the guarantor. This valuation was based upon the Company's application of Black Scholes. This value was accounted for as debt issuance cost and was amortized over the expected period that the facility was to be in place (four months).

The Company utilized a portion of the proceeds from its initial public offering to pay down or discharge certain of its debts. The Company repaid the entire \$8.0 million outstanding under its October 1996 Facility and \$2.0 million was used to repay a portion of the Company's outstanding subordinated notes, due May 1, 2001. In connection with the discharge of the Company's subordinated notes, an extraordinary loss of \$286,000 was recognized.

NOTE 9. COMMITMENTS AND CONTINGENCIES

On November 16, 1992, the Company entered into a three-year lease agreement with a bank for 34,000 square feet of space in the building the Company presently occupies. On March 31, 1995, the agreement was renewed for 5 years for 49,000 square feet. In November 1996, the Company signed an agreement to occupy the remaining 26,000 square feet that it previously had not occupied.

The Company leases certain equipment under non-cancelable operating leases.

Facility and equipment rent expense under such leases amounted to approximately \$350,000, \$548,000 and \$637,000 for the years ended September 30, 1996, 1997 and 1998, respectively.

Future minimum rental payments under the Company's non-cancelable operating leases with an initial or remaining term of one year or more as of September 30, 1998 are as follows:

PERIOD ENDING SEPTEMBER 30,

1999.....	\$ 712,000
2000.....	359,000
2001.....	74,000
2002.....	13,000
2003.....	8,000

Total minimum lease payments.....	\$1,166,000
	=====

The Company is from time to time involved in litigation incidental to the conduct of its business. Management and its counsel believe that such pending litigation will not have a material adverse effect on the Company's results of operations, cash flows or financial condition.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 10. INCOME TAXES

Income tax expense consists of the following:

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998
Current:			
Federal.....	\$ --	\$113,000	\$ --
State.....	--	24,000	--
	--	137,000	--
Deferred:			
Federal.....	--	--	--
State.....	--	--	--
Total.....	\$ --	\$137,000	\$ --
	=====	=====	=====

The principal differences between the U.S. statutory and effective income tax rates were as follows:

	YEARS ENDED SEPTEMBER 30,		
	1996	1997	1998
US statutory income tax (benefit) expense rate.....	(34.0)%	(34.0)%	(34.0)%
State rate, net of federal benefit.....	(5.9)	(5.9)	(5.9)
Acquired in-process research and development.....			18.2
Change in valuation allowance.....	38.3	37.7	19.8
Non-deductible amortization.....	--	--	3.4
Other.....	1.6	4.7	(1.5)
Effective tax rate.....	0.0%	2.5%	0.0%
	=====	=====	=====

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

The components of the Company's net deferred taxes were as follows:

	YEARS ENDED SEPTEMBER 30,	
	----- 1997	1998 -----
Deferred tax assets:		
Federal net operating loss carryforwards.....	\$3,502,348	\$7,943,877
Research credit carryforwards (state and federal).....	718,644	1,479,221
Inventory reserves.....	207,732	247,521
Accounts receivable reserves.....	243,996	239,701
Interest.....	1,461,389	1,657,337
Accrued installation reserve.....	362,379	163,778
Accrued warranty reserve.....	158,202	75,621
State net operating loss carryforwards.....	461,821	1,494,064
Other.....	144,586	238,318
Valuation reserve -- federal.....	(5,583,217)	(9,438,122)
Valuation reserve -- state.....	(1,334,975)	(3,751,314)
	-----	-----
Total deferred tax assets.....	342,905	350,002
Deferred tax liabilities:		
Fixed assets and intangibles.....	(342,905)	(350,002)
	-----	-----
Total deferred tax liabilities.....	(342,905)	(350,002)
Net deferred taxes.....	\$ --	\$ --
	=====	=====

The Company has established a valuation reserve as it has not determined that it is more likely than not that the net deferred tax asset is realizable, based upon the Company's past earnings history.

As of September 30, 1998, the Company has net operating loss carryforwards for regular tax purposes of approximately \$22.0 million which expire in the years 2003 through 2013. The Company believes that the consummation of certain equity transactions and a significant change in the ownership during fiscal years 1995 and 1998 have constituted a change in control under Section 382 of the Internal Revenue Code ("IRC"). Due to the change in control, the Company's ability to use its federal net operating loss carryovers and federal research credit carryovers to offset future income and income taxes, respectively, are subject to annual limitations under IRC Section 382 and 383.

The Company believes that the acquisition of MODE and the consummation of certain other equity transactions has constituted a change in control in fiscal 1998 under Section 382 of the IRC. As such, Federal net operating loss carryovers and research credit carryovers incurred subsequent to the Company's fiscal 1995 change in control (as described above) will also be subject to annual limitations under IRC Section 382 and 383.

NOTE 11. STOCKHOLDERS' EQUITY

Reverse Stock Split. On February 3, 1997, the Board of Directors approved a 3.4:1 reverse stock split of its common stock and approved a decrease in the number of shares of common stock authorized. All references in the accompanying financial statements to the number of common stock and per-share amounts have been restated to reflect the reverse split.

Common Stock Offering. In March 1997, the Company completed an initial public offering of 2,500,000 shares of common stock at a price of \$9.00 per share (the "Offering"), and upon the exercise of the Underwriter's overallotment option, 375,000 additional shares of common stock were also sold at \$9.00 per share. The proceeds, net of commissions and certain expenses, to the Company from the offering were

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

approximately \$22.8 million. Prior to the Offering, there was no public market for the Company's common stock.

Warrant Exercise. On December 3, 1997, the holders of 1.8 million common stock purchase warrants (with an exercise price of \$4.08) exercised such warrants with the Company taking full recourse notes amounting to approximately \$7.5 million in exchange for the issued common stock. The notes receivable mature and are payable in full on May 1, 2001 and bear interest at a rate of 6%, compounding semi-annually. In addition, the holders are required to provide collateral at a 2:1 coverage ratio. This collateral is presently held by the Company.

Preferred Stock. The Company's certificate of incorporation authorizes the Board of Directors to issue up to 5,882,353 shares of preferred stock of the Company upon such terms and conditions having such rights, privileges and preferences as the Board of Directors may determine.

NOTE 12. STOCK OPTIONS AND WARRANTS

Stock Option Plan. In November 1994, the Company's Incentive Stock Option Plan, initiated in 1987, was eliminated. On June 5, 1995, the Company adopted the 1995 Incentive and Non-Statutory Stock Option Plan (the "Option Plan"). Under the terms of the Option Plan, options to acquire 323,529 shares of common stock may be granted to eligible employees, as defined, at no less than 100 percent of the fair market value on the date of grant. In March 1996, options to acquire an additional 323,530 shares of common stock were approved. In February 1997, options to acquire an additional 725,000 shares of common stock were approved. As of September 30, 1998, 1,372,059 stock options were available for issuance under the Company's Option Plan.

Certain options under the Option Plan are intended to qualify as incentive stock options pursuant to Section 422A of the Internal Revenue Code.

During fiscal 1998, options with respect to 816,284 shares were granted pursuant to the Company's option plan or issued in connection with the MODE acquisition at exercise prices ranging from \$0.44 to \$20.00 per share.

Stock options granted generally vest over three to five years and are exercisable over a ten year period. As of September 30, 1996, 1997 and 1998, options with respect to 162,764, 199,368 and 481,863 shares were exercisable, respectively.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

The following table summarizes the activity under the plan:

	SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding as of September 30, 1995.....	281,470	\$ 3.03
Granted.....	57,942	6.04
Exercised.....	--	--
Canceled.....	--	--
-----	-----	-----
Outstanding as of September 30, 1996.....	339,412	\$ 3.54
Granted.....	182,700	11.06
Exercised.....	(42,165)	3.17
Canceled.....	(4,475)	3.08
-----	-----	-----
Outstanding as of September 30, 1997.....	475,472	\$ 6.47
Granted.....	615,318	13.34
Exercised.....	(19,919)	3.78
Canceled.....	(35,457)	12.34
-----	-----	-----
Outstanding as of September 30, 1998.....	1,035,414	\$10.40
=====	=====	=====

As of September 30, 1998, stock options outstanding, excluding those assumed in connection with the acquisition of MODE, were as follows:

EXERCISE PRICES -----	OPTIONS OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YEARS) -----	EXERCISABLE OPTIONS -----
\$0.00 more than x less than \$5.00.....	242,219	7.96	242,219
\$5.00 more than x less than \$10.00.....	22,500	9.88	--
\$10.00 more than x less than \$15.00.....	661,975	9.17	178,873
\$15.00 more than x less than \$20.00.....	74,720	9.19	767
\$20.00 more than x less than \$25.00.....	34,000	8.94	6,800

In connection with the Company's acquisition of MODE, it assumed 200,966 common stock purchase options with exercise prices ranging from \$0.43 to \$0.59. The MODE options have a term of 10 years from the date of grant, with such options expiring at various dates through July 31, 2007. The options vest, with continued service, over a four-year period; 25% in year one and 75% equally over the remaining 36 months. As of September 30, 1998, there are 177,312 options outstanding at a weighted average exercise price of \$0.50.

The following table summarizes the activity of options assumed in the MODE acquisition.

	SHARES -----	WEIGHTED AVERAGE EXERCISE PRICE -----
Outstanding as of September 30, 1997.....	--	--
Options assumed at the date of acquisition.....	200,966	\$0.50
Exercised.....	(15,890)	0.51
Cancelled.....	(7,764)	0.56
-----	-----	-----
Outstanding as of September 30, 1998.....	177,312	0.50
=====	=====	=====

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

In October 1995, the Financial Accounting Standards Board issued SFAS No. 123, "Accounting for Stock Based Compensation" ("SFAS 123"). SFAS 123 establishes financial and reporting standards for stock based compensation plans. The Company has adopted the disclosure only provisions of this standard and has elected to continue to apply the provision of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees". Had the Company elected to recognize compensation expense for stock options based on the fair value at the grant dates of awards, net loss and net loss per share would have been as follows:

	YEARS ENDED SEPTEMBER 30,	
	1997	1998
Net loss before extraordinary item		
As reported.....	\$5,333,772	\$36,418,796
Pro forma.....	\$5,441,274	\$37,037,847
Net loss per basic and diluted share before extraordinary item		
As reported.....	\$ (1.14)	\$ (4.15)
Pro forma.....	\$ (1.17)	\$ (4.22)
Net loss		
As reported.....	\$5,619,367	\$36,418,796
Pro forma.....	\$5,726,869	\$37,037,847
Net loss per basic and diluted share		
As reported.....	\$ (1.20)	\$ (4.15)
Pro forma.....	\$ (1.23)	\$ (4.22)

The weighted average fair value of the Company's stock options was calculated using Black Scholes with the following weighted-average assumptions used for grants in fiscal 1997 and 1998: no dividend yield; expected volatility of 0% prior to the Company's initial public offering and 60% thereafter; a risk-free interest rate of 6.04% and 5.57% for fiscal years 1997 and 1998, respectively; and expected lives of 5 years. The weighted average fair value of options granted during the years ended September 30, 1997 and 1998 is \$3.82 and \$7.50 per share, respectively. Stock options granted by the Company prior to its initial public offering were valued using the minimum value method under FASB No. 123.

Warrants. Set forth below is a summary of the Company's outstanding warrants at September 30, 1998:

SECURITY	EXERCISE PRICE	WARRANTS	EXPIRATION DATE
Common Stock(1).....	\$ 4.08	385,428	May 1, 2001
Common Stock(2).....	\$ 4.33	36,990	August 21, 2006
Common Stock(2).....	\$ 5.92	10,128	May 16, 2007
Common Stock(3).....	\$10.20	1,225,490	September 1, 2001
Common Stock(4).....	\$11.38	284,684	May 1, 2001

-
- (1) Issued in connection with the Company's May 1996 subordinated note issuance.
 - (2) Issued in connection with the MODE acquisition.
 - (3) Issued in connection with the Company's September 1996 subordinated debt issuance and October 1996 debt guarantee.
 - (4) Issued in connection with the 1998 Agreement guarantee.

NOTE 13. RELATED PARTIES

In May 1995, 52% of the Company's outstanding shares of Common Stock were purchased by Jesup & Lamont Merchant Partners, L.L.C. ("JLMP"). Prior to May 12, 1997, a majority of the Company's then six directors were members of JLMP. On May 12, 1997, JLMP distributed all of its shares of the Company to the

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

individual members of JLMP. In May 1995, the Company entered into a consulting agreement (the "Agreement") with Jesup & Lamont Capital Markets, Inc. ("Jesup & Lamont") pursuant to which Jesup & Lamont agreed to provide financial advisory and employee services for the Company for one year. Total fees paid to Jesup & Lamont amounted to approximately \$241,697 for the fiscal year ended September 30, 1996. No fees were paid to Jesup & Lamont during the fiscal years ended September 30, 1998 and 1997.

In December 1996, the Company's chairman and chief executive officer retired. The Company entered into a consulting agreement with him for a term of two years and will provide compensation of \$250,000 per annum. In addition, the Company has also forgiven \$115,300 of his indebtedness to the Company and had agreed to extend the period for the exercise of his vested stock options through March 1997 and accordingly he exercised all 26,471 vested shares.

In fiscal 1997, the Company entered into a non-exclusive and non-refundable technology licensing and royalty agreement with Uniroyal Technology Corporation ("UTC") for the process technology to develop and manufacture high brightness light emitting diodes ("LEDs"). During fiscal 1998 and 1997, revenue associated with the UTC licensing agreement amounted to \$2.5 million and \$2.5 million, respectively. At the time the transaction was originally entered into, UTC's Chairman and CEO was a member of EMCORE's Board of Directors and EMCORE's Chairman was on the Board of Directors of UTC. All related party accounts receivable for fiscal 1997 have been paid in full. As of September 30, 1998, the Company had an outstanding related party receivable of \$500,000.

In July 1998, the Company and a wholly-owned subsidiary of UTC formed Uniroyal Optoelectronics, a venture (the "UTC Venture") to produce and market compound semiconductor products. The Company has a 49% non-controlling minority interest. The Company's rights under the venture agreement are protective and as such, the Company accounts for its interest in the venture under the equity method of accounting. In July 1998, the Company invested \$490,000 in the UTC Venture which was classified as a component of other long-term assets. For the year ended September 30, 1998, the Company recognized a loss of \$198,000 related to the UTC Venture, which has been recorded as a component of other income and expense. In November 1998, the Company invested an additional \$5.0 million into the UTC Venture.

The President of Hakuto Co. Ltd. ("Hakuto"), the Company's Asian distributor, is a member of the Company's Board of Directors and Hakuto is a minority shareholder of the Company. During the year ended September 30, 1998, sales made through Hakuto approximated \$9.2 million.

On June 22, 1998, the Company entered into the 1998 Agreement. The 1998 Agreement was guaranteed by the Chairman and the Chief Executive Officer of the Company (see Note 8). In return for guaranteeing the facility, the Company granted the Chairman and the Chief Executive Officer an aggregate of 284,684 common stock purchase warrants at \$11.375 per share which expire May 1, 2001. These warrants are callable at the Company's option at \$0.85 per warrant at such time as the Company's common stock has traded at or above 150% of the exercise price for a period of 30 days.

On September 17, 1998, the Company borrowed \$7.0 million from its Chairman, Thomas J. Russell. The loan bears interest at 9.75% per annum. In addition, on October 23, 1998 the Company borrowed an additional \$1.5 million from its Chairman on identical terms. The entire \$8.5 million, borrowed from Mr. Russell was repaid from the proceeds of a private placement (See Note 8).

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 14. EXPORT SALES

The information below summarizes the Company's export sales by geographic area. The Company's export sales to the Far East and Europe are as follows:

	ASIA	EUROPE	TOTAL
	-----	-----	-----
Year ended September 30, 1996.....	\$ 8,209,309	\$3,588,066	\$11,797,375
Year ended September 30, 1997.....	\$14,583,981	\$5,478,186	\$20,062,167
Year ended September 30, 1998.....	\$15,527,169	\$1,584,851	\$17,112,020

NOTE 15. QUARTERLY FINANCIAL DATA (UNAUDITED)

	REVENUES	OPERATING INCOME (LOSS)	NET INCOME (LOSS)	NET INCOME (LOSS) PER SHARE
	-----	-----	-----	-----
	(IN THOUSANDS, EXCEPT PER SHARE DATA)			
Fiscal Year Ended September 30, 1997:				
December 31, 1996.....	\$ 8,591	\$ (2,585)	\$ (3,798)	\$(0.86)
March 31, 1997.....	12,929	147	(3,150)	(0.82)
June 30, 1997.....	14,106	907	830	0.10
September 30, 1997.....	12,126	841	498	0.06
Fiscal Year Ended September 30, 1998:				
December 31, 1997 (as previously reported).....	\$12,357	\$(29,223)*	\$(29,389)*	\$(4.15)*
December 31, 1997 (as restated).....	12,357	(19,717)*	(19,883)*	(2.81)*
March 31, 1998 (as previously reported)....	13,808	200	37	0.00
March 31, 1998 (as restated).....	13,808	(615)	(778)	(0.08)
June 30, 1998 (as previously reported).....	9,074	(7,141)	(7,446)	(0.80)
June 30, 1998 (as restated).....	9,074	(7,956)	(8,260)	(0.88)
September 30, 1998 (as previously reported).....	8,521	(5,544)	(6,683)	(0.71)
September 30, 1998 (as restated).....	8,521	(6,359)	(7,498)	(0.80)

See Note 20, "Restatement".

* includes a one-time charge to acquired in-process research and development, non-cash.

NOTE 16. EMPLOYEE SAVINGS PLAN

The Company has a savings plan (the "Savings Plan") that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the Savings Plan, participating employees may defer a portion of their pretax earnings, up to the Internal Revenue Service annual contribution limit. Effective August 1, 1997, the Company began contributing to the Savings Plan. All employer contributions are made in the Company's common stock. For the year ended September 30, 1998, the Company contributed approximately \$252,000 to the Savings Plan.

NOTE 17. SUBSEQUENT EVENT -- REDEEMABLE PREFERRED STOCK PRIVATE PLACEMENT

On November 30, 1998, the Company sold an aggregate of 1,550,000 shares of Series I Redeemable Convertible Preferred Stock (the "Series I Preferred Stock") to related parties (Hakuto Company, Ltd., Uniroyal Technology Corporation, and Union Miniere, Inc.) for aggregate consideration of \$21.7 million before deducting costs and expenses which amounted to approximately \$500,000. The Series I Preferred Stock was recorded net of issuance costs. The excess of the preference amount over the carrying value of the Series I Preferred Stock will be accreted by periodic charges to accumulated deficit in the absence of additional paid in

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

capital. The shares of Series I Preferred Stock are convertible, at any time, at the option of the holders thereof, unless previously redeemed, into shares of common stock at an initial conversion price of \$14.00 per share of common stock, subject to adjustment in certain cases. The market price of the Company's common stock was \$12.875 on the date the Series I Preferred Stock was issued. The Series I Preferred Stock is redeemable, in whole or in part, at the option of the Company at any time the Company's stock has traded at or above \$28.00 per share for 30 consecutive trading days, at a price of \$14.00 per share, plus accrued and unpaid dividends, if any, to the redemption date. The Series I Preferred Stock carries a dividend of 2% per annum. Dividends are being charged to accumulated deficit in the absence of additional paid in capital. In addition, the Series I Preferred Stock is subject to mandatory redemption by the Company at \$14.00 per share plus accrued and unpaid dividends, if any, on November 17, 2003.

NOTE 18. SUBSEQUENT EVENTS -- JOINT VENTURES

In November 1998, the Company entered into a joint venture with Union Miniere Inc. to undertake research and development aimed at new material application of germanium substrates. The Company has a 50% non-controlling interest in the venture. The Company will account for its interest in the venture under the equity method of accounting. In November 1998, the Company invested \$600,000 in the venture. The Company is obligated to fund the venture's capital requirements in proportion to its equity interest.

In November 1998, the Company also formed a venture with Optek Technology, Inc. to produce, market and distribute packaged electronic semiconductor components. The Company has a 50% non-controlling interest in the venture. The Company will account for its interest in the venture under the equity method of accounting. The Company is obligated to fund the venture's capital requirements in proportion to its equity interest.

On January 21, 1999, GE Lighting and the Company agreed, subject to certain conditions, to form a new joint venture to develop and market "white light" light-emitting diodes. The new company, GELcore, LLC (the "GELcore Venture"), will develop and market LEDs as replacements for miniature automotive, compact fluorescent, halogen and traditional incandescent lighting. Under terms of the joint venture agreement, the Company will have a 49% non-controlling interest in the GELcore Venture.

In connection with the GELcore venture, General Electric will loan the Company \$7.8 million at 4.75% per annum. The proceeds will be used to fund part of the Company's initial capital contribution in GELcore. This subordinated debenture (the "Debenture") will mature seven years from the date of issuance and is convertible into common stock of the Company at a conversion price of \$22.875 or 340,984 shares. The Debenture is convertible at any time at the option of GE Lighting and may be called by the Company after three years, if the price of the Company's common stock has traded at or above \$34 for at least thirty days. The Debenture's interest rate will be subject to adjustment in the event the Company does not complete a public offering by June 30, 1999.

General Electric will also receive between 282,010 warrants to purchase common stock at \$22.875 per share. The warrants will be exercisable at any time and will expire in seven years from the date of issuance.

On April 27, 1999, the Company contributed an additional \$500,000 as a capital investment in their joint venture with Uniroyal Technologies Corporation.

NOTE 19. SUBSEQUENT EVENTS -- OTHER

Short Term Borrowings

On February 1, 1999, the Company entered into a \$5 million short-term note (the "Note") with First Union. The Note is due and payable in May 1999. The Note bears interest at a rate equal to one-month LIBOR plus three-quarters of one percent per annum.

On April 29, 1999, the Company entered into a \$19.0 million short-term note (the "Amended Note") with First Union. The Amended Note consolidated the \$8.0 million loan agreement dated June 22, 1998 and the \$5 million Note plus an additional \$6.0 million. The Amended Note is due and payable October 1, 1999 and bears interest at a rate equal to one-month LIBOR plus three-quarters of one percent per annum.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

1997 Agreement. In January 1999, the Company borrowed the remaining balance of \$2,050,000 available under the 1997 Agreement.

Related Party Transactions

On January 27, 1999, the Company borrowed \$3.0 million from its Chairman. The loan bears interest at 8% per annum. This loan was repaid from borrowings under the Note.

On January 29, 1999, the Company's Chairman committed to provide \$30 million of long-term financing of the Company through July 1, 2000. The Chairman's financing commitment terminates if the Company completes a secondary offering of approximately \$40.0 million.

On April 29, 1999, the Company borrowed \$2.5 million from its Chairman at an interest rate of prime plus two percent. On May 7, 1999, this loan was repaid from borrowing under the Amended Note with First Union.

20. RESTATEMENT

Subsequent to the issuance of the Company's Annual Report on Form 10-K for the year ended September 30, 1998, the Company's management revised the amount of the purchase price which was allocated to in-process research and development in accounting for the acquisition of MicroOptical Devices, Inc. ("MODE") in December 1997. The revised allocation is based upon methods prescribed in a letter from the Securities and Exchange Commission ("SEC") sent to the American Institute of Certified Public Accountants. The letter sets forth the SEC's views regarding the valuation methodology to be used in allocating a portion of the purchase price to acquired in-process research and development ("IPR&D") at the date of acquisition.

The revised valuation is based on management's estimates of the net cash flows associated with expected operations of MODE and gives explicit consideration to the SEC's views on acquired IPR&D as set forth in its letter to the American Institute of Certified Public Accountants.

As a result of the revised allocation, the Company's financial statements for the year ended September 30, 1998 have been restated from amounts previously reported to reduce the amount of the acquired in-process research and development expensed by \$9.8 million and to increase goodwill by \$9.8 million. The amount allocated to goodwill includes approximately \$0.5 million related to the value of MODE's workforce. The change had no impact on net cash flows used by operations.

A summary of the significant effects of the restatement is as follows:

	AS OF SEPTEMBER 30, 1998	
	AS PREVIOUSLY REPORTED	AS RESTATED
BALANCE SHEET DATA:		
Goodwill, net.....	\$ 2,457,000	\$ 9,519,000
Accumulated deficit.....	(67,258,454)	(60,196,454)

	FOR THE YEAR ENDED SEPTEMBER 30, 1998	
	AS PREVIOUSLY REPORTED	AS RESTATED
STATEMENT OF OPERATIONS DATA:		
Goodwill amortization.....	\$ 921,941	\$ 3,637,941
Research and development - one-time required in-process, non-cash.....	29,294,000	19,516,000
Net loss.....	(43,480,796)	(36,418,796)
Net loss per common share -- Basic and Diluted.....	\$(4.95)	\$(4.15)

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and
Shareholders of EMCORE Corporation
Somerset, New Jersey

We have audited the accompanying consolidated balance sheet of EMCORE Corporation, (the "Company") as of September 30, 1998, and the related consolidated statements of operations, shareholders' equity, and cash flows for the year then ended. Our audit also included the financial statement schedule listed in the Index at Item 14(a)(2) for the year ended September 30, 1998. These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. 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 audit provides a reasonable basis for our opinion.

In our opinion, the 1998 consolidated financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 1998, and the results of their operations and their cash flows for the year then ended in conformity with generally accepted accounting principles. Also, in our opinion, such financial statement schedule for the year ended September 30, 1998, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 20 the accompanying 1998 consolidated financial statements have been restated.

DELOITTE & TOUCHE LLP

Parsippany, New Jersey
May 14, 1999

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and
Shareholders of EMCORE Corporation

We have audited the accompanying balance sheet of EMCORE Corporation (the "Company") as of September 30, 1997, the related statements of operations, shareholders' (deficit) equity and cash flows for each of the two years in the period ended September 30, 1997. We have also audited the financial statement schedule listed in Item 14(a)(2) for each of the two years in the period ended September 30, 1997. These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and the financial statement schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. 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 financial statements referred to above present fairly, in all material respects, the financial position of EMCORE Corporation as of September 30, 1997, and the results of its operations and its cash flows for each of the two years in the period ended September 30, 1997, in conformity with generally accepted accounting principles. In addition, in our opinion, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information required to be included therein.

Coopers & Lybrand L.L.P.

Parsippany, New Jersey
November 3, 1997, except for
note 15, as to which the date
is December 5, 1997

STATEMENT OF MANAGEMENT RESPONSIBILITY FOR FINANCIAL STATEMENTS

To the Shareholders of
EMCORE Corporation:

Management has prepared and is responsible for the consolidated financial statements and related information in the Annual Report. The financial statements, which include amounts based on judgment, have been prepared in conformity with generally accepted accounting principles consistently applied.

Management has developed, and in 1998 continued to strengthen, a system of internal accounting and other controls for the Company. Management believes these controls provide reasonable assurance that assets are safeguarded from loss or unauthorized use and that the Company's financial records are a reliable basis for preparing the financial statements. Underlying the concept of reasonable assurance is the premise that the cost of control should not exceed the benefit derived.

The Board of Directors, through its audit committee, is responsible for reviewing and monitoring the Company's financial reporting and accounting practices. The audit committee meets regularly with management and independent accountants - both separately and together. The independent accountants have free access to the audit committee to review the results of their audits, the adequacy of internal accounting controls and the quality of financial reporting.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

PricewaterhouseCoopers LLP ("PwC") and one of its predecessors, Coopers & Lybrand L.L.P., have served as the Company's independent public accountants since 1986. On May 13, 1999 the staff of the Securities and Exchange Commission (the "SEC") advised EMCORE that, in its view, because several current and former Price Waterhouse LLP partners owned shares of the Company's common stock, PwC had violated the independence standards promulgated by the SEC. The SEC staff is requiring the Company to change auditors and to have a new accounting firm reaudit its fiscal 1998 financial statements as a result of such violations by PwC.

In connection with the foregoing, on May 13, 1999, the Company engaged Deloitte & Touche LLP as its independent public accountants to reaudit the Company's financial statements for fiscal year 1998 and dismissed PwC as the Company's independent public accountant for fiscal year 1998. Both of these decisions were approved by the audit committee of the Company's Board of Directors.

PwC's report on the Company's financial statements for the two most recent fiscal years (1997 and 1996) did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope, or accounting principles. In addition, during the Company's two most recent fiscal years and through May 13, 1999, there were no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference to the subject matter of the disagreement in connection with its report,

During the Company's two most recent fiscal years and through May 13, 1999, there have been no reportable events, as defined in Regulation S-K Item 304(a)(1)(v).

Prior to formally being appointed as auditors on May 13, 1999, Deloitte & Touche LLP performed certain audit-related work at the request of the Company as a precaution in the event the SEC staff required the Company to change accountants.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this item is incorporated herein by reference to the Company's 1999 Proxy Statement which will be filed on or before January 28, 1999.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the Company's 1999 Proxy Statement which will be filed on or before January 28, 1999.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item is incorporated herein by reference to the Company's 1999 Proxy Statement which will be filed on or before January 28, 1999.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this term is incorporated herein by reference to the Company's 1999 Proxy Statement which will be filed on or before January 28, 1999.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.

14(A)(1) FINANCIAL STATEMENTS:

Included in Part II, Item 8 of this report:

	Page Reference -----
Consolidated Balance sheets as of September 30, 1997 and 1998 (as restated)	30
Consolidated Statements of operations for the years ended September 30, 1996, 1997 and 1998 (as restated)	31
Consolidated Statements of shareholders' equity for the years ended September 30, 1996, 1997 and 1998 (as restated)	32
Consolidated Statements of cash flows for the years ended September 30, 1996, 1997 and 1998 (as restated)	33
Notes to financial statements	35-53

14(A)(2) Financial Statement Schedule:

Included in Part IV of this report:

Schedule II - Valuation and qualifying accounts and reserves

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Other schedules have been omitted since they are either not required or not applicable.

14(A)(3) EXHIBITS

EXHIBIT NO.	DESCRIPTION
3.1	Restated Certificate of Incorporation, amended February 3, 1997 (incorporated by reference to Exhibit 3.1 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997 (the "1997 S-1")).*
3.2	Amended By-Laws, as amended January 11, 1989 (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to the 1997 S-1).*
3.3	Certificate of Amendment to the Certificate of Incorporation, dated November 19, 1998.*
4.1	Specimen certificate for shares of Common Stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the 1997 S-1).*
4.2	Form of \$11.375 Warrant.*
10.1	1995 Incentive and Non-Statutory Stock Option Plan (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the 1997 S-1).*
10.2	1996 Amendment to Option Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the 1997 S-1).*
10.3	Specimen Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to the 1997 S-1).*
10.4	Second Amended and Restated Distributorship Agreement dated as of March 31, 1998 between the Company and Hakuto. Confidential treatment has been requested by the Company for portions of this document. Such portions are indicated by "[*]".
10.5	Amendment to Lease for premises at 394 Elizabeth Avenue, Somerset, New Jersey 08873 (incorporated by reference to Exhibit 10.5 to Amendment No. 1 to the 1997 S-1).*
10.6	Registration Rights Agreement relating to September 1996 warrant issuance (incorporated by reference to Exhibit 10.6 to Amendment No. 1 to the 1997 S-1).*
10.7	Registration Rights Agreement relating to December 1996 warrant issuance (incorporated by reference to Exhibit 10.7 to Amendment No. 1 to the 1997 S-1).*
10.8	Form of 6% Subordinated Note Due May 1, 2001 (incorporated by reference to Exhibit 10.8 to Amendment No. 1 to the 1997 S-1).*
10.9	Form of 6% Subordinated Note Due September 1, 2001 (incorporated by reference to Exhibit 10.9 to Amendment No. 1 to the 1997 S-1).*
10.10	Form of \$4.08 Warrant (incorporated by reference to Exhibit 10.10 to Amendment No. 1 to the 1997 S-1).*

EXHIBIT INDEX - (CONTINUED)

EXHIBIT NO.	DESCRIPTION
10.11	Form of \$10.20 Warrant (incorporated by reference to Exhibit 10.12 to Amendment No. 1 to the 1997 S-1).*
10.12	Consulting Agreement dated December 6, 1996 between the Company and Norman E. Schumaker (incorporated by reference to Exhibit 10.14 to Amendment No. 1 to the 1997 S-1).*
10.13	Purchase Order issued to the Company by General Motors Corporation on November 17, 1996. (incorporated by reference to Exhibit 10.15 to Amendment No. 1 to the 1997 S-1).* Confidential treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "[*]".
10.14	Acquisition Agreement, dated as of December 5, 1997, between the Company and MicroOptical Devices, Inc. (incorporated by reference to Exhibit 2 to the Company's filing on Form 8-K, dated December 22, 1997).*
10.15	Purchase Agreement, dated November 30, 1998, by and between the Company, Hakuto UMI and UTC.*
10.16	Registration Rights Agreement, dated November 30, 1998 by and between the Company, Hakuto, UMI and UTC.*
10.17	Long Term Purchase Agreement dated November 24, 1998 by and between the Company and Space Systems/Loral, Inc. Confidential treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "[*]."
10.18	Promissory Note, dated June 22, 1998 by the Company in favor of First Union National Bank.*
10.19	Second Amendment to Revolving Loan and Security Agreement, dated as of November 30, 1998 between the Company and First Union National Bank.*
21	Subsidiaries of the registrant.*
23.1	Consent of Deloitte & Touche LLP.
23.2	Consent of PricewaterhouseCoopers LLP
27	Financial Data Schedule.

* Filed previously with or incorporated by reference in Form 10-K filed on December 29, 1998.

14(B) Reports on Form 8-K:

The Company filed a current report on Form 8-K dated August 6, 1998 which set forth information under Item 5.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Somerset, State of New Jersey, on May 17, 1999.

EMCORE CORPORATION

By /s/ REUBEN F. RICHARDS, JR.

Name: Reuben F. Richards, Jr.
TITLE: PRESIDENT AND CHIEF EXECUTIVE OFFICER

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of EMCORE Corporation in the capacities indicated, on May 17, 1999.

SIGNATURE

TITLE

/s/ THOMAS J. RUSSELL Chairman of the Board and Director

Thomas J. Russell

/s/ REUBEN F. RICHARDS, JR. President, Chief Executive Officer and
Director (Principal Executive Officer)

Reuben F. Richards, Jr.

/s/ THOMAS G. WERTHAN Vice President, Chief Financial Officer,
Secretary and Director (Principal
Accounting and Financial Officer)

Thomas G. Werthan

/s/ RICHARD A. STALL Director

Richard A. Stall

/s/ ROBERT LOUIS-DREYFUS Director

Robert Louis-Dreyfus

/s/ HUGH H. FENWICK Director

Hugh H. Fenwick

/s/ SHIGEO TAKAYAMA Director

Shigeo Takayama

/s/ CHARLES T. SCOTT Director

Charles T. Scott

/s/ JOHN HOGAN Director

John Hogan

EMCORE CORPORATION
 Valuation and Qualifying Accounts and Reserves
 For the years ended September 30, 1996, 1997 and 1998

	Balance at Beginning of Period -----	Additions Charged to Costs and Expenses -----	Write-offs (Deductions) -----	Balance at End of Period -----
ALLOWANCE FOR DOUBTFUL ACCOUNTS				
Year Ended September 30, 1996	\$164,000	\$ 183,000	\$ (37,000)	\$310,000
Year Ended September 30, 1997	310,000	515,000	(128,000)	697,000
Year Ended September 30, 1998	697,000	1,117,000	(1,203,000)	611,000
RESERVES FOR INVENTORY OBSOLESCENCE				
Year Ended September 30, 1996	\$115,000	\$ 105,000	--	\$220,000
Year Ended September 30, 1997	220,000	120,000	--	340,000
Year Ended September 30, 1998	340,000	120,000	--	460,000

SECOND AMENDED AND RESTATED
DISTRIBUTORSHIP AGREEMENT

THIS SECOND AMENDED AND RESTATED DISTRIBUTORSHIP AGREEMENT, effective as of March 31, 1998 (as amended, modified or supplemented from time to time, the "Agreement"), by and between EMCORE CORPORATION, a corporation duly organized and existing under the laws of New Jersey, having its principal place of business at 394 Elizabeth Avenue, Somerset, New Jersey 08873 ("Emcore"), and HAKUTO CO. LTD., a corporation duly organized and existing under the laws of Japan, having its principal place of business at 1-13, Shinjuku, 1-chome, Shinjuku-ku, Tokyo 160, Japan ("Hakuto"), amends, restates, replaces and supersedes that certain Amended and Restated Distributorship Agreement, dated as of January 20, 1998, retroactively effective as of July 12, 1995, by and between Emcore and Hakuto (the "Amended Distributorship Agreement").

W I T N E S S E T H:

WHEREAS, Emcore is engaged in the business of manufacturing technical and industrial products; and

WHEREAS, Hakuto is engaged in the business of, among other things, marketing and selling products throughout the world; and

WHEREAS, the parties heretofore entered into the Amended and Restated Distributorship Agreement pursuant to which Hakuto distributed certain Emcore products in defined markets, and the parties desire to revise the terms of the Amended and Restated Distributorship Agreement in accordance with which revised terms Hakuto will continue to serve as Emcore's distributor.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, Emcore and Hakuto do hereby agree as follows:

1. DEFINITIONS. As used in this Agreement, the following terms shall have the following meanings:

"CHANGE OF CONTROL" means: (1) the acquisition by any party, or any group acting in concert (other than a group consisting exclusively of current directors and/or officers of

CONFORMED COPY OF EXECUTION ORIGINAL

Emcore), of 50% or more of the issued and outstanding capital stock of Emcore; or (2) the sale by Emcore of assets that significantly reduces Emcore's ability to produce Mode Items, Pegasus Items or E2M Items.

"EQUIPMENT" means any or all items listed in Part 1 of Exhibit A attached hereto and made a part hereof, including all Modifications and Improvements thereto.

"E2M ITEMS" means any or all items listed in Part 2 of Exhibit A attached hereto and made a part hereof, including all Modifications and Improvements thereto.

"MODE ITEMS" means any or all items listed in Part 3 of Exhibit A attached hereto and made a part hereof, including all Modifications and Improvements thereto.

"MODIFICATION" AND "IMPROVEMENT" means any and all alterations, whether patentable or not, or copyrightable or not, to the Products or the name or designation thereof, or of the method of manufacture, design, construction, installation, maintenance or sale of products.

"NEW CONTROL PARTY" means any party that acquires 50% or more of the outstanding capital stock of Emcore in a Change of Control, or any party that acquires assets of Emcore in a Change of Control.

"NON-JAPAN AGREEMENTS" means, collectively, the Amended and Restated Distributorship Agreement, dated as of March 31, 1998, by and between Emcore and S&T Enterprises Ltd., a Hong Kong company, and the Amended and Restated Distributorship Agreement, dated as of January 20, 1998, by and between Emcore and S&T Enterprises (Singapore) Pte. Ltd., a Singapore company.

"PEGASUS ITEMS" means any or all items listed in Part 4 of Exhibit A attached hereto and made a part hereof, including all Modifications and Improvements thereto.

[*] CONFIDENTIAL INFORMATION OMITTED
AND FILED SEPARATELY WITH THE
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ASTERICKS DENOTE SUCH OMISSIONS.

"PRODUCTS" means, collectively, Equipment, Mode Items, Pegasus Items and E2M Items.

[*]

"TERRITORY" means the country of Japan, provided, however, if Hakuto develops a business prospect or prospective customer in the Philippines, Hakuto shall advise Emcore forthwith of such business prospect and request that the Philippines be made a part of Hakuto's exclusive territory. Upon receipt of such request, Emcore shall give first priority to Hakuto to act as Emcore's exclusive distributor in the Philippines, and the Philippines shall thereupon be added to this Agreement as part of the Territory.

2. EXCLUSIVE DISTRIBUTORSHIP.

2.1 APPOINTMENT AND ACCEPTANCE. Emcore hereby appoints Hakuto as the sole and exclusive distributor of the Products in the Territory and Hakuto accepts such appointment, all in accordance with the terms and conditions set forth in this Agreement. Without limiting the foregoing, Emcore shall refer to Hakuto: (1) all inquiries concerning the Products from parties in the Territory or parties outside the Territory who may deliver, or cause to be delivered, Products in the Territory; and (2) orders for Products from customers or potential customers in the Territory, or orders originating outside the Territory that may require intermediate or ultimate delivery or use of Products in the Territory. During the term of this Agreement, Emcore shall not appoint or designate, directly or indirectly, any distributor of the Products in the Territory other than Hakuto and shall not itself, directly or indirectly, sell any of the Products in the Territory.

2.2 COMPENSATION TO HAKUTO. As indicated in SECTION 2.7 of this Agreement, the relationship between Emcore and Hakuto is that of seller and purchaser, respectively, and Hakuto

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shall be compensated for Hakuto's ultimate sale of the Products to Hakuto's customers through [*]; provided, however, that, given the global market and expected competitive pressures on the prices of the Products in the Territory, from time to time Hakuto and Emcore shall consult regarding the pricing of the Products, and, to the extent that Hakuto cannot be compensated to Hakuto's satisfaction by the [*], Hakuto shall receive, for all sales of Mode Items, E2M Items and Pegasus Items in the Territory, at least [*] of the total amount invoiced to Hakuto's customer in connection with any such sale. Without limiting the foregoing, Emcore shall pay to Hakuto [*] of the total invoice amount in connection with all sales outside the Territory of Mode Items, Pegasus Items and E2M Items that are designed in the Territory but produced or further designed outside the Territory and the territories specified in the Non-Japan Agreements.

2.3 LICENSE ROYALTY FEES. Emcore shall promptly pay to Hakuto [*] of all license royalties, fees and other compensation accruing, directly or indirectly, to or received by Emcore in connection with Emcore's technology sharing arrangements (including, but not limited to, licensing and leasing) of Mode Items: (1) in the Territory or (2) to any customer procured by Hakuto but relating to arrangements outside of the Territory and the territories specified in the Non-Japan Agreements (the "Licensing Royalty Fee").

2.4 REVIEW OF COMPENSATION AND LICENSING ROYALTY FEE. Hakuto and Emcore shall: (1) review compensation and Licensing Royalty Fee on the second anniversary of the effective date of this Agreement and on every other anniversary date thereafter; and (2) alter such compensation and Licensing Royalty Fee, if agreed to by both Hakuto and Emcore.

2.5 FEES PAYABLE TO EMCORE. In consideration of the distribution rights granted by Emcore to Hakuto in this Agreement and in the Non-Japan Agreements, Hakuto shall pay to Emcore [*] as follows: (1) [*] upon execution of this Agreement; and (2) an additional [*] will be due in four equal installments, such installments equaling [*] for each [*] in sales orders (for

which Hakuto and any of its affiliates under the Non-Japan Agreements is compensated hereunder) for Mode Items, Pegasus Items and E2M Items generated in the Territory or in the territories specified in the Non-Japan Agreements.

2.6 BEST EFFORTS. Hakuto shall exert its best efforts to sell the Products in the Territory. Specifically, and not in limitation hereof, if Emcore, based on its independent market research, believes that certain of the Products should be targeted to specific customers in the Territory, Emcore shall convey its findings to Hakuto forthwith, whereupon Hakuto shall promptly exert its full and best efforts to address these markets and Hakuto will confer with Emcore regarding the best marketing strategies to promote sales of the Products, and Hakuto will otherwise fully coordinate its sales efforts with Emcore. Hakuto shall not market, distribute, sell or advertise for sale within the Territory any products that are competitive with the Products.

2.7 NO AGENCY. The relationship between Emcore and Hakuto shall not be that of a principal and agent, but shall be that of a seller and purchaser, each acting as an independent contractor. Neither Hakuto nor Emcore shall have the right or authority to incur, assume or create, in writing or otherwise, any warranty, liability or obligation of any kind, express or implied, in the name of or on behalf of the other party.

2.8 SUBDISTRIBUTORS. Hakuto shall not appoint any subdistributor or subagent to perform any of its obligations under this Agreement without the prior written consent of Emcore. Nothing herein, however, shall prohibit Hakuto from assigning certain parts of the Territory, or certain customers in the Territory, to its subsidiaries and affiliates. If Hakuto makes any such assignment to a subsidiary or affiliate, Hakuto and Emcore shall nevertheless be responsible for the obligations created hereunder.

2.9 MARKETING. Notwithstanding the exclusive sales rights granted to Hakuto, Emcore may at its own expense and from time to time dispatch to the Territory its personnel to engage in market research, Product promotion, and other marketing activities, provided that all such activities shall at all times be coordinated with Hakuto, conducted with full disclosure to and knowledge of Hakuto, and provided further that any potential sale of any Products resulting from

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such activities of Emcore shall be referred to and channeled exclusively through Hakuto, pursuant to the terms of this Agreement.

2.10 PRODUCT MODIFICATION, IMPROVEMENT AND DISCONTINUANCE. Emcore shall have the right to make Modifications and Improvements, and to discontinue production of any or all of the Products in its sole discretion, provided, that: (1) Emcore shall give Hakuto not less than ninety (90) days' notice prior to the discontinuance, Modification or Improvement of any Product; and (2) any Modification or Improvement by Emcore of any Product shall be deemed to be added to Exhibit A hereto by reference.

3. ORDERS AND PRICE TERMS.

3.1 PRODUCTS. Hakuto may submit to Emcore from time to time requests for quotations with respect to any Products. Each such request for a quotation shall identify Hakuto's prospective customer and shall set forth detailed specifications for the Products required, including all optional features. Emcore may respond to any such request by submitting a quotation on Emcore's standard form setting forth the sales price to Hakuto for such Products.

3.2 EQUIPMENT; AND EQUIPMENT SPARE PARTS. At Hakuto's specific request, Emcore will include in its quotations for Equipment: (1) a firm price for Emcore's installation or assistance in installing the Equipment; and/or (2) a firm price for Emcore's assistance in the start-up of the Equipment and a demonstration of basic material specifications, provided that, in each case, such request contains sufficiently detailed information regarding the nature of the installation or assistance required or the material specifications to be demonstrated. Hakuto may submit to Emcore from time to time purchase orders with respect to spare parts or components included as Equipment under this Agreement ("Spare Parts"), setting forth the quantity and desired delivery date of such Spare Parts. The price for any Spare Part shall be [*]. Emcore reserves the right to

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change its Spare Parts price list from time to time upon not less than ninety (90) days' prior written notice to Hakuto.

3.3 OTHER TERMS. The terms and conditions on purchase orders issued by Hakuto and quotations issued by Emcore shall be deemed to be a part of this Agreement as a supplement hereto, provided that any provision in such purchase order or quotation which is inconsistent with or contrary to the provisions of this Agreement shall be deemed to be deleted from the purchase order or quotation and of no force or effect unless the parties shall have specifically agreed in writing that said provision in the purchase order or provision is intended to supersede the inconsistent provision of this Agreement, in which case the provisions of the purchase order or quotation shall prevail solely with respect to such purchase order. All prices quoted by Emcore shall be F.O.B. Emcore's plant in Somerset, New Jersey or, in the case of Mode Items, F.O.B. Emcore's plant in Albuquerque, New Mexico. The quotations issued by Emcore for Products shall be valid for not less than ninety (90) days (unless otherwise specified in writing by Emcore). To be effective, all purchase orders must be accepted in writing by Emcore at its plant in Somerset, New Jersey.

4. PAYMENT TERMS.

4.1 EQUIPMENT. Hakuto shall pay for Equipment purchased under this Agreement as follows: [*] either (a) not later than one hundred eighty (180) days prior to the scheduled delivery date of the Equipment, or (b) within thirty (30) days after issuance of Hakuto's purchase order or Hakuto's letter of intent if delivery of the Equipment is scheduled thereafter sooner than one hundred eighty (180) days after the date of the purchase order or letter of intent. Any payment accompanying a letter of intent shall be refundable to Hakuto in the event that the anticipated purchase order is not issued by reason of the customer's change of plans or the

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customer's other business decision; and (2) [*] after shipment of the Equipment by Emcore and delivery of a bill of lading evidencing such shipment.

4.2 SPARE PARTS. Hakuto shall remit payment in full to Emcore for all Spare Parts purchased under this Agreement within thirty (30) days after shipment by Hakuto to Hakuto's customer.

4.3 MODE ITEMS; PEGASUS ITEMS; E2M ITEMS. Hakuto shall remit payment in full to Emcore for all Mode Items, Pegasus Items and E2M Items purchased under this Agreement within sixty (60) days after delivery to Hakuto.

4.4 NO ADJUSTMENTS OR DEDUCTIONS. All payments for Products shall be in U.S. dollars without adjustment for any currency exchange or conversion rate changes and without deduction for any taxes at any time levied by any governmental authority.

5. SHIPMENT.

5.1 TAXES AND COSTS. All Products shall be shipped via carrier designated in the purchase order, F.O.B. Emcore's plant in Somerset, New Jersey or, in the case of Mode Items, F.O.B. Emcore's plant in Albuquerque, New Mexico. Hakuto shall bear and pay for all taxes of any nature (except for taxes assessed upon or due in connection with Emcore's income) imposed by any taxing authority after delivery to the carrier at the F.O.B. point. Hakuto shall also bear and pay for all charges for freight, shipping, consular fees, customs duties, and all costs and expenses incurred after delivery of the Products to the carrier at the F.O.B. point. Hakuto shall bear all risk of loss or damage to the Products after delivery to the carrier at the F.O.B. point.

5.2 SHIPPING DATES. Shipping dates, even though accepted by Emcore, shall be understood only as best estimates. Emcore shall attempt to respect all shipping dates, but, except as set provided in SECTION 7.5, shall not be liable to Hakuto for damages arising from any delay in shipment or delivery, however caused, except as otherwise expressly agreed by Emcore in writing on a case-by-case basis. If Emcore experiences shipping or production delays, Emcore shall not allocate Products to parties other than Hakuto, unless Hakuto is allocated Products on a pro-rata basis with such other parties.

5.3 SHORTAGE OR DEFECT. Except as provided in SECTION 7.5, Emcore shall not be liable for any obvious shortage of Products or for any patently obvious defect in Products discoverable by visual inspection with respect to any shipment received by Hakuto, unless Hakuto notifies Emcore in writing of such obvious shortage or patently obvious defect, prior to the earlier to occur of: (1) the expiration of sixty (60) days after receipt of such shipment by Hakuto; or (2) the expiration of twenty (20) days after Hakuto ships such Products to Hakuto's customer. Upon receipt of such notice, together with evidence that such obvious shortage or patently obvious defect exists, and subject to the provisions of SECTION 7.5, Emcore reserves the right, at its election, to replace Products found to be defective or short in quantity, to issue a credit to Hakuto for the prorated invoice amount relating to such shortage or defect, or to repair Products found to be defective, all such remedial action to be taken by Emcore promptly without material adverse effect upon Hakuto or its customer.

6. EQUIPMENT INSTALLATION AND SERVICE.

6.1 GENERAL. Except as set forth below with respect to warranty service, and except as provided in SECTION 7.5 and otherwise expressly provided in quotations for Equipment issued by Emcore, Hakuto shall be responsible at its own expense for the installation and service of all Equipment purchased under this Agreement. Hakuto shall maintain trained personnel and shall purchase and maintain an inventory of Spare Parts sufficient in volume and assortment to promptly and efficiently perform necessary installation and service functions for all Equipment in the Territory. Hakuto shall give due consideration to Emcore's suggested minimum inventories for various Spare Parts.

[*] CONFIDENTIAL INFORMATION OMITTED
AND FILED SEPARATELY WITH THE
SECURITIES AND EXCHANGE COMMISSION.
ASTERICKS DENOTE SUCH OMISSIONS.

6.2 INITIAL AND POST-INSTALLATION SERVICE FEES. Emcore shall make certain personnel available to assist Hakuto in the initial installation of Equipment at the customer's facility as well as in servicing Equipment after installation until such time as Hakuto personnel are fully trained and are capable, in Emcore's reasonable judgment, to perform such functions. The costs of initial installation shall be borne by Emcore (i.e., included in the sale price of the Equipment) unless other fee arrangements are agreed between Emcore and Hakuto on a specific transaction. Hakuto shall pay Emcore for post-installation servicing at the rate of [*] per person per day for field service engineers and [*] per person per day for material process engineers, plus travel and living expenses. Said reimbursement rates are based on the U.S. Consumer Price Index in effect on the effective date of this Agreement and shall be subject to adjustment on an annual basis to conform to any increase or decrease in said U.S. Consumer Price Index as of each anniversary date of this Agreement.

7. WARRANTY, INSURANCE AND INDEMNIFICATION.

7.1 WARRANTIES RELATING TO EQUIPMENT.

7.1.1 MATERIAL AND QUALITY. Subject to the disclaimers, limitations and exclusions set forth below, and subject to the provisions of SECTIONS 7.5 and 10.5, Emcore warrants to Hakuto and to the end user customer of the Equipment that the Equipment shall be free from defects in design, materials and quality. This warranty shall become effective upon delivery of the Equipment to the end user customer of Hakuto, and shall extend for a period of one (1) year from the date of acceptance of the Equipment by the end user customer. Hakuto shall notify Emcore from time to time of the installation completion and customer acceptance date of Equipment. With respect to any non-conforming Products as to which Emcore shall have received notification of such non-

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conformance within twenty (20) days after discovery of same, Emcore shall, subject to the provisions of SECTIONS 7.5 and 10.5, at its election repair the same or provide a replacement Product at no cost to Hakuto or the end user. Subject to SECTIONS 7.5 and 10.5, Emcore shall not be liable for the cost of any labor or transportation charges incurred in the repair or replacement of any non-conforming Products, other than: (1) labor costs incurred by Emcore for Product repairs performed in the United States; (2) cost of transportation incurred by Emcore in the United States; and (3) upon Emcore's express written instructions only, costs of transportation by Hakuto to Emcore of Products to be repaired by Emcore in the United States.

7.1.2 WARRANTY AS TO SPECIFICATIONS. Emcore warrants that all Products shall conform to the published specifications of Emcore or the specifications of an end user customer approved and accepted by Emcore. With respect to any non-conforming Product under this warranty, Emcore shall perform all necessary re-engineering, rework or other procedures necessary to conform the Product to the agreed specifications. Specifically, Emcore shall be responsible for labor, travel and living costs of Emcore personnel whether incurred in the United States or in Japan.

7.1.3 EXCLUSIONS AND DISCLAIMER. Emcore's warranties set forth in SECTIONS 7.1.1 and 7.1.2 do not apply to expendable items, including those items listed in Exhibit B attached hereto. Also excluded from Emcore's foregoing warranties are any components identified by Emcore to Hakuto as being the subject of manufacturer's or licensor's warranties, which warranties shall be deemed assigned to Hakuto at the time title to the goods passes to Hakuto. With respect to all such components, subject to the provisions of SECTIONS 7.5 and 10.5, Hakuto's remedy shall be limited to the warranty and remedy provided by the manufacturer or the licensor of said components, and Emcore's liability obligation shall be limited to the exercise of its best efforts to assist Hakuto in obtaining the benefit of such manufacturer's or licensor's warranties. The foregoing limitation with respect to components shall not apply to Emcore manufactured or designed components.

THE FOREGOING IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND, SUBJECT TO THE PROVISIONS OF SECTIONS 7.5 AND 10.5, SHALL CONSTITUTE THE SOLE REMEDY OF HAKUTO AND LIABILITY OF EMCORE WITH RESPECT TO ANY PRODUCTS DELIVERED PURSUANT TO THIS AGREEMENT. EXCEPT AS PROVIDED IN SECTIONS 7.5 AND 10.5, IN NO EVENT SHALL EMCORE BE LIABLE FOR DAMAGES OF ANY KIND OR NATURE RESULTING FROM IMPROPER OR NEGLIGENT USE OR OPERATION OF PRODUCTS, IMPROPER PREVENTATIVE MAINTENANCE, MODIFICATIONS FROM THE ORIGINAL SYSTEM CONFIGURATION OR REPAIR BY PERSONNEL OTHER THAN THOSE IN THE EMPLOY OF EMCORE, OR THOSE IN THE EMPLOY OF HAKUTO WHO HAVE BEEN TRAINED AND APPROVED BY EMCORE. EXCEPT AS PROVIDED IN SECTIONS 7.5 AND 10.5, IN NO EVENT SHALL EMCORE BE LIABLE FOR CONSEQUENTIAL DAMAGES, ANTICIPATED OR LOST PROFITS, INCIDENTAL DAMAGES OR LOSS OF TIME OR OTHER LOSSES OR EXPENSES INCURRED BY HAKUTO OR ANY END USER CUSTOMER, DIRECTLY OR INDIRECTLY, IN CONNECTION WITH THE SALE, HANDLING OR USE OF THE PRODUCTS COVERED BY EMCORE'S WARRANTY.

7.2 WARRANTIES RELATING TO MODE ITEMS, PEGASUS ITEMS AND E2M ITEMS.

7.2.1 MATERIAL, QUALITY AND SPECIFICATIONS. Subject to the provisions of SECTIONS 7.5 and 10.5, Emcore warrants to Hakuto and to the end user customer that for a period beginning upon delivery of the Applied Products to Hakuto or to the end user customer and continuing until the date one (1) year from the date of acceptance by the end user customer that any Applied Products delivered to Hakuto or the end user customer shall be free from defects in material, workmanship and quality and shall meet the specifications set forth in its specifications sheets or specifications as agreed formally with

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the end user customer or as mutually agreed by Emcore and Hakuto from time to time hereafter.

7.2.2 EXCLUSIONS AND DISCLAIMER. THE EXPRESS WARRANTY GRANTED ABOVE SHALL EXTEND DIRECTLY TO AUTHORIZED DISTRIBUTORS AND, EXCEPT AS PROVIDED IN SECTIONS 7.5 AND 10.5, IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Except as provided in SECTION 7.5 and 10.5, Emcore will be liable under this warranty only for replacement of the defective Product or, at the option of Hakuto or the customer, credit of the Customer Price of the defective Product.

7.3 SPARE PARTS CONSIGNMENT INVENTORY. Emcore shall be responsible for supplying all Spare Parts necessary to satisfy Emcore's obligations under the foregoing warranties, and Hakuto shall be responsible for supplying all installation or service relating to the warranty program except as otherwise provided in SECTIONS 7.1.1 and 7.1.2 with respect to specification non-conformance. Emcore agrees to maintain with Hakuto, at such location in the Territory as Hakuto may designate, a consignment inventory of Spare Parts ("Consignment Inventory") determined by Emcore to be reasonably necessary for the prompt and efficient delivery of warranty service. Hakuto agrees to provide to Emcore periodic reports setting forth: (1) with respect to all warranty claims made during such month, the identity of the end user, the nature of the claim, the service provided and the Spare Parts used, if any, in providing such service; and (2) the current levels of all Spare Parts comprising the Consignment Inventory.

7.4 INSURANCE. Emcore shall maintain in force during the term of this Agreement, and for a period of five (5) years thereafter, product liability insurance based on an occurrence basis rather than a claims made basis, with respect to the Products, in an amount not less than Two Million Dollars (\$2,000,000) per person and Two Million Dollars (\$2,000,000) per occurrence. Such insurance policies shall name Hakuto as an additional insured, or shall contain coverage protecting Hakuto as a vendor of the Products. Emcore shall furnish Hakuto with properly executed Certificates of Insurance. Such insurance policies shall include the obligation of the

insurer to notify Hakuto, not less than thirty (30) days in advance, of any reduction, non-renewal or cancellation of the foregoing insurance. In the event that Emcore fails to purchase or maintain in force the above insurance, Hakuto may purchase such insurance on Emcore's account, and at Emcore's expense, and nothing herein shall waive Emcore's obligation to purchase and maintain such insurance.

7.5 INDEMNIFICATION. Emcore shall indemnify and, at its own expense and with diligence, defend and hold Hakuto, its subsidiaries and affiliates, and their respective customers, free and harmless from and against any and all claims, losses, damages, suits, causes of action, obligations and/or liabilities (and against all associated costs and expenses, including, without limitation, reasonable attorneys' fees and costs of litigation) whenever and wherever they may occur, arising directly or indirectly from the sale or use of the Products, provided, however, Emcore's obligation to indemnify Hakuto under this paragraph shall not extend to any claims, losses, damages, suits, causes of action, obligations and/or liabilities arising out of the gross negligence or intentional wrongful conduct of the claimant.

8. OBLIGATIONS OF HAKUTO.

8.1 GENERAL OBLIGATIONS. In addition to and not in limitation of any other obligations of Hakuto under this Agreement, Hakuto shall, at its own expense unless otherwise expressly provided herein:

- 8.1.1 exert its best efforts to vigorously promote the sale of the Products in the Territory and to develop a market demand for the Products in the Territory;
- 8.1.2 advertise the Products throughout the Territory in appropriate advertising media and in a manner insuring proper and adequate publicity for the Products, provided that Emcore shall be given the opportunity to review and approve all advertising prior to release by Hakuto;

- 8.1.3 prepare for Emcore's review and approval, and update not less than quarterly, a detailed marketing plan for the sale of the Products in the Territory;
- 8.1.4 establish and maintain within the Territory adequate business locations, including suitable facilities for the display, care and storage of the Products and provide adequate insurance against loss;
- 8.1.5 maintain within the Territory an inventory of Spare Parts (in addition to the Consignment Inventory) sufficient to meet expected demands for service and upgrading of the Equipment in the Territory;
- 8.1.6 maintain a trained technical sales force and sufficient other personnel qualified to promote, install and service the Equipment in the Territory and send appropriate personnel to Emcore for one week training on an annual basis;
- 8.1.7 offer the Products for sale (including all advertising and promotional activities) under the Emcore trademark as manufacturer and Hakuto's trademark as distributor;
- 8.1.8 assume full responsibility for the installation of the Equipment, and the warranty and post-warranty service and maintenance of the Equipment, in the Territory;
- 8.1.9 translate and prepare promotional and technical literature for use in the Territory;
- 8.1.10 obtain all import and regulatory approvals necessary for the promotion and sale of the Products in the Territory, supply Emcore with necessary customer import certificates, and otherwise advise and assist Emcore in

complying with U.S. regulations and with regulations
and customs applicable in the Territory;

- 8.1.11 provide Emcore with periodic reports (but not less often than quarterly) in form and substance reasonably satisfactory to Emcore, setting forth detailed information for such period regarding sales, quotations, promotional efforts made, advertising, resale prices, competitors, activities in the Territory, installation and service activities performed, customer complaints, business trends and any other information likely to assist Emcore in evaluating the performance of Hakuto in the Territory;
- 8.1.12 establish and maintain complete and accurate records of all sales and service of the Products in the Territory;
- 8.1.13 refrain, without Emcore's prior written consent, from seeking customers outside the Territory or from promoting the sale of the Products outside the Territory;
- 8.1.14 refrain from purchasing or soliciting orders for goods which directly compete in any way with the Products; and
- 8.1.15 (1) immediately assign a full time sales manager; (2) within 60 days of the date of this Agreement, appoint an additional sales person to specialize in the distribution of Mode Items, Pegasus Items and E2M Items; and (3) within one year of the date of this Agreement, form a group to specialize in the distribution of Mode Items, Pegasus Items and E2M Items.

8.2 EQUIPMENT MINIMUM PURCHASE OBLIGATION. With respect to Equipment, Hakuto shall have a minimum purchase obligation during each year of the term of this Agreement

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("Contract Year"). Hakuto will submit to Emcore purchase orders during each of the [*]. For each succeeding Contract Year of the Agreement, Hakuto and Emcore shall mutually agree on a minimum purchase order amount for each such year prior to commencement of such Contract Year. In computing the value of the minimum purchase amount for each Contract Year, there shall be included the value of all Equipment shipped during said Contract Year, the value of orders placed by Hakuto though not shipped by Emcore during the Contract Year, and the value of orders procured by Hakuto but canceled by Hakuto's customer by reason of Emcore's inability to perfect delivery of the Equipment within six (6) months from date of the order. The value of all of the foregoing orders which exceeds the minimum purchase commitment for any Contract Year shall be credited to Hakuto's minimum purchase order commitment for the subsequent Contract Year. "Contract Year" means the twelve (12) month period commencing on the date of this Agreement and each twelve (12) month period thereafter during the term of this Agreement or any renewal term thereafter.

9. OBLIGATIONS OF EMCORE. In addition to and not in limitation of any other obligations of Emcore under this Agreement, Emcore shall, at its own expense, provide Hakuto with periodic reports (but not less often than quarterly) in form and substance satisfactory to Hakuto, setting forth detailed information for such period regarding production costs and margins with respect to the Products and any other information likely to assist Hakuto in evaluating pricing options.

10. TRADEMARK AND PATENT RIGHTS.

10.1 LICENSE GRANT. Exhibit C attached hereto and made a part hereof identifies all registered, recorded or issued material intellectual property, including registered copyrights and trademarks, issued patents and applications for any of the foregoing, which have been, or, with respect to applications, may be issued to or registered by Emcore in the Territory (which listed items, together with other intellectual property in which Emcore claims a proprietary interest in

the Territory such as, inter alia, know-how and common law trademarks shall hereafter be referred to as "Intellectual Property"). Hakuto is hereby granted a license and privilege to use all of the Intellectual Property, including any improvements, modifications or functional equivalents, during the term of this Agreement in furtherance of the objectives of this Agreement. Hakuto shall not have the right to sublicense (except to Hakuto's subsidiaries and affiliates) the Intellectual Property or otherwise permit its use by third parties without Emcore's prior written consent. If Hakuto is required by law to register its licenses in Japan or, in its sole discretion, determines that registration hereof should be effected in order to protect the rights and interests of Hakuto hereunder, then Emcore shall cooperate with Hakuto to effect the same.

10.2 HAKUTO COOPERATION. Hakuto shall advise Emcore from time to time of any additional filings, registrations or other actions that may be necessary or desirable for the protection of Emcore's Intellectual Property in the Territory. Upon Emcore's request, Hakuto shall assist Emcore in connection with the issuance or registration of any new Emcore patents, copyrights, trademarks or other Intellectual Property in the Territory.

10.3 INFRINGEMENT. Hakuto shall at all times respect and protect Emcore's rights of total ownership of the Intellectual Property in the Territory. Hakuto shall promptly notify Emcore of any infringements of such rights of which Hakuto has notice and shall assist Emcore in taking such action against such infringement as Emcore may elect.

10.4 TERMINATION OF LICENSE. Upon termination of this Agreement for any reason, Hakuto shall promptly relinquish to Emcore any rights to the use of the Intellectual Property and shall thereafter refrain from using the same.

10.5 INFRINGEMENT INDEMNIFICATION. If Hakuto or its customers are served notice of alleged infringement of any patents, designs, copyrights and/or trademarks arising from the sale or use of any of the Products, Emcore shall, at its own expense and with diligence, defend and hold Hakuto and its customers free and harmless from and against any and all claims, loss, damage, suits, causes of action and/or liability (and against all associated costs and expenses, including, without limitation, reasonable attorneys' fees and costs of litigation) whenever and wherever they

may occur, on account of said alleged infringement; provided, however, that Emcore shall have no obligation to indemnify Hakuto or its customers to the extent the alleged infringement is due solely to: (a) a Product modification by Hakuto or the customer; (b) use of a Product in combination with any other device or thing; or (c) failure to use the Product in accordance with its customary use or in conformity with Emcore's instructions and operating guidelines. If Emcore shall fail or refuse to do so, Hakuto and its customers may take such action as Hakuto or its customer, or jointly, may deem necessary, and all costs, attorneys' fees, losses or damages as may be incurred by Hakuto or its customers shall be the obligation of Emcore to be recovered by Hakuto or its customers by suit or otherwise.

10.6 QUALITY CONTROL. In connection with any use hereunder by Hakuto of any registered or unregistered trademark owned by Emcore, Emcore shall have the right at all times to: (a) establish and require Hakuto's adherence to quality control standards governing the repair, sale and quality of the Products; and (b) establish and require Hakuto's adherence to standards governing the manner of display of any Emcore trademark in promotional, technical and informational materials. Emcore shall have the right to request, at reasonable intervals, inspection by Emcore or its designee of Hakuto's operations and of any materials used or created by Hakuto displaying any Emcore trademark, so that Emcore can verify to its satisfaction that the Products, services and display of trademarks conform to the appropriate standard of quality.

11. CONFIDENTIALITY. Each party hereto when receiving information from the other party (in such case, a "Receiving Party") agrees to use its best efforts to hold in strict confidence and not to disclose to others or use, for a period of three years after termination hereof, any technical or business information, manufacturing technique, process, experimental work, trade secret or other confidential matter relating to the business of the party in possession of such information (such party, a "Disclosing Party") or relating to the Products, in the case of Hakuto, or the other party's business ("Confidential Information"), except to the extent necessary to further the objectives of this Agreement. This SECTION 11 shall not apply to: (1) information known to the Receiving Party prior to disclosure by the Disclosing Party of Confidential Information; (2) Confidential Information which is, or becomes through no fault of the Receiving Party, generally known or available to the public; (3) Confidential Information which is received by the Receiving Party from

third parties who are not bound by confidentiality obligations; (4) Confidential Information which the Disclosing Party discloses to a third party who is not bound by confidentiality obligations, unless such third party is a subsidiary or affiliate of the Disclosing Party; and (5) information independently developed by the Receiving Party. The Receiving Party shall, upon request (and upon termination of this Agreement without request), deliver to the Receiving Party any and all drawings, notes, documents and materials received from the Receiving Party.

12. ASSIGNMENT. Neither party shall assign, transfer or otherwise dispose of this Agreement or any of its rights or obligations hereunder in whole or in part to any individual, firm or corporation without the prior written consent of the other party, and any attempted assignment in violation of this provision shall be null and void.

13. TERM AND TERMINATION.

13.1 TERM. This Agreement shall take effect on the effective date set forth on the first page hereof and shall remain in effect for a period of ten (10) years thereafter unless earlier terminated in accordance with the terms hereof. This Agreement may be terminated by either Party upon the expiration of the ten (10) year period by giving six (6) months' prior written notice to the other party of its intent not to extend the Agreement for further periods. Unless such notice of intent to terminate is given, this Agreement shall continue to remain in effect after the initial ten (10) year period for further consecutive periods of one (1) year each, subject, however, to the right of either party to terminate the Agreement during each such extended one-year period by giving six (6) months' prior written notice to the other party of its intent to terminate.

13.2 TERMINATION. In addition to the provisions of SECTION 13.1 above, either party may terminate this Agreement as follows:

- 13.2.2 immediately and without prior written notice if proceedings in bankruptcy or insolvency are instituted by or against the other party, a receiver is appointed or any substantial part of the assets of the other party is the subject of attachment, sequestration or other similar proceeding, and such proceeding is not vacated, terminated or stayed within sixty (60) days after its commencement or institution; or
- 13.2.3 immediately upon the occurrence of a default by the other party in the performance of its obligations under this Agreement, which default is not cured within thirty (30) days after receipt by such party of written notice of the default; or
- 13.2.4 immediately if either party is unable to obtain or renew any material permit, license, or other governmental approval necessary to such party's performance under this Agreement.

14. CONSEQUENCES UPON TERMINATION. Upon expiration or termination of this Agreement for any reason:

14.1 REPURCHASE OF SPARE PARTS. Emcore shall repurchase Hakuto's inventory of new and unused Spare Parts at Emcore's then effective list price for such Spare Parts or Hakuto's cost therefor, whichever is lower. Hakuto shall deliver such Spare Parts, together with the Consignment Inventory, at Emcore's expense, to Emcore at such location, in such manner and at such time as Emcore may direct.

14.2 RETURN OF MATERIALS. Hakuto shall return to Emcore all proprietary information and all sales and technical literature relating to the Products, and Hakuto shall deliver to Emcore Hakuto's list of all customers and prospective customers for the Products in the Territory, including names, addresses, telephone numbers and contact persons.

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ASTERICKS DENOTE SUCH OMISSIONS.

14.3 NON-COMPETITION; CESSATION OF MARKETING AND USE OF EMCORE NAME.

For a period of [*] after the date of termination of this Agreement, Hakuto shall not engage in the marketing, sales or distribution of any products which may be directly competitive with the Products, provided, however, nothing herein shall prohibit Hakuto from liquidating by sale or otherwise any Products remaining in Hakuto's inventory on the date of termination and not repurchased by Emcore. Hakuto shall cease marketing the Products and using Emcore's name and trademarks in the Territory, provided that all orders for Products accepted by Emcore prior to expiration or termination of this Agreement shall be completed in accordance with their terms. Hakuto shall thereafter, for such [*] period, refer to Emcore any and all inquiries, orders, correspondence and the like, whether in written or oral form, pertaining to Products in the Territory.

14.4 ASSUMPTION OF WARRANTY OBLIGATIONS. Emcore shall assume, commencing immediately upon termination of this Agreement, full responsibility for providing warranty service and post-warranty servicing of the Equipment to all customers theretofore serviced by Hakuto, and Emcore shall hold Hakuto free and harmless from all such obligations.

14.5 COMMISSIONS. Emcore shall pay to Hakuto a commission as follows:

(1) with respect to Equipment, a commission equal to [*] purchase price of any Equipment sold by Emcore (i.e., orders received and approved by Emcore) or with respect to compensation or fees received by Emcore in connection with technology sharing arrangements in or for use in the Territory within twelve (12) months after expiration or termination of this Agreement; (2) with respect to Mode Items, [*]; (3) with respect to Pegasus Items, [*]; and (4) with respect to E2M Items, [*].

14.6 LIABILITY FOR TERMINATION. Provided that termination of this Agreement did not result by reason of the breach of or default under this Agreement by either party, and except as

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provided in SECTION 15, neither party to this Agreement shall claim from the other party any indemnity, reimbursement, compensation or damages for alleged loss of clientele, good will, profits or anticipated sales or on account of expenditures, investments, leases or other commitments arising from the expiration or termination of this Agreement, each party acknowledging that it has made all decisions and investments in full awareness of the possibility of losses or damages arising from the expiration or termination of this Agreement.

15. CHANGE OF CONTROL. If, during the term of this Agreement, a Change of Control occurs, then Emcore shall either: (1) pay [*] to Hakuto; or (2) provide Hakuto with reasonable assurance that the New Control Party will assume the obligations of this Agreement and that the New Control Party will, or will cause Emcore to, manufacture and sell, in the Territory and pursuant to the terms of this Agreement, Mode Items, Pegasus Items and E2M Items at a level satisfactory to Hakuto.

16. MISCELLANEOUS.

16.1 NOTICES. All notices and other communications in connection with this Agreement shall be in writing, shall be sent to the respective parties at the following addresses, or to such other addresses as may be designated by the parties in writing from time to time, by registered or certified mail, telecopy or recognized overnight delivery service, and shall be effective upon receipt:

To Emcore:	Emcore Corporation 394 Elizabeth Avenue Somerset, New Jersey 08873 Attention: William J. Kroll Telephone: 908-271-9090 Fax: 908-271-9686
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To Hakuto: Hakuto Co. Ltd.
 1-13 Shinjuku
 1-chome, Shinjuku-ku
 Tokyo 160, Japan
 Attention: A. Nakazawa
 Telephone: 3-3225-8910
 Fax: 3-3225-9007

With Copy To: Masuda, Funai, Eifert & Mitchell, Ltd.
 One East Wacker Drive, Suite 3200
 Chicago, Illinois 60601-1802
 Attention: Thomas P. McMenamin
 Telephone: 312-245-7500
 Fax: 312-245-7467

16.2 NO WAIVER. Any failure by any party hereto to enforce at any time any term or condition under this Agreement shall not be considered a waiver of that party's right thereafter to enforce each and every term and condition of this Agreement.

16.3 GOVERNING LAW; ARBITRATION. This Agreement is made and shall be construed according to the laws of the State of New Jersey, USA. All disputes, controversies, or differences which may arise between the parties, out of or in relation to or in connection with this contract, or the breach thereof, shall be finally settled by arbitration pursuant to the Japan-American Trade Arbitration Agreement, of September 16, 1952, by which each party hereto is bound. The arbitration proceeding shall be held in Somerset County, New Jersey, if Hakuto seeks arbitration and in Tokyo, Japan, if Emcore institutes such proceeding. Each party shall bear its own costs incurred in such arbitration proceeding.

16.4 MODIFICATION. This Agreement may be modified, amended or revised only by a written instrument duly executed by the parties hereto.

16.5 COMPLIANCE WITH LAWS. In the conduct of its business under this Agreement, Hakuto shall comply with the applicable laws, regulations, orders and the like prevailing in the Territory.

16.6 ENTIRE AGREEMENT. This Agreement, the exhibits and duly executed addenda thereto, all approved purchase orders issued pursuant hereto, shall contain the entire and only agreement between the parties relating to the subject matter hereof, and any representations, terms or conditions relating thereto but not incorporated herein shall not be binding upon either party. This Agreement cancels, voids and supersedes any agreement heretofore entered into between the parties with respect to the subject matter hereof, except as otherwise expressly provided herein.

16.7 SEVERABILITY. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions or affecting the validity or enforceability of any provision in any other jurisdiction.

16.8 SUCCESSORS AND ASSIGNS. Subject to SECTION 12 hereof, all terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted transferees, successors and assigns.

16.9 COUNTERPARTS. This Agreement may be executed by duly authorized representatives of the respective parties hereto in any number of counterparts, each of which, when fully executed, shall be deemed an original. This Agreement may be translated into any other language and such translation may be initialed, but only this Agreement in the English language shall be deemed the original. If any conflict exists between the English language and any translation thereof, the English language version shall control.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

EMCORE CORPORATION

By: /s/ WILLIAM J. KROLL

Name: William J. Kroll
Title: Executive Vice President

HAKUTO CO. LTD.

By: /s/ SHIGEO TAKAYAMA

Title: President & CEO

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PART 1: EQUIPMENT

Equipment shall mean the following, including all Modifications and Improvements and all functional equivalents thereof:

Explorer Reactor with glove box (no load lock) and limited options
Discovery 75
Discovery 125
Discovery 180
Enterprise 200
Enterprise 300
Enterprise 400
Advanced Oxide CVD System Standard
Standard accessory Tools for above Systems

PART 2: E2M ITEMS

All Epitaxial Wafers and all other products of Emcore's Electronic Materials Division, including all products not yet in existence that are designed, developed, manufactured or sold by Emcore and that are similar or related to the above-listed products.

PART 3: MODE ITEMS

All Vertical Cavity Surface Emitting Lasers and all other products of Emcore's MODE Division, including all products not yet in existence that are designed, developed, manufactured or sold by Emcore and that are similar or related to the above-listed products.

PART 4: PEGASUS ITEMS

All MR Sensors and all other products of Emcore's Pegasus Division, including all products not yet in existence that are designed, developed, manufactured or sold by Emcore and that are similar or related to the above-listed products.

EXHIBIT B

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EXPENDABLE ITEMS

NOT COVERED UNDER WARRANTY

1. Pump Fluids - (krytox, mechanical pump fluid)
2. Oil Coalescing Filter Element
3. Oil Backstreaming Filter Element
4. Oil Recirculation Filter Element
5. Graphite Heater Filament
6. Loadlock Heater Bulbs
7. Copper Gaskets
8. Nickel Gaskets
9. Viton-rings VCR Filter Gaskets
10. PD Cell Membrane
11. Reactor Parts:
 - a. Moly Electrodes
 - b. Moly Standoff Nuts
 - c. Moly Screws
 - d. Vented Screws
 - e. Diffusion Plate Screen
12. TGA (Activated Carbon)
13. MDA Tape
14. MDA Thermal Print Paper
15. Motor Drive Belt
16. Needle Valve Belt
17. Computer Disks
18. Fuses
19. Loadlock Operation Fluid
20. Stainless Steel Filter Medium
21. Fluorescent Light Bulbs
22. Clean Air Filters
23. Miscellaneous Hardware

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PATENTS AND TRADEMARKS

CATEGORY	ITEM	COUNTRY	APPLICATION NUMBER	DATE ISSUED	REGISTRATION NO.
Patents	Modular Gas Handling Apparatus Gas Treatment Apparatus and Method Gas Dispersion Device				
Trade Mark	Emcore				
Copyrights					
Other Intellectual					
Property Rights					
Applications					

S-622773-JSS
Long-Term Purchase Agreement

IN CONSIDERATION OF THE PROMISES HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

SCHEDULE

This Long-Term Purchase Agreement Number S-622773-JSS, hereinafter referred to as the "Agreement", is entered into between SPACE SYSTEMS/LORAL, INC., (hereinafter referred to as "Buyer" or "SS/L"), a corporation organized and existing under the laws of the State of Delaware, and having its principal offices and place of business at 3825 Fabian Way, Palo Alto, California, 94303, and EMCORE CORPORATION, (hereinafter referred to as "Subcontractor" or "EMCORE"), with offices located at 10420 Research Road SE, Albuquerque, NM 87123.

This Agreement is contemplated by the following:

1. Buyer's AUTHORIZATION TO PROCEED (ATP) NO. S-622735-JSS, dated September 3, 1998.
2. The MEMORANDUM OF UNDERSTANDING (MOU) between the parties, dated October 6, 1998.

This Agreement supersedes the ATP and the MOU in their entirety and therefore constitutes the entire agreement between the parties. Any action taken pursuant to the ATP and the MOU shall be considered as action taken and costs incurred in the performance of this Agreement.

This Agreement is entered into on November 16, 1998, and shall expire on December 31, 2002, unless extended by mutual agreement of the parties.

This Agreement consists of the SCHEDULE, the TERMS AND CONDITIONS, and the SIGNATURE PAGE.

ARTICLE I - SCOPE OF WORK

This Agreement provides for the procurement of COMPOUND SEMICONDUCTOR MULTI-JUNCTION HIGH-EFFICIENCY SOLAR CELLS (with by-pass diode), hereinafter also referred to as Hardware, and Subcontractor agrees to provide the personnel, services, materials, equipment, and facilities necessary for the accomplishment of the tasks specified in the Exhibits cited below and any other requirements identified elsewhere in this Agreement.

The following Exhibits are listed in their order of precedence. In the event of a conflict or inconsistency between an Exhibit and an Article of this Agreement, the Article shall take precedence.

- Exhibit A SS/L Document No. E177493, entitled HIGH EFFICIENCY, DUAL-JUNCTION SOLAR CELL STATEMENT OF WORK (PRELIMINARY), redlined dated September 2, 1998.
- Exhibit B SS/L Document No. E177495, entitled MULTI-JUNCTION SOLAR CELL SOURCE CONTROL DRAWING (PRELIMINARY).
- Exhibit C SS/L Document No. E177492, entitled HIGH EFFICIENCY, DUAL-JUNCTION, SOLAR CELL PERFORMANCE SPECIFICATION. (PRELIMINARY), redlined September 2, 1998.
- Exhibit D SS/L Document No. E032894, entitled SUBCONTRACTOR PRODUCT ASSURANCE REQUIREMENTS, Revision A, Amendment No. 1, release date March 28, 1996.
- Exhibit E SS/L Document No. SH-E023988, entitled DATA REQUIREMENTS INSTRUCTIONS (DRI) FOR SPACECRAFT SUBCONTRACTORS, release date October 4, 1993.
- Exhibit F SS/L Document No. E060042, entitled ENVIRONMENTAL REQUIREMENTS SPECIFICATION, release date March 27, 1995.
- Exhibit G SS/L Document No. LG-E080742, DIRECT BROADCAST SATELLITES (DBS) (FOR APSTAR, MABUHAY AND TELSTAR) PROGRAM AUTHORIZED PARTS LIST (PAPL), Revision N/C, release date May 26, 1995.
- Exhibit H SS/L Document No. LG-E076310, TELSTAR PROGRAM AUTHORIZED MATERIALS LIST (PAML), Revision N/C, release date June 1, 1995.
- Exhibit I SS/L Document No. LG-E076311, TELSTAR Program Authorized Process List (PAPRL), Revision N/C, release date June 1, 1995.

ARTICLE II - PROVISIONS AND INFORMATION APPLICABLE TO PURCHASE RELEASES

Qualification and procurement of Hardware by Buyer pursuant to this Agreement shall be accomplished by the issuance of Purchase Releases to the extent sanctioned by the initial publication of this Agreement and amendments to same. Subcontractor shall qualify, fabricate, test, and deliver Hardware in accordance with Exhibit A through Exhibit I of Article I (SCOPE OF WORK).

Buyer may issue Purchase Releases for work, services and/or Hardware at any time during the effective term of this Agreement and Subcontractor shall fulfill all requirements of such orders accordingly.

As a minimum, each Purchase Release for Hardware shall set forth the following:

1. Long-Term Purchase Agreement (LTPA) Number.
2. Purchase Release Number.
3. Description of work, services and/or quantity of Hardware ordered.
4. Program/Project Name, if applicable, associated with the Hardware.
5. Configuration, applicable documentation, part numbers and description.
6. Firm Fixed Prices in accordance with Article IV (OPTIONS).
7. Delivery of Hardware in accordance with Article IV (OPTIONS).
8. Payment stipulations pursuant to Article IV (OPTIONS).
9. Related specific and miscellaneous instructions.

ARTICLE III - PURCHASE RELEASES

PURCHASE RELEASE NO. 1

This initial Purchase Release is issued to record and definitize Buyer's Authorization to Proceed (ATP) to Subcontractor No. S-622735-JSS, dated September 3, 1998, for the Development and Qualification effort associated with the High-Efficiency Solar Cell- reference JSS-EMC/98-001, September 3, 1998.

Unless otherwise indicated herein this Agreement, Subcontractor's successful completion of the Qualification program imposes no obligation upon Buyer to procure Hardware from Subcontractor.

This initial Purchase Release is issued by Buyer under authority of the Agreement and sanctions Subcontractor for the QUALIFICATION OF THE HIGH-EFFICIENCY SOLAR CELL (HESC). Pursuant to the provisions of this Purchase Release, Subcontractor shall undertake and complete all requirements of the qualification program in accordance with Exhibit A through Exhibit I, and any other work herein described, as follows:

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

A. PRICE

Subcontractor shall provide all personnel, material and resources necessary for the proper accomplishment of the Qualification Program tasks for the FIRM FIXED PRICE OF [*].

B. PERFORMANCE AND DELIVERY

Subcontractor shall commence the qualification effort on or about September 2, 1998 and complete all work and tasks in accordance with the following schedule:

ITEM NO. -----	DESCRIPTION -----	COMPLETION DATE -----
1	Develop process and tooling of High-Efficiency Solar Cell process	[*]
2	Demonstrate High-Efficiency Solar Cell Meet specifications	[*]
3	Deliver [*] Solar Cells processed at RTI to Buyer for Radiation Space Qualification	[*]
4	Deliver [*] Subcontractor processed Solar Cells for Space Qualification Coupon	[*]
5	Critical Design Review (CDR)	[*]
6	Deliver [*] Subcontractor processed Solar Cells for further space qualification	[*]
7	Material Readiness Review (MRR) / Final Design Review (FRR)	[*]
8	Publication of Final Qualification Program Report	March 30, 1999

C. PAYMENT

This Purchase Release provides for Milestone Payments as follows:

1	Develop process and tooling of High-Efficiency Solar Cell. Deliver Mask Data.	September 15, 1998	[*]
2	a) Deliver [*] Solar Cells processed at RTI for radiation space qualification		

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

	b)	Deliver [*] Solar Cells processed at Subcontractor's facility for space qualification coupon	December 21, 1998	[*]
	c)	Closure of Subcontractor CDR Action Items	December 31, 1998	[*]
3	a)	Deliver [*] Solar Cells processed at Subcontractor's facility for further space qualification.		
	b)	Closure of Subcontractor MRR/FDR Action Items.	March 30, 1999	[*]
4		Buyer Approval of Subcontractor Final Qualification Program Report	April 7, 1999	[*]

		Total Milestone Payments		[*]
				=====

1. All material and work covered by Milestone Payments shall become the sole property of Buyer.

2. Upon completion of a Milestone, Subcontractor may submit an invoice for the amounts specified provided, however, Buyer reserves the right to inspect or otherwise verify Subcontractor's progress to determine that performance relative to each payment has been satisfactorily completed.

3. Subcontractor shall submit an original and one copy of invoices to:

Space Systems/Loral, Inc. Attention: Accounts Payable
P.O. Box 10825 M/S AC-1
Palo Alto, California 94303-4697

Each invoice shall cite the LTPA Number, the Purchase Release number, and the number and description of the milestone.

4. Payment terms shall be net 30 days after receipt of invoice, actual milestone completion date or scheduled milestone completion date, whichever is later.

D. ADDITIONAL UNDERSTANDINGS AND REQUIREMENTS

1. Subcontractor shall demonstrate successful qualification of the High-Efficiency Solar Cell at the Manufacturing Readiness Review (MRR), currently scheduled for March 15, 1999.

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

2. Successful qualification of the laydown of the High-Efficiency Solar Cell on a substrate furnished by Buyer is a requirement of this process.

The qualification of the laydown will be done by a supplier to be named by Buyer.

Qualification of the laydown of the HESC will be demonstrated at a joint MRR between the substrate supplier and Subcontractor.

3. Upon Subcontractor's demonstration that it has met the requirements of this Qualification Program to the satisfaction of Buyer, Buyer will issue and activate Purchase Release No. 2 by written notice to Subcontractor in accordance with the stipulations of Article IV (OPTIONS). Pending Buyer's documented ratification, Buyer assumes no liability or obligation to Subcontractor with respect to Purchase Release No. 2.

In the event Subcontractor is unsuccessful in achieving the requirements of the Qualification Program, Buyer has no obligation to procure hardware from Subcontractor.

E. EXCLUSIVITY

All information and data developed under this Qualification program shall be deemed proprietary to Buyer and therefore shall be provided to Buyer on an exclusive basis. Subcontractor shall have the right to use this proprietary information and data for its own purposes. Subcontractor shall not disclose information proprietary to Buyer to a third party absent the written consent of Buyer.

PURCHASE RELEASE NO. 2

PURCHASE RELEASE NO. 2 IS HEREIN DOCUMENTED BY THE INITIAL PUBLICATION OF THE AGREEMENT SOLELY FOR THE PURPOSE OF RECORDING BUYER'S INTENT TO PROCURE HARDWARE AS DEPICTED BELOW. AT THIS WRITING, PURCHASE RELEASE NO. 2 IS NOT A CONFIRMATION OF PURCHASE AS BUYER'S VALIDATION OF THE RELEASE IS SUBJECT TO THE CONTINGENCY AND ANY ASSOCIATED CONDITIONS STIPULATED IN PURCHASE RELEASE NO. 1, PARAGRAPH D.3.

Pursuant to the provisions of this Purchase Release, Subcontractor shall fabricate, test and deliver Hardware and perform related work and services in accordance with the requirements of Exhibit A through Exhibit I and the stipulations of this Release.

A. PRICE

Subcontractor shall provide all Hardware, services and documentation specified in this Purchase Release for the Firm Fixed Price of \$5,250,000, as follows:

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

Solar Cell P/n	Description	Solar Cell Efficiency Rating	Total Quantity Solar Cells	Unit Price	Total Price
TBD	Compound Semiconductor Multi-Junction HESC	[*] %	[*]	[*]	[*]

B. DELIVERY

Subcontractor shall deliver Hardware and complete any work or services procured by this Release in accordance with the following:

P/n	Quantity	Date	Destination
TBD	[*]	1 Month ABNQ(1)	TBD
TBD	[*]	2 Months ABNQ	TBD
TBD	[*]	3 Months ABNQ	TBD
TBD	[*]	4 Months ABNQ	TBD

(1) ABNQ = After Buyer Notification of Qualification

ARTICLE IV - OPTIONS

All Hardware procured under Article III (PURCHASE RELEASES) shall be deemed to be ordered as Options. Accordingly, in consideration of the award of this Agreement, Subcontractor grants to Buyer unilateral and irrevocable Options to purchase Hardware throughout the effective term of this Agreement. Any order for optional Hardware shall be accomplished by an authorized Purchase Release conveyed and confirmed by an amendment to this Agreement.

Except as expressly provided for, nothing in this Agreement shall be construed as a commitment that Buyer shall purchase Hardware.

A. PRICE

The Firm Fixed Option Prices, by Calendar Year and Solar Cell Efficiency Rating, and associated conditions applicable to Hardware ordered under this Agreement is as follows:

Calendar Year	Solar Cell Efficiency Rating	Solar Cell Quantity Range	Unit Price
1999	[*] %	[*]	[*]
		[*]	[*]
		[*]	[*]
		[*]	[*]

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

2000	[*] %	[*] [*] [*] [*] [*]	[*] [*] [*] [*] [*]
2001	[*] %	[*] [*] [*] [*] [*]	[*] [*] [*] [*] [*]
2002	[*] %	[*] [*] [*] [*] [*]	[*] [*] [*] [*] [*]

1. The foregoing Hardware unit prices are:

- a. [*]
- b. [*]

2. ADJUSTMENTS TO PURCHASE RELEASE UNIT PRICES

Modifications to Unit Prices shall be made on the basis of the following:

- a. If in a Calendar Year, and within a three-month period, Buyer places a Purchase Release(s) which, when added to a previous Purchase Release(s), in the aggregate increases the quantity of Hardware purchased such that a higher Solar Cell Quantity Range is achieved, the Unit Price(s) for all effected Releases will be modified to reflect the cumulative quantity of Hardware so purchased under these conditions.
- b. If in a Calendar Year, for a incremental Purchase Release(s) which does not fall within the three-month stipulation of Subparagraph a., above, no adjustment will be made to the Unit Price of the prior Purchase Release; the Unit Price applicable to the incremental Purchase Release will, however, be adjusted provided that (1) in the aggregate a higher Solar Cell Quantity Range is achieved, and (2) continuity of monthly Subcontractor delivery is maintained.
- c. In the event Hardware with a higher Solar Cell Efficiency Rating is not available during a Calendar Year as identified in this provision, Buyer may purchase available rated Hardware in accordance with the stipulations of Subparagraph a. and b., above. Under such conditions, any Hardware aggregate limitation imposed by the definition of a Calendar Year is waived.

Examples applicable to these subparagraphs can be found in APPENDIX I to this Agreement.

[*] Confidential information omitted and filed separately with the Securities and Exchange Commission. Asterisks denote such omissions.

Any Purchase Release and associated conditions effected by Unit Price adjustments will be modified accordingly.

B. [*]

C. DELIVERY / SUBCONTRACTOR CAPACITY

1. Subcontractor shall provide for the allocation of resources to ensure Buyer the capacity to fabricate and deliver Hardware not-to-exceed the following:

Calendar Year -----	Solar Cells Per Month -----
1999	[*]
2000	[*]
2001	[*]
2002(1)	[*]

(1) Through completion of orders

2. Subcontractor is not required to commence delivery of Hardware earlier than April 1999.

D. MINIMUM ORDER QUANTITY

Except as otherwise indicated in this Agreement, each purchase release will consist of no less than [*] Solar Cells.

E. HARDWARE REQUIREMENTS COVENANT

In consideration of the accords recorded in this Agreement, Buyer shall, during the effective term of this Agreement, procure from Subcontractor its requirements for Compound Semiconductor GaAs Multi-Junction High-Efficiency Solar Cells as expressly defined by the technical documentation cataloged in Article I (SCOPE OF WORK) of this Agreement, provided that Subcontractor (1) perform satisfactorily in the manufacture, test and delivery of the Hardware purchased by Buyer, (2) sustain a level of technical and product quality competence equal to or greater than acceptable industry standards, and (3) preserve the guarantee declared in Paragraph B, above. In the event Subcontractor fails to satisfy the foregoing or any other stipulation of this Agreement, Buyer has the right to terminate this Agreement in accordance with the terms and conditions of same.

F. DOCUMENTATION

Documentation shall be delivered in accordance with the schedule appearing in the Subcontract Data Requirements List (SDRL) of Exhibit A to the delivery point identified in Article VIII (DELIVERABLE REPORTS AND DOCUMENTATION).

If a SDRL requirement has been submitted and approved by Buyer in conjunction with a prior Purchase Release issued under this Agreement, Subcontractor shall submit complete reference information from the from each submission for review and confirmation by Buyer. If a prior SDRL submittal has been approved by Buyer, yet subsequently updated or modified by Subcontractor in any manner whatsoever, such SDRL submittal shall be conveyed in its entirety for review and approval by Buyer. SUBCONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT ANY DOCUMENTATION REQUIRING THE APPROVAL OF BUYER IS RECEIVED BY BUYER.

ARTICLE V - PAYMENT

All payment due for Hardware ordered by this Agreement shall be made in accordance with the following:

A. Subcontractor may submit invoices on a monthly basis in accordance with the completion of the monthly delivery stipulations of a Purchase Release.

B. PROPERTY RIGHTS

All Hardware, work and services covered by invoice payments shall become the sole property of Buyer or Buyer's Customer. This provision shall not be construed as relieving Subcontractor from the sole responsibility of all Hardware upon which payments have been made or the restoration of any defective work in accordance with the Warranty provisions of this Agreement, or as waiving the right of Buyer to require fulfillment of all terms of this Agreement.

C. INVOICES

Subcontractor may, upon completion of monthly delivery requirements, submit invoices for the amounts specified, provided however that Buyer reserves the right to inspect or otherwise verify that Hardware for which payment is requested complies with the requirements of this Agreement. Payment for Hardware delivered does not relieve Subcontractor of any obligation hereunder.

Subcontractor shall submit an original and one copy of invoices to:

SPACE SYSTEMS/LORAL, INC.
3825 Fabian Way
Palo Alto, California 94303-4604

Attention: Accounts Payable M/S AC-1

D. PAYMENT TERMS

Payment terms are Net 30 days after receipt of invoice, scheduled delivery date, or completion of actual delivery requirements.

E. The California Resale Registration Number for Space Systems/Loral applicable to this transaction is SY GH 24-91636.

ARTICLE VI - INSPECTION AND ACCEPTANCE

A. The inspection of the work to be performed under this Agreement shall be in accordance with the requirements of Exhibit A through Exhibit I and Clause No. 19 (INSPECTION AND ACCEPTANCE) of the Terms and Conditions. The inspection period shall culminate at such time that Buyer provides written notice of Final Acceptance of the work performed.

B. Authorization to make delivery of the hardware hereunder shall occur at Subcontractor's plant upon successful completion of inspections and testing in accordance with the requirements of Exhibit A through Exhibit I. Subcontractor shall have demonstrated, by properly documented inspection and test results, full compliance with the performance requirements herein including correction by the Subcontractor of all deficiencies and all discrepancies pertaining to such inspections and testing and including completion of further retesting as may be necessary to demonstrate same. The hardware hereunder shall have been inspected by Buyer and determined to be in full compliance with the requirements of the Agreement including correction by Subcontractor of all deficiencies and discrepancies pertaining to such inspection. Satisfying the requirements of Exhibit A through Exhibit I shall not constitute waiver or release the Subcontractor from the responsibility of meeting all of the provisions herein.

Any waiver of a requirement granted by Buyer or acceptance of an out-of-spec condition applies only to the specific unit(s) identified. Said waiver or acceptance of an out-of-spec condition does not constitute a change to or waiver of any requirement of this Agreement.

C. Final acceptance of documentation hereunder shall occur at Space Systems/Loral, Palo Alto, California, after review and determination of its compliance with requirements of this Agreement, including correction by the Subcontractor of all deficiencies and discrepancies pertaining to such items.

D. Buyer and Buyer's Customer accompanied by Buyer shall have access to Subcontractor's facilities, drawings, specifications and descriptions of standards or production processes for hardware or software to be delivered hereunder to the extent necessary to ensure compliant performance. Notice of visit by Buyer and/or Buyer's customer(s) will be provided within 48 hours of the anticipated visit to Subcontractor's facility and such visit will be on a non-interference basis to Subcontractor's operations.

E. The work to be performed under this Agreement is subject to the on-going technical monitoring and pre-shipment inspection of Buyer and Buyer's Customer accompanied by

Buyer on a non-interference basis. Any review, concurrence or approval by Buyer of activities performed by Subcontractor including, but not limited to, any SDRL item submittals in connection with the work shall not relieve Subcontractor from fulfilling its obligations in meeting the requirements of this Agreement.

ARTICLE VII - TERMS OF HARDWARE DELIVERY AND SHIPMENT

All shipment of Hardware shall be in accordance with the following:

- A. Buyer's Purchase Release(s) shall identify the quantity and destination of Hardware items procured under this Agreement.
- B. The Initial and Final destination of all Hardware items to be delivered hereunder is as follows:

- Initial Destination Point - International Freight Services (for Space Systems/Loral)
1610 Rollins Road
Burlingame, CA 94010
Attention: Mr. Achim Biller
Phone: 650 259-5106
- Final Destination Point - TOSHIBA
Toshiba Corporation
Komukai Works
1, Komukai, Toshiba-Cho, 210
Saiwai-Ku, Kawasaki, 210 Japan
Attention: Mr. Isao Takahashi,
Space Products Manufacturing
Department: Parts Acceptance Center
Building No. 7-1, 1ST Floor
- Final Destination Point - MELCO
Mitsubishi Electric Corporation
Kamakura Works
325 Kamimachiya, Kamakura
Kanagawa 247, Japan
Attention: Mr. Hideo Uemura,
Space Systems Section
Planning & Marketing Department
- Final Destination Point - SS/L
Space Systems/Loral, Inc.
Receiving/Distribution Center
1145 Hamilton Court
Menlo Park, California 94025
Attention: Mr. Naresh Makhijami,
Mail Stop G-44

Mark With: LTPA S-612773-JSS

- C. The FOB and Delivery Point is Carrier, as designated by Buyer, at Subcontractor's dock,

Albuquerque, New Mexico. Subcontractor shall be responsible for all costs associated with transportation and insurance of Hardware to the Delivery Point.

D. Buyer shall be responsible for all arrangements and costs associated with the transportation and insurance of Hardware- including the preparation and execution of any and all documentation, obtaining all necessary permits, licenses and clearances required by either the United States Government or the Government of Japan, the payment of Duties, Taxes and Fees, or other such charges which may be levied by these governments- from the Delivery Point set forth in Paragraph C, above, to the Destination Points noted in Paragraph B, above, or to any other delivery point within Japan required by Buyer.

E. If, by law or regulation, Buyer is required to obtain any permit, license or clearance in its capacity as Buyer under this Agreement, Buyer shall undertake all reasonable efforts to do so. If Buyer is either (1) unsuccessful in obtaining any regulatory mandated sanctions, or (2) the pursuit of same is delayed to the extent such as to endanger the intent and purpose of this Agreement, Buyer may terminate this Agreement.

Under such circumstances, Buyer's liability and obligation with respect to this Agreement shall not exceed the aggregate amount of Purchase Releases authorized by Buyer at that time.

In the event of a conflict between this paragraph and any other stipulation appearing in this Agreement, the former shall prevail.

F. Confirmation of all shipment of Hardware, including a copy of the packing list, shall be faxed to Buyer immediately after delivery to the Carrier. The Carrier's delivery receipt, executed and dated by Carrier, shall be considered as evidence of the satisfaction of delivery requirements. This notice shall be directed to Buyer's cognizant Subcontract Administrator as designated in Article XIV, WITH AN INFORMATION COPY TO BUYER'S TRAFFIC DEPARTMENT FAX NO. (415) 852-6440.

G. Title to Hardware deliverable hereunder and risk of loss associated therewith shall be assumed by Buyer when said Hardware is placed into the hands of the Carrier at the Delivery Point noted herein and confirmed in accordance with the requirements of Paragraph F, above.

ARTICLE VIII - DELIVERABLE REPORTS AND DOCUMENTATION

Subcontractor agrees to prepare and submit all technical and other documentation, including documentation as required in the Subcontract Data Requirement List (SDRL) of Article I, Exhibit A, as follows:

A. Unless otherwise directed by a Purchase Release, all documentation required by this Agreement shall be delivered FOB Buyer's Facility, Palo Alto, California, addressed as follows:

SPACE SYSTEMS/LORAL, INC.
3825 Fabian Way
Palo Alto, CA 94303

Attention: Data Bank
Mail Stop: V-86

The transmittal letter with each item of deliverable documentation shall reference the Agreement Number, Statement of Work Number, Document Title, and SDRL Item Number.

- B. This Agreement requires submittal of documentation, including but not limited to design, analysis, drawings, materials and parts lists and processes which require Buyer approval. Buyer approval, however, does not in any manner constitute relief of the Subcontractor's responsibility for either determining the adequacy of said items for their intended use or Subcontractor's responsibility for satisfying all requirements of this Agreement.
- C. Subcontractor shall deliver with "unlimited" rights all technical data and software which Subcontractor provides to Buyer in accordance with the Subcontractor Data Requirements List set for in Article I, Exhibit A.
- D. SDRL items which require Fax submittal shall be sent to the attention of Buyer's Data Bank at Fax (650) 852-4788, and Buyer's cognizant Subcontract Administrator in accordance with Article XIV.
- E. Subcontractor shall submit SS/L Form 1266 (FINAL RELEASE, COMPLETION AND ROYALTY CERTIFICATION) with the final invoice submitted under this Agreement.

ARTICLE IX - NON-DISCLOSURE OF INFORMATION

- A. Neither Party, nor their employees, will disclose to any third person any information it has acquired under, or as a result of this Agreement or negotiations leading to it concerning a Party's plans, business objectives, customers, personnel, products, processes, work or services without the prior written consent of the other Party, unless such information becomes generally known without fault of the disclosing Party, or is obtainable from other sources; nor shall either Party disclose or release for public dissemination any information concerning this Agreement in advertising without prior written approval of the other Party.
- B. Subcontractor agrees to make no use of drawings, specifications and technical information or data

(1) furnished by Buyer, or (2) prepared by Subcontractor or its employees and agents during the course of performance of work under this Agreement, except as required to perform hereunder.
- C. Neither Party shall disclose any funding, authorization, price and schedule details of this Agreement to anyone other than Loral Space and Communications, Inc., or its customers, without the written consent of the other Party, or as might be directed by a court of law.

ARTICLE X - TECHNICAL ASSISTANCE

With the exception of the requirements of Purchase Release No. 1, Buyer makes no implication of intent nor any representation by this Agreement that it will provide any technical assistance to Subcontractor in order for Subcontractor to satisfy the requirements of this Agreement.

ARTICLE XI - ADVANCE TECHNOLOGY SUPPORT

Subcontractor will provide Buyer, free of charge, a mutually agreeable and reasonable level of engineering support in the event Buyer elects to pursue any advance technology associated with the hardware identified in this Agreement.

ARTICLE XII - PERIODIC REVIEW OF AGREEMENT

In the interest of maintaining a good-faith, long-term relationship between Buyer and Subcontractor as contemplated by this Agreement, Buyer and Subcontractor shall convene no less than an annual review each calendar year to discuss the agenda items suggested below:

1. Subcontractor's and Buyer's past performance.
2. Buyer's business projections.
3. Possible opportunities for cost savings to both parties.
4. Potential for the extension of the Agreement.
5. Other matters as deemed applicable and appropriate by the parties.

ARTICLE XIII - KEY SUBCONTRACTOR PERSONNEL CLAUSE

With respect to this Agreement and any effort leading to same, Buyer has relied upon Subcontractor's representation that Dr. Hong Hou is designated Subcontractor's primary technical representative for the work and tasks required by this Agreement.

Accordingly, in the event that the above named individual becomes unavailable to further participate in the work and tasks required by this Agreement, Subcontractor shall replace this individual with another of a comparable level of experience, qualifications and ability, and Subcontractor shall obtain Buyer's written approval prior to the replacement of the individual herein named.

ARTICLE XIV - AMENDMENTS AND NOTICES

Sole authority to make changes in or amendments to this Agreement, and to effect waivers or deviations from the work herein specified is hereby vested in Buyer's authorized Subcontract Department representative. Except as otherwise specifically provided for herein, any notices to be furnished by Subcontractor to Buyer, or by Buyer to Subcontractor, shall be sent by mail or fax addressed respectively, as follows:

SPACE SYSTEMS/LORAL, INC.
3825 Fabian Way
Palo Alto, California 94303

Attention: Joseph S. Szander

Phone No. (650) 852-6506
Fax No. (650) 852-7969
Mail Station: Z53

EMCORE CORPORATION
10420 Research Road, SE
Albuquerque, NM 87123

Attention: Karen L. Schneider

Phone No. (505) 332-5008
Fax No. (505) 332-5038

TERMS AND CONDITIONS

In addition to the provisions set forth in the SCHEDULE of this Agreement, Fixed Price Procurement Order Terms and Conditions SS/L P-10S Rev. 7/98 are applicable and are incorporated herein. In the event of a conflict between these stipulations and the provisions of the SCHEDULE, the latter shall prevail.

SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of the day and year first written below:

SPACE SYSTEMS/LORAL, INC.

By: /s/ JOSEPH S. SZANDER

Joseph S. Szander
Title: Subcontract Administrator

Date: November 24, 1998

EMCORE CORPORATION

By: /s/ KAREN L. SCHNEIDER

Karen L. Schneider
Title: Director of Business & Administration

Date: NOVEMBER 25, 1998

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statements No. 333-27507, 333-36445, 333-39547 and 333-45827 of EMCORE Corporation on Forms S-8 of our report dated May 14, 1999 appearing in this Annual Report on Form 10-K/A of EMCORE Corporation for the year ended September 30, 1998.

DELOITTE & TOUCHE LLP
Parsippany, New Jersey
May 17, 1999

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Registration Statements of EMCORE Corporation on Form S-8 (File Nos. 333-27507, 333-36445, 333-39547 and 333-45827) of our report dated November 3, 1997, except for Note 15, as to which the date is December 5, 1997, on our audits of the financial statements and financial statement schedule of EMCORE Corporation as of September 30, 1997 and 1996, and for the three years ended September 30, 1997, which report is included in this Annual Report on Form 10-K/A.

PricewaterhouseCoopers LLP

Florham Park, New Jersey
May 17, 1999