

REGISTRATION NO. 333-71791

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 2

TO

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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, NEW JERSEY 08873
(732) 271-9090

(Address, including zip code, and telephone number, including
area code, of registrant's agent for service and principal executive offices)

THOMAS G. WERTHAN
EMCORE CORPORATION
394 ELIZABETH AVENUE
SOMERSET, NEW JERSEY 08873
(732) 271-9090

(Name, address, including zip code, and telephone number,
including area code, of agent for service)

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: as soon as
practicable after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered
pursuant to dividend or interest reinvestment plans, please check the following
box. []

If any of the securities being registered on this Form are to be offered on
a delayed or continuous basis pursuant to Rule 415 under the Securities Act of
1933, check the following box. []

If this Form is filed to register additional securities for an offering
pursuant to Rule 462(b) under the Securities Act of 1933, please check the
following box and list the Securities Act of 1933 registration statement number
of the earlier effective registration statement for the same offering. []

If this Form is a post-effective amendment filed pursuant to Rule 462(c)
under the Securities Act of 1933, check the following box and list the
Securities Act of 1933 registration statement number of the earlier effective
registration statement for the same offering. []

If delivery of the prospectus is expected to be made pursuant to Rule 434,
please check the following box. []

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR
DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL
FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION
STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF
THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME
EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A),
MAY DETERMINE.

[Artwork depicts a cellular relay station antenna, fiber optics, an automobile line drawing showing engine components, a cellular phone handset, a bar code, a satellite, light-emitting diodes, Cds, and, the lights of Times Square at night.

Text of artwork states "Leading manufacturers throughout the world use EMCORE's production systems and process technology, wafers and devices for a variety of advanced electronic applications. Below the artwork text states "Illustrated above are examples of current and future end-use product applications that incorporate the compound semiconductor process, technology or equipment developed and sold by EMCORE Corporation. This illustration contains products of companies other than EMCORE Corporation. (EMCORE logo).]

[Fold out artwork depicts a diagram of flow and heat patterns inside a TurboDisc reactor under heading Technology with text stating EMCORE has developed its compound semiconductor processes and higher performance production systems through substantial investments in research and development. EMCORE works closely with its customers to identify specific performance criteria in its production systems, wafers and devices.

Surrounding the EMCORE logo and "Integrated Compound Semiconductor Solutions"

TECHNOLOGY

EMCORE has developed its compound semiconductor processes and higher performance production systems through substantial investments in research and development. EMCORE works closely with its customers to identify specific performance criteria in its production systems, wafers, and devices.

WAFERS AND DEVICES

EMCORE provides its customers with materials science expertise, process technology and metal-organic chemical vapor deposition (MOCVD) systems that enable the manufacture of commercial volumes of high-performance compound semiconductor wafers and devices. (Pictures of MR Sensors, VCSELs, Solar Cells, 3 LEDs and RF Materials.)

The Company is working with its customers and JV partners to design, engineer and manufacture commercial quantities of compound semiconductor devices and materials. The devices are fabricated from materials grown in our production equipment; and then tested according to specifications worked out in partnership with customers or JV partners.

SYSTEMS

EMCORE provides production-scale metal organic chemical vapor deposition, MOCVD, equipment using its proprietary TURBODISC technology. By combining material science expertise and proven process technology, EMCORE offers key enabling technology for the low cost, high-volume production of a variety of compound semiconductor wafers and devices. (Picture of TurboDisc System)]

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PROSPECTUS SUMMARY

This summary is qualified by more detailed information appearing in other sections of this prospectus. The other information is important, so please read this entire prospectus carefully. Unless otherwise indicated, all information in this prospectus: (a) gives effect to a 3.4-for-1 reverse stock split that was completed on February 3, 1997 and (b) assumes that the underwriters do not exercise their over-allotment option. References to EMCORE's fiscal years refer to fiscal years ended on September 30.

EMCORE CORPORATION

EMCORE designs, develops and manufactures compound semiconductor wafers and devices and is a leading developer and manufacturer of the tools and manufacturing processes used to fabricate compound semiconductor wafers and devices. Our products and technology enable our customers, both in the United States and internationally, to manufacture commercial volumes of high-performance electronic devices using compound semiconductors. Our products are used in 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.

Compound semiconductors are the key components of electronic systems and electronic circuits and are now used in today's most advanced information systems. 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, phosphorus or nitrogen. These elements are combined in our proprietary manufacturing process to create a round disk, or wafer, that has multiple layers of thin films of semiconductors on it. The wafers are further processed to create devices that are ready to be packaged by our customers for use in their products, such as solar cells, lasers and transistors. Many compound semiconductor materials have unique physical properties that allow electrons to move at least four times faster than through semiconductors based on silicon. Advantages of compound semiconductor devices over silicon devices include:

- operation at higher speeds;
- lower power consumption;
- less noise and distortion; and
- the ability to emit and detect light, known as optoelectronic properties.

Although compound semiconductors are more expensive to manufacture than the more traditional silicon-based semiconductors that are used in most computers, electronics manufacturers are increasingly integrating compound semiconductors into their products in order to achieve higher performance.

We manufacture and sell, either alone or with our joint venture partners, the following products:

PRODUCT	CURRENT AND POTENTIAL APPLICATIONS
Solar cells	Solar panels in communications satellite power systems
Compound semiconductor devices that emit light, called high-brightness light-emitting diodes (HB LEDs)*	Traffic lights Miniature lamps
Compound semiconductor lasers that emit light in a cylindrical beam, called vertical cavity surface emitting lasers (VCSELs)	Automotive lighting Flat panel displays High performance data and telecommunications lines including fiber optic cables and other network applications
Compound semiconductor sensor devices that can detect a magnetic field and sense the position of a metal object called magneto resistive sensors (MR sensors)	Cam and crank shaft sensors for automobiles Antilock brake systems Brushless motors
Compound semiconductor materials that transmit and receive communications called radio frequency materials (RF materials)	Engine timing sensors Cellular phone handsets
TurboDisc production systems	Fiber optics Satellite transmitters and receivers Platform technology for all of the above

* Products under development

Our objective is to capitalize on our position as a leading developer and manufacturer of compound semiconductor tools and manufacturing processes to become the leading supplier of compound semiconductor wafers and devices. The key elements of our strategy are to:

- apply our core scientific and manufacturing technology across multiple product applications;
- target high growth opportunities;
- partner with key industry participants; and
- continue our investment to maintain technology leadership.

We have recently established a number of strategic relationships through joint ventures and long-term supply agreements including:

- a joint venture with General Electric Lighting to develop and market white light and colored HB LED lighting products.
- a long-term purchase agreement for solar cells with Space Systems/Loral, a wholly-owned subsidiary of Loral Space & Communications.
- a cooperative development agreement and a three-year purchase agreement with Sumitomo Electric to provide certain RF materials for use in cellular handsets.

We were incorporated in the State of New Jersey in September 1986. Our World Wide Web site is www.emcore.com. Our web site is not part of this prospectus. EMCORE and TurboDisc are registered trademarks of EMCORE and Gigalase, Gigarray and the EMCORE logo are trademarks of EMCORE. Each trademark, trade name or service mark of any other company appearing in this prospectus belongs to its holder.

THE OFFERING

Common stock offered:	
By EMCORE.....	3,000,000 shares
By the selling shareholders.....	897,441 shares

Total.....	3,897,441 shares
Common stock to be outstanding after this offering.....	13,226,014 shares
Use of proceeds by EMCORE.....	To repay approximately \$36.8 million of debt and for general corporate purposes. See "Use of Proceeds."
Nasdaq National Market symbol.....	EMKR

The number of shares of common stock to be outstanding after this offering is based on the 9,500,086 shares outstanding as of May 1, 1999, as further described under "Capitalization."

SUMMARY CONSOLIDATED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	FISCAL YEARS ENDED SEPTEMBER 30,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998(*)	1998(*)	1999
STATEMENT OF OPERATIONS DATA:					
Revenues.....	\$27,779	\$47,753	\$ 43,760	\$ 26,165	\$ 26,197
Gross profit.....	9,172	17,659	19,084	12,255	10,978
Operating loss.....	(2,753)	(689)	(34,647)	(20,332)	(7,859)
Net loss.....	(3,176)	(5,619)	(36,419)	(20,661)	(10,856)
Net loss per basic and diluted share(1).....	\$ (1.06)	\$ (1.20)	\$ (4.15)	\$ (2.52)	\$ (1.17)
Weighted average shares used in calculating net loss per share.....	2,994	4,669	8,775	8,189	9,409

(*) As restated -- See Note 20 to the consolidated financial statements

	AS OF MARCH 31, 1999	
	ACTUAL	AS ADJUSTED(2)
BALANCE SHEET DATA:		
Working capital.....	\$ 6,663	\$ 31,336
Total assets.....	85,071	109,744
Long-term liabilities.....	32,570	1,567
Redeemable convertible preferred stock.....	21,369	14,089
Shareholders' equity.....	8,967	71,191

(1) Basic and diluted earnings per share have been restated for all periods presented to give effect to the Commission's Staff Accounting Bulletin No. 98, which eliminated certain computational requirements of the Commission's Staff Accounting Bulletin No. 64.

(2) Reflects the sale by EMCORE of 3,000,000 shares of common stock offered by this prospectus, repayment of all long-term debt, the conversion of 520,000 shares of convertible preferred stock into 520,000 shares of common stock and the exercise of 19,898 warrants at \$4.08 per share and 186,030 warrants at \$10.20 per share for 205,928 shares of common stock.

RISK FACTORS

You should carefully consider the following risks, together with the other information contained in this prospectus, before you decide whether to purchase shares of our common stock. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In such case, the trading price of our common stock could decline, and you may lose all or part of the money you paid to buy our common stock.

This prospectus contains forward-looking statements based on our current expectations, assumptions, estimates and projections about EMCORE and our industry. These forward-looking statements involve numerous risks and uncertainties. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of certain factors, as more fully described in this section and elsewhere in this prospectus. We undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

WE EXPECT TO CONTINUE TO INCUR OPERATING LOSSES.

We started operations in 1984 and as of March 31, 1999 had an accumulated deficit of \$71.2 million. We incurred net losses of \$3.2 million in fiscal 1996, \$5.6 million in fiscal 1997, \$36.4 million in fiscal 1998 and \$10.9 million in the first six months of fiscal 1999. We expect to continue to incur losses. To support our growth, we have increased our expense levels and our investments in inventory and capital equipment. As a result, we will need to significantly increase revenues and profit margins to become and stay profitable. If our sales and profit margins do not increase to support the higher levels of operating expenses and if our new product offerings are not successful, our business, financial condition and results of operations will be materially and adversely affected. Please see "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and the Notes thereto for detailed information on our history of losses.

OUR RAPID GROWTH PLACES A STRAIN ON OUR RESOURCES.

We are experiencing rapid growth, having added a significant number of new employees, acquired MicroOptical Devices, Inc., or MODE, and entered into joint ventures with General Electric Lighting (pending), Uniroyal Technology Corporation, Optek Technology, Inc. and Union Miniere Inc. We have expanded our facilities to include two manufacturing facilities in Albuquerque, New Mexico in addition to our original facility in Somerset, New Jersey. Our joint venture with Uniroyal Technology Corporation has leased a manufacturing facility in Tampa, Florida. This growth has placed and will continue to place a significant strain on our management, financial, sales and other employees and on our internal systems and controls. If we are unable to effectively manage multiple facilities and multiple joint ventures in geographically distant locations, our business, financial condition and results of operations will be materially and adversely affected. We are also in the process of installing new manufacturing software for all of our facilities and are evaluating replacing our accounting and purchasing systems. Most of the new manufacturing software is

customized to our particular business and manufacturing processes. It will take time and require evaluation to eliminate all of the bugs in the software and to train personnel to use the new software. In this transition we may experience delays in production, cost overruns and disruptions in our operations.

Please see "Management's Discussion and Analysis of Financial Condition and Results of Operations" for more information.

SINCE THE TECHNOLOGY IN THE COMPOUND SEMICONDUCTOR INDUSTRY RAPIDLY CHANGES, WE MUST CONTINUALLY IMPROVE EXISTING PRODUCTS, DESIGN AND SELL NEW PRODUCTS AND MANAGE THE COSTS OF RESEARCH AND DEVELOPMENT IN ORDER TO EFFECTIVELY COMPETE.

We compete in markets characterized by rapid technological change, evolving industry standards and continuous improvements in products. Due to constant changes in these markets, our future success depends on our ability to improve our manufacturing processes and tools and our products. For example, our TurboDisc production systems must remain competitive on the basis of cost of ownership and process performance. To remain competitive we must continually introduce manufacturing tools with higher capacity and better production yields.

We have recently introduced a number of new products and, in connection with recent joint ventures and internal development, we will be introducing additional new products in the near future. The commercialization of new products involves substantial expenditures in research and development, production and marketing. We may be unable to successfully design or manufacture these new products and may have difficulty penetrating new markets. In addition, many of our new products are being incorporated into our customers' new products for new applications, such as high speed computer networks.

Because it is generally not possible to predict the amount of time required and the costs involved in achieving certain research, development and engineering objectives, actual development costs may exceed budgeted amounts and estimated product development schedules may be extended. Our business, financial condition and results of operations may be materially and adversely affected if:

- we are unable to improve our existing products on a timely basis;
- our new products are not introduced on a timely basis;
- we incur budget overruns or delays in our research and development efforts; or
- our new products experience reliability or quality problems.

FLUCTUATIONS IN OUR QUARTERLY OPERATING RESULTS MAY NEGATIVELY IMPACT OUR STOCK PRICE.

Our revenues and operating results may vary significantly from quarter to quarter due to a number of factors particular to EMCORE and the compound semiconductor industry. Not all of these factors are in our control. These factors include:

- the volume and timing of orders for our products, particularly TurboDisc systems, which have an average selling price in excess of \$1 million;

- the timing of our announcement and introduction of new products and of similar announcements by our competitors;
- downturns in the market for our customers' products;
- regional economic conditions, particularly in Asia where we derive a significant portion of our revenues; and
- price volatility in the compound semiconductor industry.

These factors may cause our operating results for future periods to be below the expectations of analysts and investors. This may cause a decline in the price of our common stock. Please see "Management's Discussion and Analysis of Financial Condition and Results of Operations" for detailed information on our annual and quarterly operating results.

OUR JOINT VENTURE PARTNERS, WHO HAVE CONTROL OF THESE VENTURES, MAY MAKE DECISIONS THAT WE DO NOT AGREE WITH AND THAT ADVERSELY AFFECT OUR NET INCOME.

Since December 1997, we have established four joint ventures (with Optek Technology, Inc., Union Miniere, Inc., Uniroyal Technology Corporation and General Electric Lighting). Each of our joint ventures involves the creation of a separate company, and we do not have a majority interest in any of these entities. Each of these joint ventures is governed by a board of managers with representatives from both the strategic partner and us. Many fundamental decisions must be approved by both parties to the joint venture, which means we will be unable to direct the operation and direction of these joint ventures without the agreement of our joint venture partners. If we are unable to agree on important issues with a joint venture partner, the business of that joint venture may be delayed or interrupted, which may, in turn, materially and adversely affect our business, financial condition and results of operations.

We have devoted and we will be required to continue to devote significant funds and technologies to our joint ventures to develop and enhance their products. In addition, our joint ventures will require that some of our employees devote much of their time to joint venture projects. This will place a strain on our management, scientific, financial and sales employees. If our joint ventures are unsuccessful in developing and marketing their products, our business, financial condition and results of operations will be materially and adversely affected.

General Electric Lighting and we have agreed that our joint venture will be the sole vehicle for each party's participation in the solid state lighting market. We and General Electric Lighting have also agreed to several limitations during the life of the venture and thereafter relating to use that each of us can make of the joint venture's technology. One consequence of these limitations is that in certain circumstances, such as a material default by us, we would not be permitted to use the joint venture's technology to compete against General Electric Lighting in the solid state lighting market.

SINCE A LARGE PERCENTAGE OF OUR REVENUES ARE FROM FOREIGN SALES, CERTAIN EXPORT RISKS MAY DISPROPORTIONATELY AFFECT OUR REVENUES.

Sales to customers located outside the United States accounted for approximately 42.5% of our revenues in fiscal 1996, 42.0% of our revenues in fiscal 1997, 39.1% of our revenues in fiscal 1998 and 44.5% of our revenues in the first six months of fiscal 1999. Sales to customers in Asia represent the majority of our international sales. We believe that international sales will continue to account for a significant percentage of our revenues. Because of this, the following export risks may disproportionately affect our revenues:

- political and economic instability may inhibit export of our systems and devices and limit potential customers' access to dollars;
- shipping and installation costs of our systems may increase;
- we have experienced and may continue to experience difficulties in the timeliness of collection of foreign accounts receivable and have been forced to write off receivables from a foreign customer;
- a strong dollar may make our systems less attractive to foreign purchasers who may decide to postpone making the capital expenditure;
- tariffs and other barriers may make our systems and devices less cost competitive;
- we may have difficulty in staffing and managing our international operations;
- the laws of certain foreign countries may not adequately protect our trade secrets and intellectual property; and
- potentially adverse tax consequences to our customers may make our systems and devices not cost competitive.

WE WILL LOSE SALES IF WE ARE UNABLE TO OBTAIN GOVERNMENT AUTHORIZATION TO EXPORT OUR PRODUCTS.

Exports of our products to certain destinations, such as the People's Republic of China, Malaysia and Taiwan, may require pre-shipment authorization from U.S. export control authorities, including the U.S. Departments of Commerce and State. Authorization may be conditioned on end-use restrictions. On certain occasions, we have been denied authorization, particularly with respect to the People's Republic of China. Failure to receive these authorizations may materially and adversely affect our revenues and in turn our business, financial condition and results of operations from international sales. Beginning April 1999, exports of all satellites and associated components require a license from the Department of State. This may cause delays in shipping solar cells abroad. Delays in receiving export licenses for solar cells may materially and adversely affect our revenues and in turn our business, financial condition and results of operations.

THE LOSS OF SALES TO GENERAL MOTORS OR OUR OTHER LARGE CUSTOMERS WOULD BE DIFFICULT TO REPLACE.

We derive a substantial portion of our revenues from a limited number of customers. Sales to Hughes-Spectrolab, primarily of TurboDisc systems and solar cells,

accounted for approximately 23.6% of our revenues in fiscal 1996, 10.2% of our revenues in fiscal 1997, 17.3% of our revenues in fiscal 1998, but only 3.8% of our revenues for the first six months of fiscal 1999. We believe that, at least in the short-term, Hughes-Spectrolab will produce most of its material requirements in-house using TurboDisc systems purchased from us. Consequently, we do not expect sales to Hughes-Spectrolab to continue to be significant in the short term. General Motors, our main customer for MR sensors, accounted for approximately 15.1% of our revenues in fiscal 1997, 12.8% of our revenues in fiscal 1998 and 10.8% of our revenues for the first six months of fiscal 1999. General Motors' three month strike in 1998 adversely affected our operating performance because during that time shipments of sensors to General Motors were halted. In addition to the lost revenues, we incurred the expense of paying salaries to the part of our workforce dedicated to producing sensors. If General Motors, or any of our other significant customers, stops ordering our products, significantly reduces the volume of these orders, or cancels, delays or reschedules any orders, and we are unable to replace these orders, our business, financial condition and results of operations could be materially and adversely affected. Please see "Business -- Customers" for more information on our significant customers.

OUR PRODUCTS ARE DIFFICULT TO MANUFACTURE AND SMALL MANUFACTURING DEFECTS CAN ADVERSELY AFFECT OUR PRODUCTION YIELDS AND OUR OPERATING RESULTS.

The manufacture of our TurboDisc systems is a highly complex and precise process. We increasingly outsource the fabrication of certain components and sub-assemblies of our systems, often to sole source suppliers or a limited number of suppliers. We have experienced occasional delays in obtaining components and subassemblies because the manufacturing process for these items is very complex and requires long lead times. The revenues derived from sales of our TurboDisc systems will be materially and adversely affected if we are unable to obtain a high quality, reliable and timely supply of these components and subassemblies. In addition, any reduction in the precision of these components will result in sub-standard end products and will cause delays and interruptions in our production cycle.

We manufacture all of our wafers and devices in our manufacturing facilities and our joint venture with Uniroyal Technology Corporation plans to manufacture HB LED wafers and package-ready devices at its facility. Minute impurities, difficulties in the production process, defects in the layering of the devices' constituent compounds, wafer breakage or other factors can cause a substantial percentage of wafers and devices to be rejected or numerous devices on each wafer to be non-functional. These factors can result in lower than expected production yields, which would delay product shipments and may materially and adversely affect our operating results. Because the majority of our costs of manufacture are relatively fixed, the number of shippable devices per wafer for a given product is critical to our financial results. Additionally, because we manufacture all of our products at our facilities in Somerset, New Jersey and Albuquerque, New Mexico, and our joint venture with Uniroyal Technology Corporation will manufacture HB LED wafers and package-ready devices at its sole facility in Tampa, Florida, any interruption in manufacturing resulting from fire, natural disaster, equipment failures or otherwise would materially and adversely affect our business, financial condition and results of operations. Please see "Business -- Manufacturing" for a more detailed description of our manufacturing processes.

WE FACE LENGTHY SALES AND QUALIFICATIONS CYCLES FOR OUR PRODUCTS AND, IN MANY CASES, MUST INVEST A SUBSTANTIAL AMOUNT OF TIME AND FUNDS BEFORE WE RECEIVE ORDERS.

Sales of our TurboDisc systems primarily depend upon the decision of a prospective customer to increase its manufacturing capacity, which typically involves a significant capital commitment by the customer. Customers usually place orders with us on average two to nine months after our initial contact with them. We often experience delays in obtaining system sales orders while customers evaluate and receive internal approvals for the purchase of these systems. These delays may include the time necessary to plan, design or complete a new or expanded compound semiconductor fabrication facility. Due to these factors, we expend substantial funds and sales, marketing and management efforts to sell our compound semiconductor production systems. These expenditures and efforts may not result in sales.

In order to expand our materials production capabilities, we have dedicated a number of our TurboDisc systems to the manufacture of wafers and devices. Several of our products are currently being tested to determine whether they meet customer or industry specifications. During this qualification period, we invest significant resources and dedicate substantial production capacity to the manufacture of these new products, prior to any commitment to purchase by the prospective customer and without generating significant revenues from the qualification process. If we are unable to meet these specifications or do not receive sufficient orders to profitably use the dedicated production capacity, our business, financial condition and results of operations would be materially and adversely affected. Please see "Business -- Products," "Business -- Marketing and Sales" and "Business -- Competition" for more information on our products and our marketing and sales efforts.

INDUSTRY DEMAND FOR SKILLED EMPLOYEES, PARTICULARLY SCIENTIFIC AND TECHNICAL PERSONNEL WITH COMPOUND SEMICONDUCTOR EXPERIENCE, EXCEEDS THE NUMBER OF SKILLED PERSONNEL AVAILABLE.

Our future success depends, in part, on our ability to attract and retain certain key personnel, including scientific, operational and management personnel. We anticipate that we will need to hire additional skilled personnel to continue to expand all areas of our business. The competition for attracting and retaining these employees, especially scientists, is intense. Because of this intense competition for these skilled employees, we may be unable to retain our existing personnel or attract additional qualified employees in the future. If we are unable to retain our skilled employees and attract additional qualified employees to keep up with our expansion, our business, financial condition and results of operations will be materially and adversely affected.

PROTECTING OUR TRADE SECRETS IS CRITICAL TO OUR ABILITY TO EFFECTIVELY COMPETE FOR BUSINESS.

Our success and competitive position depend on protecting our trade secrets and other intellectual property. Our strategy is to rely more on trade secrets than patents to protect our manufacturing and sales processes and products, but 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. We take certain measures to protect our trade secrets, including executing non-disclosure agreements with our employees, joint venture partners, customers and suppliers. If parties breach these agreements or the measures we take are not properly

implemented, we may not have an adequate remedy. Disclosure of our trade secrets or reverse engineering of our proprietary products, processes or devices would materially and adversely affect our business, financial condition and results of operations.

Although we currently hold 11 U.S. patents, these patents do not protect any material aspects of the current or planned commercial versions of our systems, wafers or devices. We are actively pursuing patents on some of our recent inventions, but these patents may not be issued. Even if these patents are issued, they may be challenged, invalidated or circumvented. In addition, the laws of certain other countries may not protect our intellectual property to the same extent as U.S. laws. Please see "Business -- Intellectual Property and Licensing" for more information regarding our trade secrets, patents and other intellectual property.

WE MAY REQUIRE LICENSES TO CONTINUE TO MANUFACTURE AND SELL CERTAIN OF OUR COMPOUND SEMICONDUCTOR WAFERS AND DEVICES, THE EXPENSE OF WHICH MAY ADVERSELY AFFECT OUR RESULTS OF OPERATIONS.

We may require licenses from Rockwell International Corporation to continue to sell our compound semiconductor wafers and devices to current customers who do not hold licenses from Rockwell International Corporation. In addition, we may be required to pay royalties for certain of our past sales of wafers and devices to these customers. 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. The failure to obtain or maintain these licenses on commercially reasonable terms may materially and adversely affect our business, financial condition and results of operations. Please see "Business -- Intellectual Property and Licensing" for more details regarding our patents and licenses.

INTERRUPTIONS IN OUR BUSINESS AND A SIGNIFICANT LOSS OF SALES TO ASIA MAY RESULT IF OUR PRIMARY ASIAN DISTRIBUTOR FAILS TO EFFECTIVELY MARKET AND SERVICE OUR PRODUCTS.

We rely on a single marketing, distribution and service provider, Hakuto Co. Ltd. to market and service many of our products in Japan, China and Singapore. Hakuto is one of our shareholders and Hakuto's president is a member of our Board of Directors. We have distributorship agreements with Hakuto which expire in March 2008 and give Hakuto exclusive distribution rights for certain of our products in Japan. Hakuto's failure to effectively market and service our products or termination of our relationship with Hakuto would result in significant delays or interruption in our marketing and service programs in Asia. This would materially and adversely affect our business, financial condition and results of operations.

YEAR 2000 PROBLEMS MAY DISRUPT OUR BUSINESS AND THE COSTS TO CORRECT THESE PROBLEMS MAY BE MATERIAL.

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.

We have made a preliminary assessment of our Year 2000 readiness. We plan to perform a Year 2000 simulation on our software during the second and third calendar quarter of 1999. We are also in the process of contacting certain third-party vendors, licensors and providers of software, hardware and services regarding their Year 2000 readiness. Following this testing and after contacting these vendors and licensors, we will be better able to make a complete evaluation of Year 2000 readiness, to determine what costs will be necessary to be Year 2000 compliant and to determine whether contingency plans need to be developed. We may discover Year 2000 compliance problems in our TurboDisc systems that will require substantial modifications. In addition, we may discover that third-party software or hardware incorporated into EMCORE's TurboDisc systems will need to be revised or replaced, all of which could be time-consuming and expensive.

Any failure on our part to fix or replace our internally developed proprietary software or third-party software or hardware or services on a timely basis could result in lost revenues, increased operating costs, the loss of customers and other business interruptions. Moreover, we could be subject to lawsuits which could be costly and time-consuming to defend. The failure of governmental agencies, utility companies, third party service providers and others outside of our control to be Year 2000 compliant could result in systemic failure such as telecommunications or electrical failure, which could have a material adverse effect on our business, results of operations and financial condition. Please see "Management's Discussion and Analysis of Financial Condition" for detailed information on our state of readiness, potential risks and contingency plans regarding the Year 2000 issue.

OUR MANAGEMENT'S STOCK OWNERSHIP GIVES THEM THE POWER TO CONTROL BUSINESS AFFAIRS AND PREVENT A TAKEOVER THAT COULD BE BENEFICIAL TO UNAFFILIATED SHAREHOLDERS.

Certain members of our management, specifically Thomas J. Russell, Chairman of our Board, Reuben F. Richards, President, Chief Executive Officer and a director, and Robert Louis-Dreyfus, a director, are former members of Jesup & Lamont Merchant Partners, L.L.C. They collectively beneficially own approximately 45.9% of our common stock immediately prior to this offering and will own approximately 34.1% of our common stock after the offering. Accordingly, such persons will continue to hold sufficient voting power to control our business and affairs for the foreseeable future. This concentration of ownership may also have the effect of delaying, deferring or preventing a change in control of our company, which could have a material adverse effect on our stock price.

UNSUCCESSFUL CONTROL OF THE HAZARDOUS RAW MATERIALS USED IN OUR MANUFACTURING PROCESS COULD RESULT IN COSTLY REMEDIATION FEES, PENALTIES OR DAMAGES UNDER ENVIRONMENTAL AND SAFETY REGULATIONS.

The production of wafers and devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsene. If our control systems are unsuccessful in preventing a release of these materials into the environment or other adverse environmental conditions occur, we could experience interruptions in our operations and incur substantial remediation and other costs. Failure to comply with environmental and health and safety laws and regulations may materially and adversely affect our business, financial condition and results of operations.

OUR BUSINESS OR OUR STOCK PRICE COULD BE ADVERSELY AFFECTED BY REDEMPTION OF OUTSTANDING CONVERTIBLE PREFERRED STOCK OR ISSUANCE OF ADDITIONAL PREFERRED STOCK.

We have 1,550,000 shares of convertible preferred stock issued and outstanding, all of which are subject to mandatory redemption by us on November 17, 2003. If we do not have the funds available to redeem the convertible preferred stock at that time, we will need to raise additional funds to finance this redemption or we will be in default under the terms of the convertible preferred stock. We may be unable to obtain adequate financing on acceptable terms, which may adversely affect our business and financial condition.

Our board of directors is authorized to issue up to an additional 4,332,353 shares of preferred stock with such dividend rates, liquidation preferences, voting rights, redemption and conversion terms and privileges as our board of directors, in its sole discretion, may determine. The issuance of additional shares of preferred stock may result in a decrease in the value or market price of our common stock, or our board of directors could use the preferred stock to delay or discourage hostile bids for control of us in which shareholders may receive premiums for their common stock or to make the possible sale of the company or the removal of our management more difficult. The issuance of additional shares of preferred stock could adversely affect the voting and other rights of the holders of common stock.

CERTAIN PROVISIONS OF NEW JERSEY LAW AND OUR CHARTER MAY MAKE A TAKEOVER OF OUR COMPANY DIFFICULT EVEN IF SUCH TAKEOVER COULD BE BENEFICIAL TO SOME OF OUR SHAREHOLDERS.

New Jersey law contains and our certificate of incorporation, as amended, contains certain provisions that could delay or prevent a takeover attempt that our shareholders may consider in their best interests. Our board of directors is divided into three classes. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock. In addition, if these amendments are adopted, approval by the holders of 80% of our voting stock is required for certain business combinations unless these transactions meet certain fair price criteria and procedural requirements or are approved by two-thirds of our continuing directors. We may in the future adopt other measures that may have the effect of delaying or discouraging an unsolicited takeover, even if the takeover were at a premium price or favored by a majority of unaffiliated shareholders. Certain of these measures may be adopted without any further vote or action by our shareholders.

FUTURE SALES BY EXISTING SHAREHOLDERS COULD DEPRESS THE MARKET PRICE OF OUR COMMON STOCK AND MAKE IT MORE DIFFICULT FOR US TO SELL STOCK IN THE FUTURE.

If our shareholders sell substantial amounts of our common stock in the public market following this offering, the market price of our common stock could fall. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. Upon completion of this offering, we will have 13,226,014 shares of common stock outstanding (based on the number of shares outstanding as of May 1, 1999 and assuming no exercise of outstanding options or warrants). Of these shares, 5,600,226 shares are freely tradeable. This leaves 5,887,883 shares eligible for sale in the public market at various times after the date of this prospectus pursuant to Rule 144.

In addition, as of May 1, 1999, stock options to purchase 1,143,293 shares of our common stock, warrants to purchase 1,371,262 shares of our common stock and 1,550,000 shares of our convertible preferred stock, which are convertible into shares of common stock on a one-for-one basis, were outstanding. In connection with our joint

venture with General Electric Lighting, we have issued General Electric common stock purchase warrants at an exercise price of \$22.875 to acquire 282,010 shares of common stock, and a \$7.8 million subordinated convertible debenture with an interest rate of 4.75% per annum due in seven years. The debenture is convertible into 340,984 shares of common stock at a conversion price equal to \$22 7/8.

Certain shareholders, representing approximately 6,863,579 shares of our common stock (including shares of common stock issuable upon conversion of our convertible preferred stock, convertible debenture and warrants) have the right to require us to register their shares. We agreed to file a shelf registration, for the benefit of the holders of our convertible preferred stock and those holders of up to 5,210,585 shares of common stock who choose to participate, 90 days after completion of this offering. This shelf registration will remain effective until November 17, 2003 or such earlier time as all of the shares of our convertible preferred stock and the common stock issued upon conversion thereof are no longer restricted under Rule 144.

USE OF PROCEEDS

The net proceeds to EMCORE from the sale of the 3,000,000 shares of common stock being offered by EMCORE are estimated to be \$54.5 million (\$66.0 million if the underwriters' over-allotment option is exercised in full), assuming a public offering price of \$19.63 per share and after deducting the underwriting discounts and commissions and estimated offering expenses. EMCORE will not receive any proceeds from the sale of shares of common stock by the selling shareholders. EMCORE intends to use \$27.5 million to repay outstanding bank indebtedness to First Union National Bank under two credit facilities, approximately \$8.8 million to repay subordinated notes to an affiliate and other investors, and the balance for general corporate purposes, including working capital.

The two credit facilities have the following principal amounts, interest rates, maturity dates and use of proceeds:

CREDIT FACILITIES	INTEREST RATE	MATURITY DATE	PROCEEDS USED TO:
\$10.0 million	Prime plus 50 basis points (8.25% at May 1, 1999)	October 1, 1999	Purchase and equip a new facility in Albuquerque, New Mexico, and for working capital purposes.
\$19 million (\$18 million outstanding)	One month LIBOR plus 75 basis points (5.62% at May 1, 1999)	October 1, 1999	Purchase and equip a new facility in Albuquerque, New Mexico, repay amounts advanced by Thomas Russell, the Chairman of the Board of EMCORE, and for working capital purposes.

When the debt is extinguished, there will be an extraordinary charge in 1999 of approximately \$1.3 million related to the early extinguishment of debt.

The subordinated notes were issued in May and September of 1996, bear interest at 6.0% and mature on May 1, 2001. Thomas Russell holds approximately \$8.4 million of the subordinated notes that are being repaid. The balance of the subordinated notes being repaid are held by approximately ten other non-affiliated investors.

We may also use a portion of the net proceeds to fund acquisitions of complementary businesses, products or technologies in the semiconductor sector. Although we periodically review potential acquisition opportunities, we have not reached any agreements, commitments or understanding for any future acquisitions. Pending such uses, the net proceeds of this offering will be invested in short-term, investment-grade, income producing investments.

We believe that the remaining net proceeds from this offering will be sufficient to fund our anticipated capital expenditures and to provide adequate working capital at least through July 2000. However, future events may require EMCORE to seek additional capital which may not be available on terms acceptable to us.

PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

EMCORE's common stock has traded on the Nasdaq National Market under the symbol "EMKR" since March 6, 1997, the date of EMCORE's initial public offering. The following table sets forth, for the periods indicated, the high and low sale prices per share of common stock, as reported on the Nasdaq National Market:

	PRICE RANGE OF COMMON STOCK	
	HIGH	LOW
FISCAL YEAR ENDED SEPTEMBER 30, 1997:		
Second Quarter (from March 6, 1997).....	\$12 3/4	\$ 9 1/4
Third Quarter.....	19 1/2	11
Fourth Quarter.....	25 1/4	16
FISCAL YEAR ENDED SEPTEMBER 30, 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 YEAR ENDING SEPTEMBER 30, 1999:		
First Quarter.....	\$18 3/8	\$ 7 1/4
Second Quarter.....	28 3/4	13 7/8
Third Quarter (through June 7, 1999).....	23	12 7/8

The reported last sale price of the common stock on the Nasdaq National Market on June 7, 1999 was \$21 3/8 per share. As of May 1, 1999, EMCORE had approximately 1,742 shareholders of record.

EMCORE has not declared or paid dividends on its common stock since its formation. EMCORE currently does not intend to pay dividends on its common stock in the foreseeable future so that it may reinvest its earnings in its business. The shares of EMCORE's convertible preferred stock are entitled to receive cumulative quarterly dividends at the annual rate of 2% of their liquidation preference (\$.28 per annum per share). The payment of dividends, if any, on the common stock in the future will be at the discretion of EMCORE's board of directors.

CAPITALIZATION

The following table sets forth the capitalization of EMCORE as of March 31, 1999, and as adjusted to reflect the sale by EMCORE of 3,000,000 shares of common stock being offered hereby (at an assumed offering price of \$19.63 per share), the conversion of 520,000 shares of convertible preferred stock into 520,000 shares of common stock and the exercise of 19,898 warrants at \$4.08 per share and 186,030 warrants at \$10.20 per share into 205,928 shares of common stock and the application of the estimated net proceeds therefrom.

	AS OF MARCH 31, 1999	
	ACTUAL	AS ADJUSTED
	(IN THOUSANDS)	
Long-term debt.....	\$ 31,003	\$ --
Convertible preferred stock; 1,550,000 issued and outstanding; as adjusted 1,030,000.....	21,369	14,089
Shareholders' equity:		
Preferred stock; 5,882,353 shares authorized; none issued and outstanding.....	--	--
Common stock, 23,529,411 shares authorized; 9,446,347 shares issued and outstanding; 13,226,014 shares issued and outstanding as adjusted.....	87,855	151,656
Notes receivable from warrant issuances and stock sales.....	(7,667)	(7,547)
Accumulated deficit.....	(71,221)	(72,918)
Total shareholders' equity.....	8,967	71,191
Total capitalization.....	\$ 61,339	\$ 85,279
	=====	=====

The 13,226,014 shares of common stock as adjusted for this offering exclude:

(1) 1,372,059 shares of common stock reserved for issuance under EMCORE's stock option plan, of which 1,078,399 shares are subject to outstanding options at exercise prices varying from \$3.03 per share to \$24.75 per share;

(2) warrants to purchase 365,171 shares of common stock at an exercise price of \$4.08 per share, exercisable until May 1, 2001;

(3) warrants to purchase 1,039,460 shares of common stock at an exercise price of \$10.20 per share, exercisable until September 1, 2001;

(4) options to purchase 149,968 shares of common stock issued in connection with EMCORE's acquisition of MODE at exercise prices ranging from \$0.43 to \$0.60;

(5) warrants to purchase 47,118 shares of common stock at exercise prices ranging from \$4.32 to \$5.92 per share, exercisable until September 2000;

(6) shares reserved for issuance pursuant to warrants to purchase 284,684 shares of common stock at an exercise price of \$11.375 per share, exercisable until May 1, 2001; and

(7) 282,010 common stock purchase warrants with an exercise price of \$22 7/8 and a subordinated convertible debenture that will be convertible into 340,984 shares of stock at a price of \$22 7/8.

Please see Notes 11, 12, 17 and 18 of the Notes to Financial Statements included elsewhere in this prospectus for more information.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data for the six months ended March 31, 1998 and 1999 and 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 Income 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 prospectus. The Statement of Income 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. The financial data as of March 31, 1999 and for the six months ended March 31, 1998 and 1999 are derived from unaudited consolidated financial statements that, in the opinion of EMCORE's management, reflect all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the financial position and results of operations for these periods. Operating results for the six months ended March 31, 1999 are not necessarily indicative of the results that may be expected for the entire fiscal year ending September 30, 1999.

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,					SIX MONTHS ENDED MARCH 31,	
	1994	1995	1996	1997	1998(*)	1998(*)	1999
	(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)						
STATEMENT OF OPERATIONS DATA:							
Revenues.....	\$9,038	\$18,137	\$27,779	\$47,753	\$ 43,760	\$ 26,165	\$ 26,197
Cost of sales.....	5,213	9,927	18,607	30,094	24,676	13,910	15,219
Gross profit.....	3,825	8,210	9,172	17,659	19,084	12,255	10,978
Operating expenses:							
Selling, general, and administrative.....	2,645	4,452	6,524	9,347	14,082	5,753	6,368
Goodwill amortization....	--	--	--	--	3,638	1,442	2,197
Research and development:							
Recurring.....	1,064	1,852	5,401	9,001	16,495	5,876	10,272
One-time acquired in- process.....	--	--	--	--	19,516	19,516	--
Total operating expenses.....	3,709	6,304	11,925	18,348	53,731	32,587	18,837
Operating income (loss).....	116	1,906	(2,753)	(689)	(34,647)	(20,332)	(7,859)
Stated interest expense, net.....	286	255	297	519	973	117	693
Imputed warrant interest expense, non-cash.....	--	--	126	3,988	601	192	633
Equity in net loss of unconsolidated affiliate.....	--	--	--	--	198	--	1,671
Other expense.....	--	10	--	--	--	--	--
Total other expense.....	286	265	423	4,507	1,772	309	2,997
(Loss) income before income taxes.....	(170)	1,641	(3,176)	(5,196)	(36,419)	(20,641)	(10,856)
Provision for income taxes....	--	125	--	137	--	20	--
(Loss) income before extraordinary item.....	(170)	1,516	(3,176)	(5,333)	(36,419)	(20,661)	(10,856)
Extraordinary loss.....	--	--	--	286	--	--	--
Net (loss) income.....	\$ (170)	\$ 1,516	\$ (3,176)	\$ (5,619)	\$ (36,419)	\$ (20,661)	\$ (10,856)
PER SHARE DATA:							
Weighted average shares used in calculating diluted per share data.....	58	1,701	2,994	4,669	8,775	8,189	9,409
Net (loss) income per basic and diluted shares before extraordinary item.....	\$ (2.93)	\$ 0.89	\$ (1.06)	\$ (1.14)	\$ (4.15)	\$ (2.52)	\$ (1.17)
Net (loss) income per basic and diluted shares.....	\$ (2.93)	\$ 0.89	\$ (1.06)	\$ (1.20)	\$ (4.15)	\$ (2.52)	\$ (1.17)

	AS OF SEPTEMBER 30,					AS OF MARCH 31,
	1994	1995	1996	1997	1998(*)	1999
	(IN THOUSANDS)					
BALANCE SHEET DATA:						
Working capital (deficiency).....	\$ 1,041	\$ 2,208	\$ 1,151	\$12,156	\$(2,017)	\$ 6,663
Total assets.....	5,415	10,143	20,434	39,463	73,220	85,071
Long-term liabilities....	3,000	3,000	8,947	7,577	26,514	32,570
Redeemable convertible preferred stock.....	16,274	--	--	--	--	21,369
Shareholders' (deficit) equity.....	(96)	1,509	522	21,831	19,580	8,967

(*) As restated -- See Note 20 to consolidated financial statements.

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

INTRODUCTION

Subsequent to the issuance of EMCORE's Annual Report on Form 10-K for the year ended September 30, 1998, EMCORE'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 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, EMCORE'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 information included in "Selected Financial Data," and in the discussion following reflect the effects of this restatement. Refer to Note 20 to the consolidated financial statements for further discussion.

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 the last week of May 1999, EMCORE and General Electric Lighting formed GELcore, a joint venture to develop and market white light and colored HB LED lighting products. GELcore's long-term goal is to develop HB LED products to replace traditional lighting. We invested \$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 May 1999, Sumitomo Electric and EMCORE entered into a long-term agreement to jointly develop and produce certain RF materials for use in digital wireless and cellular applications. EMCORE will manufacture these RF materials at our Somerset, New Jersey manufacturing facility. Sumitomo Electric will market them in Japan. Sumitomo Electric is one of the world's leading electronics manufacturers. Shipments of these RF materials are expected to begin in June 1999.
- 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, 1998 and the first six months of fiscal 1999, international sales constituted 42.5%, 42.0%, 39.1% and 44.5%,

respectively, of revenues. In fiscal 1998, the 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
1999 (6 months).....	7,967,184	145,919	8,113,103

As of March 31, 1999, EMCORE had an order backlog of \$38.3 million scheduled to be shipped through March 31, 2000. This represented an increase of 69% since September 30, 1998 which primarily relates to increased systems bookings in Asia and an initial order for solar cells from Loral, which is subject to product qualification. 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.

RESULTS OF OPERATIONS

The following table sets forth the statement of operations data of EMCORE expressed as a percentage of total revenues for the fiscal years ended September 30, 1996, 1997 and 1998 and the six months ended March 31, 1998 and 1999.

	FISCAL YEARS ENDED SEPTEMBER 30,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998(*)	1998(*)	1999
Revenues.....	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales.....	67.0	63.0	56.4	53.2	58.1
Gross profit.....	33.0	37.0	43.6	46.8	41.9
Operating expenses:					
Selling, general and administrative.....	23.5	19.6	32.2	22.0	24.3
Goodwill amortization.....			8.3	5.5	8.4
Research and development.....					
Recurring.....	19.4	18.8	37.7	22.4	39.2
One-time acquired in-process.....	--	--	44.6	74.6	--
Operating loss.....	(9.9)	(1.4)	(79.2)	(77.7)	(30.0)
Stated interest expense, net....	1.1	1.1	2.2	0.5	2.6
Imputed warrant interest expense, non-cash.....	0.4	8.4	1.4	0.7	2.4
Equity in net loss of associated companies.....	--	--	0.4	--	6.4
Loss before income taxes and extraordinary item.....	(11.4)	(10.9)	(83.2)	(78.9)	(41.4)
Provision for income taxes.....	--	0.3	--	0.1	--
Net loss before extraordinary item....	(11.4)	(11.2)	(83.2)	(79.0)	(41.4)
Extraordinary loss.....	--	(0.6)	--	--	--
Net loss.....	(11.4)%	(11.8)%	(83.2)%	(79.0)%	(41.4)%

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

COMPARISON OF SIX MONTHS ENDED MARCH 31, 1998 AND 1999

RESULTS OF OPERATIONS:

Revenues. For both the six-month periods ended March 31, 1998 and 1999, revenues were \$26.2 million. Revenues from systems-related sales and materials-related sales were \$14.4 million and \$11.7 million, respectively, for the six months ended March 31, 1998 and \$20.6 million and \$5.6 million, respectively, for the six months ended March 31, 1999. As a percentage of revenues, production systems and wafers and devices accounted for 55.2% and 44.8%, respectively, for the six months ended March 31, 1998 and 78.8% and 21.2%, respectively, for the six months ended March 31, 1999. EMCORE expects these percentages to approach 50% in each category as its new products such as solar cells, VCSELS and HBT's are introduced and production ramps. International sales accounted for 43.5% of revenues for the six months ended March 31, 1998 and 44.5% of revenues for the six months ended March 31, 1999.

Cost Of Sales/Gross Profit. Cost of sales includes direct material and labor costs, allocated manufacturing and service overhead, and installation and warranty costs. EMCORE's gross profit decreased 10.4% from \$12.3 million for the six months ended March 31, 1998, to \$11.0 million for the six months ended March 31, 1999. The decrease was due principally to EMCORE's sale of three compound semiconductor production systems for approximately \$5.3 million to a joint venture in which it has a 49% minority interest. EMCORE eliminated \$1.2 million of gross profit on these sales, which deferred gross profit will be recognized ratably over the assigned life of the production systems purchased by the joint venture.

Selling, General and Administrative. Selling, general and administrative expenses increased by 10.7% from \$5.8 million for the six months ended March 31, 1998 to \$6.4 million in the six months ended March 31, 1999. As a percentage of revenue, selling, general and administrative expenses increased from 22.0% for the six months ended March 31, 1998 to 24.3% for the six months ended March 31, 1999. A significant portion of the increase was due to increases in sales personnel headcount to support both domestic and foreign markets and general headcount additions to sustain internal administrative support.

Goodwill Amortization. EMCORE recognized approximately \$2.2 million of goodwill amortization for the six months ended March 31, 1999 in connection with the acquisition of MODE on December 5, 1997. As of March 31, 1999, EMCORE had approximately \$7.3 million of goodwill remaining, which will be fully amortized by December 2000.

Research and Development. Research and development expenses increased 74.8% from \$5.9 million in the six months ended March 31, 1998 to \$10.3 million in the six months ended March 31, 1999. As a percentage of revenue, recurring research and development expenses increased from 22.5% for the six months ended March 31, 1998 to 39.2% for the six months ended March 31, 1999. The increase was primarily attributable to EMCORE's acquisition of MODE, the startup of our new Albuquerque, New Mexico facility 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, RF materials and other optoelectronic devices. During the six months ended March 31, 1998, EMCORE recognized a \$19.5 million one-time charge for acquired in-process research and development relating to the purchase of MODE. To maintain growth and to continue to pursue market leadership in materials science technology, EMCORE expects to continue to invest a significant amount of its resources in research and development.

Operating Loss. EMCORE reported an operating loss of \$7.9 million for the six months ended March 31, 1999, as compared to an operating loss of \$20.3 million for the six months ended March 31, 1998. The change in operating loss was principally due to the \$19.5 million one-time charge for acquired in-process research and development in 1998, offset by the elimination of \$1.2 million of gross profit in 1999 on the three compound semiconductor production systems sold to a joint venture in which it has a 49% minority interest. In addition, EMCORE's 1999 operating loss was impacted by increased research and development spending, the loss generated from the

operations of MODE and the startup expenses associated with the opening of EMCORE's new Albuquerque, New Mexico facility.

Other Expense. During fiscal 1996, EMCORE issued detachable warrants along with subordinated notes to certain of its existing shareholders. 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. In June 1998, EMCORE issued 284,684 warrants to its Chairman and its Chief Executive Officer for providing a guarantee in connection with an 18-month credit facility with First Union National Bank. EMCORE also assigned a value to these warrants using the Black-Scholes option pricing model. The consequent expense of these warrant accretion amounts is charged to "Imputed warrant interest, non-cash" and equals approximately \$192,000 and \$633,000 for the six months ended March 31, 1998 and March 31, 1999, respectively.

For the six months ended, March 31, 1999, stated interest expense, net increased by \$577,000 to \$693,000 due to additional borrowing.

Because EMCORE does not have a controlling economic and voting interest in the Uniroyal, Union Miniere, and General Electric Lighting joint ventures, EMCORE accounts for these joint ventures under the equity method of accounting. For the six months ended March 31, 1999, EMCORE incurred a net loss of \$1.0 million related to the Uniroyal joint venture, a \$497,000 net loss related to the GELCore joint venture and a \$141,000 net loss related to the UMCORE joint venture.

Net Loss. For the six months period March 31, 1999, EMCORE reported net loss of \$10.9 million, a decrease of 47.5% from a \$20.7 million net loss for the six months ended March 31, 1998. The decrease in the year-to-date loss was attributable to the \$19.5 million write-off of acquired in-process research and development in connection with the acquisition of MODE on December 5, 1997 offset in part by an increase in research and development expenses and the net loss from unconsolidated affiliates.

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1997 AND 1998

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.

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 practical application of research	Completed 2/98 (in production)	Completed 5/98 (not in production)	Completed 12/98 (in production)	3.5 man years	8 man years	4 man years
Revised cost to complete	Completed	Completed	Completed	\$314	\$717	\$358
Estimated time development efforts will begin	Completed	Completed	Completed	Began 02/99	10/99	11/99
Reason for development/commercialization/production efforts delay	--	***	--	**	**	**

* one "man year" is defined as approximately 2,000 hours of effort (including training, holiday, etc.) by one individual, which is an approximation of a year of effort.

** development efforts curtailed as a result of EMCORE's redirection of its resources.

*** commercialization and production efforts curtailed as a result of EMCORE's redirection of its resources to other products due to market demand forces.

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. EMCORE has capitalized approximately \$0.5 million for MODE's workforce, which is included in goodwill and is offset against the values assigned in the table above.

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, 2.6% 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 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 expenses of \$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 for the fiscal year ended September 30, 1996 to \$47.8 million. 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 \$13.7 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. 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.

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 credit 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 \$4.0 million of non-cash imputed warrant interest associated with certain financing transactions.

QUARTERLY RESULTS OF OPERATIONS

The following tables present EMCORE's unaudited results of operations expressed in dollars and as a percentage of revenues for the ten most recently ended fiscal quarters. EMCORE believes that all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts below to present fairly the selected quarterly information when read in conjunction with the consolidated financial statements and notes included elsewhere in this prospectus. EMCORE's results from operations may vary substantially from quarter to quarter. Accordingly, the operating results for a quarter are not necessarily indicative of results for any subsequent quarter or for the full year.

	THREE MONTHS ENDED						
	DEC. 31, 1996	MAR. 31, 1997	JUNE 30, 1997	SEPT. 30, 1997	DEC. 31,* 1997	MAR. 31,* 1998	JUNE 30,* 1998
	(IN THOUSANDS)						
Revenues.....	\$ 8,591	\$12,929	\$14,106	\$12,127	\$12,357	\$13,808	\$ 9,074
Cost of sales.....	6,724	8,855	8,208	6,307	6,376	7,534	5,448
Gross profit.....	1,867	4,074	5,898	5,820	5,981	6,274	3,626
Operating expenses:							
Selling, general and administrative....	2,202	1,940	2,573	2,632	3,003	2,901	4,596
Goodwill amortization.....	--	--	--	--	343	1,099	1,098
Research and development:							
Recurring.....	2,250	1,987	2,418	2,346	2,836	2,889	5,887
One-time acquired in process.....	--	--	--	--	19,516	--	--
Total operating expenses.....	4,452	3,927	4,991	4,978	25,698	6,889	11,581
Operating (loss) income.....	(2,585)	147	907	842	(19,717)	(615)	(7,955)
Stated interest expense, net.....	197	249	(8)	82	70	47	211
Imputed warrant interest, non-cash.....	1,016	2,792	85	94	96	96	94
Equity in net loss of unconsolidated affiliate.....	--	--	--	--	--	--	--
Total other expense.....	1,213	3,041	77	176	166	143	305
(Loss) income before income taxes.....	(3,798)	(2,894)	830	666	(19,883)	(758)	(8,260)
Provision for income taxes.....	--	--	--	137	--	20	--
(Loss) income before extraordinary item.....	(3,798)	(2,894)	830	529	(19,883)	(778)	(8,260)
Extraordinary loss...	--	256	--	30	--	--	--
Net (loss) income....	\$(3,798)	\$(3,150)	\$ 830	\$ 499	(19,883)	\$ (778)	\$(8,260)

	THREE MONTHS ENDED		
	SEPT. 30,* 1998	DEC. 31,* 1998	MAR. 31, 1999
	(IN THOUSANDS)		
Revenues.....	\$ 8,521	\$10,125	\$16,072
Cost of sales.....	5,317	6,016	9,203
Gross profit.....	3,204	4,109	6,869
Operating expenses:			
Selling, general and administrative....	3,582	3,143	3,225
Goodwill amortization.....	1,098	1,099	1,098
Research and development:			
Recurring.....	4,883	5,924	4,348
One-time acquired in process.....	--	--	--
Total operating expenses.....	9,563	10,166	8,671

Operating (loss) income.....	(6,359)	(6,057)	(1,802)
Stated interest expense, net.....	626	230	463
Imputed warrant interest, non-cash.....	315	316	317
Equity in net loss of unconsolidated affiliate.....	198	276	1,395
Total other expense.....	1,139	822	2,175
(Loss) income before income taxes.....	(7,498)	(6,879)	(3,977)
Provision for income taxes.....	--	--	--
(Loss) income before extraordinary item.....	(7,498)	(6,879)	(3,977)
Extraordinary loss...	--	--	--
Net (loss) income....	<u>\$(7,498)</u>	<u>\$(6,879)</u>	<u>\$(3,977)</u>

	THREE MONTHS ENDED					
	DEC. 31, 1996	MAR. 31, 1997	JUNE 30, 1997	SEPT. 30, 1997	DEC. 31,* 1997	MAR. 31,* 1998
	(AS A PERCENTAGE OF REVENUES)					
Revenues.....	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales.....	78.3	68.5	58.2	52.0	51.6	54.6
Gross profit.....	21.7	31.5	41.8	48.0	48.4	45.4
Operating expenses:						
Selling, general and administrative.....	25.6	15.0	18.2	21.7	24.3	21.0
Goodwill amortization.....	--	--	--	--	2.8	7.9
Research and development:						
Recurring.....	26.2	15.4	17.1	19.3	23.0	20.9
One-time acquired in process.....	--	--	--	--	157.9	--
Total operating expenses.....	51.8	30.4	35.3	41.0	208.0	49.8
Operating (loss) income.....	(30.1)	1.1	6.5	7.0	(159.6)	(4.4)
Stated interest expense, net.....	2.3	1.9	(0.1)	0.7	0.6	0.3
Imputed warrant interest, non-cash...	11.8	21.6	0.6	0.8	0.8	0.7
Equity net loss of unconsolidated affiliate.....	--	--	--	--	--	--
Other expense.....	14.1	23.5	0.5	1.5	1.4	1.0
(Loss) income before income taxes.....	(44.2)	(22.4)	6.0	5.5	(161.0)	(5.4)
Provision for income taxes.....	--	--	--	1.1	--	0.2
(Loss) income before extraordinary item...	(44.2)	(22.4)	6.0	4.4	(161.0)	(5.6)
Extraordinary loss....	--	2.0	--	0.2	--	--
Net (loss) income.....	(44.2)%	(24.4)%	6.0%	4.2%	(161.0)%	(5.6)%

	THREE MONTHS ENDED			
	JUNE 30,* 1998	SEPT. 30,* 1998	DEC. 31,* 1998	MAR. 31, 1999
	(AS A PERCENTAGE OF REVENUES)			
Revenues.....	100.0%	100.0%	100.0%	100.0%
Cost of sales.....	60.0	62.4	59.4	57.3
Gross profit.....	40.0	37.6	40.6	42.7
Operating expenses:				
Selling, general and administrative.....	50.7	42.0	31.0	20.1
Goodwill amortization.....	12.1	12.9	10.9	6.8
Research and development:				
Recurring.....	64.9	57.3	58.5	27.0
One-time acquired in process.....	--	--	--	--
Total operating expenses.....	127.7	112.2	100.4	53.9
Operating (loss) income.....	(87.7)	(74.6)	(59.8)	(11.2)
Stated interest expense, net.....	2.3	7.3	2.3	2.9
Imputed warrant interest, non-cash...	1.0	3.7	3.1	2.0
Equity net loss of unconsolidated affiliate.....	--	2.3	2.7	8.6
Other expense.....	3.3	13.3	8.1	13.5
(Loss) income before income taxes.....	(91.0)	(87.9)	(67.9)	(24.7)
Provision for income taxes.....	--	--	--	--
(Loss) income before extraordinary item...	(91.0)	(87.9)	(67.9)	(24.7)

Extraordinary loss....	-----	-----	-----	-----
	--	--	--	--
Net (loss) income.....	(91.0)%	(87.9)%	(67.9)%	(24.7)%
	=====	=====	=====	=====

* As restated -- see Notes 15 and 20 to consolidated financial statements.

From inception through December 31, 1996, EMCORE derived the majority of its revenues from the sale of TurboDisc production systems. Beginning in January 1997, EMCORE expanded its product line to offer wafers and devices. Throughout fiscal 1997 and the first half of fiscal 1998, EMCORE benefited from the expanded product offerings. Early in fiscal 1998, the capital equipment market experienced a downturn and bookings of TurboDisc systems decreased substantially. The result was lower revenues for the last two quarters of fiscal 1998 and the first quarter of fiscal 1999.

Cost of sales was also affected by revenue shifts. Gross profit improved consistently from the introduction of the new product lines through the second quarter of fiscal 1998. Thereafter, gross profit was affected primarily by reduced revenues and the resulting under-absorbed overhead.

Operating expenses have generally increased both in absolute dollars and as a percentage of revenues, due to increased staffing in research and development, sales and marketing, and general and administrative functions. The increase in research expenditures was related to the development of systems for the processing of gallium nitride materials used in the production of blue HB LEDs, enhancement of production systems, and the introduction of wafers and devices, in particular, MR sensors,

VCSELS and solar cells. Selling, general and administrative expenses increased as a result of increased marketing and sales related activities, including the hiring of additional personnel, commissions, customer samples, expansion of facilities, and the opening of field offices in Taiwan and California.

EMCORE has experienced and expects to continue to experience significant fluctuations in quarterly results. Factors which have had an influence on and may continue to influence EMCORE's operating results in a particular quarter include, but are not limited to the timing of receipt of orders, cancellation, rescheduling or delay in product shipment or supply deliveries, product mix, competitive pricing pressures, EMCORE's ability to design, manufacture and ship products on a cost effective and timely basis, including the ability of EMCORE to achieve and maintain acceptable production yields for wafers and devices, regional economic conditions and the announcement and introduction of new products by EMCORE and by its competitors. The timing of sales of EMCORE's TurboDisc production systems may cause substantial fluctuations in quarterly operating results due to the substantially higher per unit price of these products relative to EMCORE's other products. If the compound semiconductor industry experiences downturns or slowdowns, EMCORE's business, financial condition and results of operations may be materially and adversely affected.

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents decreased by \$2.8 million from \$4.5 million at September 30, 1998 to \$1.6 million at March 31, 1999. For the six months ended March 31, 1999, net cash used for operations amounted to \$5.9 million, primarily due to EMCORE's net losses and an increase in accounts receivable which was partially offset by EMCORE's non-cash depreciation and amortization charges and an increase in advance billings.

For the six months ended March 31, 1999, net cash used for investment activities amounted to \$16.2 million, primarily due to the purchase and manufacture of new equipment for the facilitation of EMCORE's wafer and device product lines, and clean room modifications and enhancements of approximately \$10.4 million, as well as investments in unconsolidated affiliates of approximately \$5.8 million.

Net cash provided by financing activities for the six months ended March 31, 1999 amounted to approximately \$19.2 million, primarily due to the \$21.2 million of net proceeds from the private placement of preferred stock in November 1998 and short-term related party borrowings of \$5.1 million. This was offset by debt repayments of \$7.0 million on short-term related party debt.

EMCORE's Chairman has committed to provide up to \$30.0 million of long-term financing to EMCORE through July 1, 2000. This commitment terminates upon completion of any public offering of EMCORE's common stock, subject to a minimum offering size requirement of \$40.0 million.

On January 27, 1999 EMCORE borrowed \$3.0 million from its Chairman, Thomas J. Russell. This loan bears interest at 8% per annum. On February 1, 1999, EMCORE repaid this loan from borrowings under a new loan from First Union National Bank. On February 1, 1999, EMCORE entered into a \$5.0 million short-term note with First Union that matures in May 1999. This note bears interest at a rate equal to one-month LIBOR plus three quarters of one percent per annum.

On April 29, 1999, EMCORE borrowed \$2.5 million from its Chairman. The loan bears interest at prime rate plus 2% per annum. On May 7, 1999, the loan was repaid from borrowings under EMCORE's \$19.0 million short-term note, as discussed below.

On April 29, 1999, EMCORE entered into a \$19.0 million short-term loan agreement with First Union. This loan agreement represented a consolidation of the \$8.0 million loan agreement dated June 22, 1998 and \$5.0 million short-term loan agreements dated February 1, 1999, and an additional note of \$6.0 million. This new loan agreement is due and payable on 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 14, 1999). On May 7, 1999, EMCORE used borrowings under this new loan agreement to repay the \$2.5 million short-term note from EMCORE's Chairman. As of May 14, 1999, EMCORE had borrowed approximately \$17.5 million under this new loan agreement. This new loan agreement is guaranteed by EMCORE's Chairman and Chief Executive Officer.

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 our joint ventures. Capital spending in 1999 also is expected to include upgrading manufacturing facilities, continued investment in analytical and diagnostic research and development equipment, upgrading and purchasing computer equipment, and the manufacture of TurboDisc systems for in-house use.

EMCORE believes that its current liquidity, together with available credit, should be sufficient to meet its cash needs for working capital through July 2000. However, if the available credit facilities, cash generated from operations and cash on hand are not sufficient to satisfy EMCORE's liquidity requirements, EMCORE will seek to obtain additional equity or debt financing. Additional funding may not be available when needed or on terms acceptable to EMCORE. If EMCORE is required to raise additional financing and if adequate funds are not available or not available on acceptable terms, the ability to continue to fund expansion, develop and enhance products and services, or otherwise respond to competitive pressures will be severely limited. Such a limitation could have a material adverse effect on EMCORE's business, financial condition or operations.

In connection with the GELcore joint venture, EMCORE issued to General Electric common stock purchase warrants to purchase 282,010 shares of EMCORE's common stock at an exercise price of \$22.875, which will expire in 2006. The number of common stock purchase warrants was determined based on the market price of EMCORE's common stock on March 31, 1999. General Electric purchased a \$7.8 million subordinated convertible debenture bearing interest at 4.75% per annum and maturing in 2006. The debenture's interest rate is subject to adjustment in the event EMCORE does not complete a public offering by June 30, 1999. The debenture is convertible into 340,984 shares of common stock at a conversion price equal to \$22.875. Proceeds from the debenture were used to fund EMCORE's investment in GELcore.

In January 1999, Rockwell settled litigation which challenged the validity of certain patents which EMCORE licensed from Rockwell prior to the commencement of the litigation. As a result of this settlement, EMCORE will be required to pay Rockwell a royalty including interest under our license agreement relating to

TurboDisc tools. EMCORE believes it has adequately accrued for these royalties. In addition, prior to the commencement of the litigation, EMCORE had initiated discussions with Rockwell to receive additional licenses to permit EMCORE to use the technology to manufacture and sell wafers and devices. EMCORE may be required to pay royalties to Rockwell for certain past sales of wafers and devices to customers who do not hold licenses directly from Rockwell. Management has reviewed and reassessed the royalty agreements and concluded that it has the appropriate amounts reserved for at both September 30, 1998 and March 31, 1999. The Rockwell patent expires in January 2000 and we may require additional licenses from Rockwell in order to continue to manufacture and sell wafers and devices. The failure to obtain licenses to manufacture these wafers and devices on commercially reasonable terms may materially and adversely affect our business, financial condition and results of operations through January 2000.

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 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.

In June 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 EMCORE.

BUSINESS

EMCORE CORPORATION

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 communica-

tions, 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.

(TurboDisc Diagram)

Wafers are loaded on a multiple wafer platter into the growth chamber, where they are subjected to high-temperature vacuum conditions and spun at high speeds. Gases are then introduced into the vacuum growth chamber, and semiconductor materials become deposited onto the substrate in a highly uniform manner.

EMCORE offers the following family of TurboDisc systems:

MODEL	LIST PRICE	APPLICATION
Explorer	\$350,000 -- \$450,000	Research
Discovery	\$600,000 -- \$1,300,000	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.

PRODUCTS AND STRATEGIC RELATIONSHIPS			
PRODUCT LINE	COMPANY	NATURE OF RELATIONSHIP	APPLICATION
Solar Cells	Space Systems/Loral	Long-term supply agreement	Solar panels in communications satellite power systems.
	Lockheed Martin Missiles and Space Union Miniere Inc.	Strategic partner Long-term germanium sourcing agreement from Union Miniere	
HB LEDs	General Electric Lighting	GELcore joint venture 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)
MR sensors	Micro Optical Devices, Inc.	Acquisition	Antilock brake systems Brushless motors Engine timing sensors
	Optek Technology, Inc.	Emtech joint venture for packaging and marketing of MR sensors	
Germanium research and development	General Motors	Long-term supply agreement	Cam and crank shaft sensors
	Union Miniere Inc.	UMCore joint venture	Exploring alternative uses for germanium substrates
RF materials	Sumitomo Electric Industries, Ltd.	Cooperative development agreement Long-term supply agreement	Digital wireless and cellular applications

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. EMCORE anticipates completing this qualification in June 1999. 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 May 1999, EMCORE and General Electric Lighting formed 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 March 31, 1999 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.

In May 1999, Sumitomo Electric and EMCORE announced a long-term agreement to jointly develop and produce certain RF materials for use in digital

wireless and cellular applications. EMCORE will manufacture these RF materials at our Somerset, New Jersey manufacturing facility and Sumitomo Electric will market them in Japan. Sumitomo Electric is one of the world's leading electronics manufacturers. Shipments of sample volumes of materials commenced in June 1999.

CUSTOMERS

EMCORE's customers include many of the largest semiconductor, telecommunications, consumer goods and computer manufacturing companies in the world. Sales to Hughes-Spectrolab accounted for 17.3% of EMCORE's revenues in fiscal 1998 and 3.8% of EMCORE's revenues in the first six months of 1999. Sales to General Motors accounted for 12.8% of EMCORE's revenues in fiscal 1998 and 10.8% of EMCORE's revenues in the first six months of 1999. 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
 The Boeing Company
 General Motors
 Hewlett Packard
 Honeywell
 Hughes-Spectrolab
 Hyundai Electronics
 IBM
 LG Semiconductor
 L.M. Ericsson AB
 Lucent Technologies
 Motorola
 Northrop Grumman
 Philips AG
 Polaroid
 Rockwell International
 Samsung
 Sharp U.S.A.
 Siemens AG
 Texas Instruments
 Thomson CSF
 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. As of March 31, 1999, EMCORE employed 27 field service engineers who install EMCORE systems and provide on-site support.

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. As of March 31, 1999, EMCORE employed 26 persons in sales and marketing.

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,						SIX MONTHS ENDED MARCH 31, 1999	
	1996		1997		1998		1999	
	(\$ IN MILLIONS)							
United States.....	\$16.0	57.6%	\$27.7	57.9%	\$26.7	61.0%	\$18.1	69.1%
Asia.....	8.2	29.5	14.6	30.6	15.5	35.4	8.0	30.5
Europe.....	3.6	12.9	5.5	11.5	1.6	3.6	0.1	0.4
Total.....	\$27.8	100.0%	\$47.8	100.0%	\$43.8	100.0%	\$26.2	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 \$10.3 million in the first six months of fiscal 1999, \$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. As of March 31, 1999, EMCORE employed 50 persons in research and development, 14 of whom held Ph.D.s in materials science or related fields.

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 March 31, 1999, government and other external research contracts have provided approximately \$13.3 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. Management has reviewed and reassessed the royalty agreements and concluded that it has the appropriate amounts reserved for at both September 30, 1998 and March 31, 1999. Additionally, 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 March 31, 1999, EMCORE had an order backlog of \$38.3 million, scheduled to be shipped through March 31, 2000. This represented an increase of 69% since September 30, 1998. This increase primarily relates to increased production systems bookings in Asia and an initial order for solar cells from Loral, which is subject to product qualification. 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. As of March 31, 1998, EMCORE had 158 employees involved in manufacturing. 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 March 31, 1999, EMCORE had 326 full-time employees. None of EMCORE's employees is covered by a collective bargaining agreement. EMCORE considers its relationship with its employees to be good.

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	FUNCTION	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.

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.

MANAGEMENT

EXECUTIVE OFFICERS AND DIRECTORS

EMCORE's executive officers and directors and their ages and positions are as follows:

NAME	AGE	POSITION
Thomas J. Russell, Ph.D(1)(2).....	67	Chairman of the Board
Reuben F. Richards, Jr.(2).....	43	President, Chief Executive Officer and Director
Thomas G. Werthan.....	42	Vice President--Finance, Chief Financial Officer, Secretary, and Director
Richard A. Stall(2).....	42	Vice President--Technology, Chief Technical Officer and Director
William J. Kroll.....	54	Executive Vice President--Strategic Planning
Paul Rotella.....	44	Vice President
Louis A. Koszi.....	54	Vice President
Thomas M. Brennan.....	45	Vice President
Robert P. Bryan.....	33	Vice President
Craig W. Farley.....	39	Vice President
David D. Hess.....	37	Corporate Controller
Robert Louis-Dreyfus.....	52	Director
Hugh H. Fenwick(1)(3).....	62	Director
Shigeo Takayama(3).....	82	Director
Charles T. Scott(1)(3).....	49	Director
John J. Hogan, Jr.....	54	Director

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- (1) Member of Compensation Committee
 - (2) Member of Nominating Committee
 - (3) Member of Audit Committee

Thomas J. Russell, Ph.D. has been a director of EMCORE since May 1995 and was elected Chairman of the Board in December 1996. Dr. Russell founded Bio/Dynamics, Inc. in 1961 and managed the company until its acquisition by IMS International in 1973, following which he served as President of that company's Life Sciences Division. From 1984 until 1988, he served as Director, then as Chairman of IMS International until its acquisition by Dun & Bradstreet in 1988. From 1988 to 1992, he served as Chairman of Applied Biosciences, Inc. Since 1992, he has been an investor and director of several companies. Dr. Russell currently serves as a director of Cordiant plc and Adidas AG. Dr. Russell is one of three trustees of the AER 1997 Trust, and he was Chairman and a member of Jesup & Lamont Merchant Partners, L.L.C. (JLMP).

Reuben F. Richards, Jr. joined EMCORE in October 1995 as its President and Chief Operating Officer and became Chief Executive Officer in December 1996. Mr. Richards has been a director of EMCORE since May 1995. From September 1994 to December 1996, Mr. Richards was a Senior Managing Director of Jesup & Lamont Capital Markets Inc. (JLCM), an affiliate of a registered broker-dealer. From December 1994 to 1997, he was a member of and President of JLMP. From 1992 until 1994, Mr. Richards was a principal with Hauser, Richards & Co., a firm engaged in corporate restructuring and management turnarounds. From 1986 until 1992, Mr. Richards was a Director at Prudential-Bache Capital Funding in its Investment Banking Division. Mr. Richards is on the management boards of Emtech, Uniroyal Optoelectronics and GELcore.

Thomas G. Werthan joined EMCORE in 1992 as its Chief Financial Officer, Vice President--Finance, Secretary and a director. Mr. Werthan is a Certified Public Accountant and has over sixteen years experience in assisting high technology, venture capital financed growth companies. Prior to joining EMCORE in 1992, he was associated with The Russell Group, a venture capital partnership, as Chief Financial Officer for several portfolio companies. The Russell Group is affiliated with Thomas J. Russell, who was a member of and Chairman of JLMP and is Chairman of the board of directors of EMCORE. From 1985 to 1989, Mr. Werthan served as Chief Operating Officer and Chief Financial Officer for Audio Visual Labs, Inc., a manufacturer of multimedia and computer graphics equipment.

Richard A. Stall, Ph.D became a director of EMCORE in December 1996. Dr. Stall helped found EMCORE in 1984 and has been Vice President--Technology at EMCORE since October 1984, except for a sabbatical year in 1993 during which Dr. Stall acted as a consultant to EMCORE and his position was left unfilled. Prior to 1984, Dr. Stall was a member of the technical staff of AT&T Bell Laboratories and was responsible for the development of molecular beam epitaxy technologies. He has co-authored more than 75 papers and holds four patents on MBE and MOCVD technology and the characterization of compound semiconductor materials.

William J. Kroll joined EMCORE in 1994 as Vice President--Business Development and in 1998 became Executive Vice President -- Strategic Planning. Prior to 1994, Mr. Kroll served for seven years as Senior Vice President of Sales and Marketing for Matheson Gas Products, Inc., a manufacturer and distributor of specialty gases and gas control and handling equipment. In that position, Mr. Kroll was responsible for \$100 million in sales and 700 employees worldwide. Prior to working at Matheson Gas Products, Mr. Kroll was Vice President of Marketing for Machine Technology, Inc., a manufacturer of semiconductor equipment for photoresistor applications, plasma strip, and related equipment.

Paul Rotella joined EMCORE in 1996 as Director of Manufacturing and has served as Vice President of TurboDisc Manufacturing since October 1997. Prior to 1996, Mr. Rotella served for three years as worldwide Manufacturing Operations Manager for Datacolor International, a manufacturer of color measurement and control instrumentation. Prior to working at Datacolor International, Mr. Rotella spent 18 years with AlliedSignal Inc., where he held various positions including Manufacturing Engineer, Manufacturing Engineering Manager and Program Manager of Quality Improvement Systems.

Louis A. Koszi joined EMCORE in 1995 as Vice President--Device Manufacturing and is presently on a 2 year assignment as Chief Operating Officer of Uniroyal Optoelectronics, LLC the Company's joint venture with Uniroyal Technology, Inc. Prior to 1995, Mr. Koszi was a member of AT&T Bell Laboratories for 25 years. Mr. Koszi has experience in all phases of semiconductor device design and manufacturing processes and associated quality programs. Mr. Koszi holds 17 U.S. patents, five foreign patents, and is a co-author of 35 publications. He was named a Distinguished Member of Technical Staff in 1989. In 1992, he was presented with the Excellence in Engineering from the Optical Society of America.

Thomas M. Brennan joined EMCORE as a result of EMCORE's acquisition of MODE in December 1997 and now serves as a Vice President of EMCORE. Prior to co-founding MODE, Mr. Brennan was a senior member of the technical staff at Sandia National Laboratories from 1986 to 1996. At Sandia, he focused his efforts on the material growth of III-V compound semiconductors, reactor design, in-situ reactor diagnostics, and material characterization. His responsibilities and activities included growth of some of the first VCSEL material at Sandia and in the U.S., and development of new and unique manufacturing techniques for VCSEL material growth. Prior to joining Sandia, Mr. Brennan was a member of the technical staff at AT&T Bell Laboratories from 1980 to 1984. At both facilities, he focused his efforts on epitaxial materials growth and characterization and epitaxial reactor design.

Robert P. Bryan joined EMCORE as a Vice President as a result of EMCORE's acquisition of MODE in December 1997. Prior to co-founding MODE in 1995, he was a co-founder of Vixel Corporation in 1992, a company that develops and manufactures VCSEL devices for data links. At Vixel, he was the executive in charge of optoelectronic product development, including all engineering management. From 1990 to 1992, he was a senior member of the technical staff at Sandia National Laboratories where his research focused on the areas of VCSEL design, fabrication and characterization.

Craig W. Farley joined EMCORE in June 1998 as Vice President--Wafer Manufacturing and is presently Vice President of Electronic Materials which includes responsibility for antimonide sensors, RF materials, optoelectronic devices, and EMCORE's Research and Applications laboratory. Dr. Farley has experience in all phases of compound semiconductor device design and manufacturing. Prior to joining EMCORE, he spent 11 years at Rockwell International Corporation where he served as a member of the technical staff at Rockwell's Science Center from 1987 to 1994 and as Manager of Advanced Device Technology for Rockwell's Gallium Arsenide Manufacturing facility from 1994 to 1998.

David D. Hess joined EMCORE in 1989 as General Accounting Manager. He was named Corporate Controller in 1990. Mr. Hess is a Certified Public Accountant and has more than fifteen years experience in monitoring and controlling all phases of product and process cost and general accounting systems. Prior to his employment at EMCORE, he held several positions as cost accounting manager, divisional accountant and inventory control supervisor in manufacturing firms such as Emerson Quiet Kool (air conditioner manufacturers), Huls North America (paint/solvent processors), and Brintec Corporation (screw machine part manufacturers).

Robert Louis-Dreyfus has been a director of EMCORE since March 1997. Mr. Louis-Dreyfus has been the Chairman of the Board and Chief Executive Officer of Adidas AG since April 1993. Prior to that time, he had been from 1990 until 1993 the Chief Executive Officer of Saatchi & Saatchi plc (now Cordiant plc) and a Director of Saatchi & Saatchi plc from January 1990 until December 1994. Since 1992, he has been an investor and a Director of several other companies. From 1982 until 1988, he served as Chief Operating Officer (1982 to 1983) and then as Chief Executive Officer (from 1984 to 1988) of IMS International until its acquisition by Dun & Bradstreet in 1988. Mr. Louis-Dreyfus controls Gallium Enterprises Inc., and he was a member of JLMP.

Hugh H. Fenwick served as a director of EMCORE from 1990 until 1995, and was again elected to serve on EMCORE's board of directors in June 1997. Since 1992, Mr. Fenwick has been a private investor and he currently holds the office of Mayor of Bernardsville, New Jersey, to which he was elected in 1994. From 1990 until 1992, Mr. Fenwick was the Executive Director of the Alliance for Technology Management at the Stevens Institute in Hoboken, New Jersey. Prior to that time, Mr. Fenwick worked as a marketing executive with Lockheed Electronics and with Alenia (formerly Selenia), an Italian subsidiary of Raytheon.

Shigeo Takayama became a director of EMCORE in July 1997. Mr. Takayama is the Chairman, President and founder of Hakuto, EMCORE's distributor of EMCORE's products in Japan, China and Singapore. Mr. Takayama is a Director Emeritus of Semiconductor Equipment & Material International (SEMI), Chairman of the Japan Electronics Products Importers Association (JEPIA), and Director of the Japan Machinery Importers' Association (JMIA). Mr. Takayama is also a director of Temptronic Corp., a semiconductor test equipment manufacturer in Newton, Massachusetts, and of Anatel Corp., a TOC high-purity water monitor manufacturer in Boulder, Colorado.

Charles T. Scott became a director of EMCORE in February 1998. Mr. Scott is presently Chairman of Cordiant Communications Group plc, the successor corporation of the Saatchi & Saatchi Advertising Group. He joined Saatchi & Saatchi Company in 1990 and served as Chief Financial Officer until 1992 when he was appointed Chief Operating Officer. In 1993, he became Chief Executive Officer and held that position until 1996 when he assumed the title of Chairman.

John J. Hogan, Jr. became a director of EMCORE in February 1999. Mr. Hogan has been President of a private investment management company since October 1997. Prior to that time, he had been with the law firm of Dewey Ballentine since 1969. He also serves as a director of several other corporations and is a former executive officer and/or director of various subsidiaries of S.A. Louis Dreyfus en Cie.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In the last week of May 1999, EMCORE and General Electric Lighting formed a joint venture to develop and market HB LED lighting products. In connection with consummation of this joint venture, EMCORE issued to General Electric warrants to purchase 282,010 shares of EMCORE common stock, which will expire in 2006 and have an exercise price of \$22.875. In addition, General Electric purchased a \$7.8 million subordinated convertible debenture bearing interest at 4.75% per annum and maturing in 2006. The debenture is convertible into 340,984 shares of common stock at General Electric's option.

On April 29, 1999, EMCORE borrowed \$2.5 million from its Chairman at an interest rate of prime plus two percent. On May 7, 1999, EMCORE repaid the loan from borrowings from First Union.

In January 1999, EMCORE's Chairman advanced \$3.0 million to EMCORE. These funds were repaid with borrowings under a new \$5.0 million credit facility with First Union National Bank. The Chairman has also committed to provide up to \$30.0 million of long-term financing to EMCORE through July 1, 2000. This commitment terminates upon completion of this offering, subject to a minimum offering size requirement of \$40.0 million.

On November 30, 1998, EMCORE completed a private placement of an aggregate of 1,550,000 shares of Series I Preferred Stock to Hakuto, Union Miniere Inc. and Uniroyal Technology Corporation. The net proceeds to EMCORE from the private placement were approximately \$21.2 million which has been used (1) to repay \$8.5 million of debt, plus interest, to EMCORE's Chairman of the Board, Dr. Thomas Russell, (2) to fund EMCORE's \$5.0 million portion of a joint venture between EMCORE and Uniroyal Technology Corporation to develop and manufacture HB LEDs and (3) to fund EMCORE's \$600,000 portion of its joint venture with Union Miniere Inc. The remaining net proceeds from the private placement of convertible preferred stock were used to acquire capital equipment for EMCORE's new Albuquerque, New Mexico manufacturing facility and for working capital purposes.

In September and October 1998, EMCORE borrowed an aggregate of \$8.5 million from its Chairman, Thomas J. Russell. The loan bears interest at 9.75% per annum. The entire \$8.5 million borrowed from Mr. Russell was repaid from the proceeds of the private placement of preferred stock.

On June 22, 1998, EMCORE entered into the 1998 Agreement with First Union National Bank. The 1998 Agreement was guaranteed by the Chairman and the Chief Executive Officer of EMCORE. In return for guaranteeing the facility, EMCORE granted the Chairman and the Chief Executive Officer an aggregate of 284,684 common stock purchase warrants at an exercise price of \$11.375 per share which expire May 1, 2001. These warrants are callable at EMCORE's option at \$0.85 per warrant if EMCORE's common stock has traded at or above 150% of the exercise price for a period of 30 days. The warrant exercise price was equal to the market price of the Company's common stock on the date of grant. An accounting value of \$1.3 million was assigned to these warrants based upon the EMCORE's application of the Black-Scholes option pricing model.

The President of Hakuto Co., Ltd., EMCORE's Asian distributor, is a member of EMCORE's board of directors and Hakuto Co., Ltd. is a minority shareholder of EMCORE. During the year ended September 30, 1998, sales made through Hakuto Co., Ltd. approximated \$9.2 million.

In February 1998, EMCORE and Uniroyal Technology Corporation formed Uniroyal Optoelectronics, a joint venture to produce and market compound semiconductor products. EMCORE has a non-controlling minority interest in the joint venture. During the first six months of fiscal 1999, EMCORE sold three TurboDisc systems to the joint venture for a total of \$5.3 million. As of March 31, 1999, EMCORE's investment in this venture amounted to \$4.3 million.

In fiscal 1997, EMCORE signed a non-exclusive and non-refundable technology licensing and royalty agreement with Uniroyal Technology Corporation for the process technology to develop and manufacture HB LEDs. During fiscal 1998 and 1997, revenue associated with the Uniroyal Technology Corporation licensing agreement amounted to \$2.5 million and \$2.5 million, respectively. At the time the transaction was originally entered into, Uniroyal Technology Corporation's Chairman and Chief Executive Officer was a member of EMCORE's board of directors and EMCORE's Chairman was on the Board of Directors of Uniroyal Technology Corporation.

All related party transactions were approved by a majority of the disinterested members of EMCORE's board of directors.

PRINCIPAL AND SELLING SHAREHOLDERS

The following table sets forth certain information known to EMCORE with respect to beneficial ownership of its common stock as of May 1, 1999 and as adjusted to reflect the sale of the shares offered pursuant to this prospectus by: (1) each person who is known by EMCORE to be the beneficial owner of five percent or more of the its common stock; (2) each of EMCORE's directors; (3) each of EMCORE's executive officers; (4) all officers and directors of EMCORE as a group (16 persons); and (5) each other selling shareholder. Except as otherwise indicated, EMCORE believes, based on information furnished by such persons, that each person listed below has the sole voting and investment power over the shares of common stock shown as beneficially owned, subject to common property laws, where applicable. Unless otherwise noted, the address for the individuals listed below is c/o EMCORE Corporation, 394 Elizabeth Avenue, Somerset, NJ 08873.

NAME OF BENEFICIAL OWNER:	SHARES BENEFICIALLY OWNED PRIOR TO THE OFFERING		SHARES ISSUABLE UPON EXERCISE OF		SHARES OFFERED	SHARES BENEFICIALLY OWNED AFTER THE OFFERING			
	NUMBER	PERCENT	OPTIONS	WARRANTS		NUMBER	PERCENT		
	Thomas J. Russell.....	2,459,991	24.0%	--		741,657(1)	--	2,459,991	17.9%
	Reuben F. Richards, Jr.....	518,957	5.3	79,412		149,952	--	518,957	3.9
Thomas G. Werthan.....	131,536	1.4	64,421	23,586	15,000	116,536	*		
Richard A. Stall.....	170,823	1.8	96,248	30,012	10,000	160,823	1.2		
Robert Louis-Dreyfus.....	1,650,582	16.6	--	432,535(2)	--	1,650,582	12.3		
Hugh H. Fenwick.....	6,879	*	--	--	--	6,879	*		
Shigeo Takayama(3).....	706,653	7.4	--	--	--	706,653	5.4		
Charles Scott.....	3,857	*	--	--	--	3,857	*		
John J. Hogan, Jr.....	--	*	--	--	--	--	*		
Thomas Brennan.....	265,128	2.8	39,141	--	40,000	225,128	1.7		
Robert Bryan.....	265,128	2.8	39,141	--	50,000	215,128	1.6		
Craig Farley.....	--	*	--	--	--	--	*		
David D. Hess.....	8,665	*	4,412	--	--	8,665	*		
Louis A. Koszi.....	10,098	*	10,098	--	--	10,098	*		
William J. Kroll.....	79,990	*	21,085	16,134	6,000	73,900	*		
Paul Rotella.....	3,578	*	3,578	--	--	3,578	*		
All directors and executive officers as a group (16 persons).....	6,281,865	57.3	353,957	1,110,357	--	6,281,865	44.5		
The AER 1997 Trust(4)....	1,588,063	16.5	--	141,504	--	1,588,063	12.1		
Gallium Enterprises, Inc.(5).....	1,218,047	12.3	--	432,535	--	1,218,047	9.1		
Union Miniere Inc.(6)....	642,857	6.8	--	--	250,000	392,857	3.0		
Uniroyal Technology Corporation(7).....	642,857	6.8	--	--	270,000	372,857	2.8		
Hakuto Co., Ltd.....	706,653	7.4	--	--	--	706,653	5.4		
General Electric(8).....	--	--	--	--	--	--	*		
Alfred T. Copeland, Jr.....	8,000	*	--	8,000	8,000	--	*		
Howard F. Curd.....	402,063	5.2	--	--	93,015	309,048	3.1		
Howard R. Curd.....	420,563	5.4	--	--	93,015	327,548	3.2		
Charles Maxwell.....	42,511	*	--	42,511	10,511	32,000	*		
Harold J. O'Keefe.....	6,869	*	--	3,069	3,069	3,800	*		
Norman E. Schumaker.....	148,611	1.6	--	138,831	48,831	99,780	*		

* Less than 1.0%

(1) With 141,504 held by the AER 1997 Trust -- see note 4.

(2) Held by Gallium Enterprises Inc. -- see note 5.

- (3) Includes 442,368 shares of Common Stock and 264,286 shares of convertible preferred stock owned by Hakuto Co., Ltd., which is controlled by Shigeo Takayama.
- (4) Dr. Thomas J. Russell, one of the three trustees for The AER 1997 Trust, is the Chairman of EMCORE. After January 13, 2002, Avery E. Russell, the daughter of Thomas J. Russell will be the primary beneficiary of the trust. The address of The AER 1997 Trust is 117 Leabrook Lane, Princeton, NJ 10854.
- (5) Gallium Enterprises Inc. is controlled by Robert Louis-Dreyfus, a member of the board of directors of EMCORE. The address of Gallium Enterprises, Inc. is c/o Harborstone Capital Management., 152 West 57th Street, 21st Floor, New York, New York 10019.
- (6) Includes 642,857 shares of convertible preferred stock. The address of Union Miniere Inc. is 13847 West Virginia Drive, Lakewood, Colorado 80228.
- (7) Includes 642,857 shares of convertible preferred stock. The address of Uniroyal Technology Corporation is Two North Tamiami Trail, Suite 900, Sarasota, Florida 34236.
- (8) In connection with the consummation of the GELcore joint venture, EMCORE issued to General Electric common stock purchase warrants for 282,010 shares of EMCORE common stock based on the stock price as of this offering or the closing price on March 31, 1999. Those warrants have an exercise price of \$22.875 and will expire in 2006. General Electric also purchased a \$7.8 million subordinated convertible debenture that is convertible into 340,984 shares of common stock at General Electric's option.

UNDERWRITING

Subject to the terms and conditions set forth in an underwriting agreement, the underwriters named below, who are represented by Donaldson, Lufkin & Jenrette Securities Corporation, Prudential Securities Incorporated, Needham & Company, Inc. and SoundView Technology Group, Inc. have severally agreed to purchase from EMCORE and the selling shareholders the respective number of shares of common stock set forth opposite their names below.

UNDERWRITERS:	NUMBER OF SHARES
Donaldson, Lufkin & Jenrette Securities Corporation.....	
Prudential Securities Incorporated.....	
Needham & Company, Inc.....	
SoundView Technology Group, Inc.....	--

Total.....	=====

The underwriting agreement provides that the obligations of the several underwriters to purchase and accept delivery of the shares of common stock offered hereby are subject to approval by their counsel of certain legal matters and certain other conditions. The underwriters are obligated to purchase and accept delivery of all the shares of common stock offered hereby (other than those shares covered by the over-allotment option described below) if any are purchased.

The underwriters initially propose to offer the shares of common stock in part directly to the public at the public offering price set forth on the cover page of this prospectus and in part to certain dealers (including the underwriters) at such price less a concession not in excess of \$ per share. The underwriters may allow, and such dealers may re-allow, to certain other dealers a concession not in excess of \$ per share. After the initial offering of the common stock, the public offering price and other selling terms may be changed by the representatives at any time without notice.

DLJdirect, Inc., an affiliate of Donaldson, Lufkin & Jenrette Securities Corporation and a member of the selling group, is facilitating the distribution of the shares sold in the offering over the Internet. The underwriters have agreed to allocate a limited number of shares to DLJdirect, Inc. for sale to its brokerage account holders.

EMCORE has granted to the underwriters an option, exercisable within 30 days after the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of 555,000 additional shares of common stock at the public offering price less underwriting discounts and commissions. The underwriters may exercise such option solely to cover over-allotments, if any, made in connection with this offering. To the extent that the underwriters exercise such option, each underwriter will become obligated, subject to certain conditions, to purchase its pro rata portion of such additional shares based on such underwriter's percentage underwriting commitment as indicated in the preceding table.

EMCORE and the selling shareholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, or to contribute to payments that the underwriters may be required to make in respect thereof.

Each of EMCORE, its executive officers and directors and certain shareholders of EMCORE (including the selling shareholders) has agreed, subject to certain exceptions, not to (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any common stock (regardless of whether any of the transactions described in clause (i) or (ii) is to be settled by the delivery of common stock, or such other securities, in cash or otherwise) for a period of 90 days after the date of the prospectus without the prior written consent of Donaldson, Lufkin & Jenrette. In addition, during such period, EMCORE has also agreed not to file any registration statement with respect to, and each of its executive officers, directors and certain shareholders of EMCORE (including the selling shareholders) has agreed not to make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock without the prior written consent of Donaldson, Lufkin & Jenrette.

Other than in the United States, no action has been taken by EMCORE, the selling shareholders or the underwriters that would permit a public offering of the shares of common stock offered hereby in any jurisdiction where action for that purpose is required. The shares of common stock offered hereby may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such shares of common stock be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of such jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to this offering of the common stock and the distribution of this prospectus. This prospectus does not constitute an offer to sell or solicitation of an offer to buy any shares of common stock offered hereby in any jurisdiction in which such an offer or a solicitation is unlawful.

The underwriters and dealers may engage in passive market making transactions in the common stock in accordance with Rule 103 of Regulation M promulgated by the Commission. In general, a passive market maker may not bid for or purchase shares of common stock at a price that exceeds the highest independent bid. In addition, the net daily purchases made by any passive market maker generally may not exceed 30% of its average daily trading volume in the common stock during a specified two-month period, or 200 shares, whichever is greater. A passive maker must identify passive market making bids as such on the Nasdaq electronic inter-dealer reporting system. Passive market making may stabilize or maintain the market price of the common stock above independent market levels. Underwriters and dealers are not required to engage in passive market making and may end passive market making activities at any time.

In connection with the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may overallocate this offering, creating a syndicate short position. In addition, the underwriters may bid for and purchase shares of common stock in the open market to cover syndicate short positions or to stabilize the price of the common stock. Finally, the underwriting syndicate may reclaim selling concessions from

syndicate members in the offering, if the syndicate repurchases previously distributed common stock in syndicate covering transactions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the common stock above independent market levels. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for EMCORE by White & Case LLP, Miami, Florida, who may rely upon Dillon, Bitar & Luther, New Jersey counsel for EMCORE as to matters of New Jersey law. Certain legal matters in connection with this offering will be passed upon for the underwriters by Brobeck, Phleger & Harrison LLP, New York, New York.

EXPERTS

The consolidated financial statements of EMCORE as of September 30, 1998 and for the year then ended included and incorporated by reference in this prospectus, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which expresses an unqualified opinion and includes an explanatory paragraph relating to a restatement described in Note 20), which is included and incorporated by reference herein, and has been so included and incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The balance sheet of EMCORE as of September 30, 1997, and the statements of operations, shareholders' equity and cash flow for the two year period ended September 30, 1997, included and incorporated by reference in this prospectus, have been included herein and incorporated by reference in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of that firm as experts in accounting and auditing.

The financial statements of MicroOptical Devices, Inc. included in this prospectus and elsewhere in the registration statement, to the extent and for the periods indicated in their reports, have been audited by Arthur Andersen LLP, independent public accountants, and are included herein in reliance upon the authority of said firm as experts in giving said reports. EMCORE has agreed to indemnify and hold harmless Arthur Andersen LLP and its personnel for any costs and expenses including attorneys' fees incurred by Arthur Andersen in successful defense of a legal action or proceeding that arises as a result of Arthur Andersen's consent to the inclusion of its audit reports on MODE's past financial statements in a registration statement filed by EMCORE with the SEC. A successful defense in this context would be one in which Arthur Andersen is neither decreed to have been culpable nor pays any part of MODE's or EMCORE's damages as a result of judgment or settlement.

The statements in this Prospectus set forth under the captions "Risk Factors -- Our ability to protect our trade secrets is crucial to our business." "-- We may require licenses to continue to manufacture and sell certain of our compound semiconductor wafers and devices." and discussions of trade secrets and the Rockwell Patent litigation in "Business -- Intellectual Property and Licensing" have been reviewed and approved by Lerner David Littenberg Krumholz & Mentlik, Westfield, New Jersey, patent counsel for EMCORE, as experts on such matters, and are included herein in reliance upon such review and approval.

PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS (UNAUDITED)

On December 5, 1997, EMCORE acquired all of the outstanding capital stock of MODE in exchange for 1,461,866 shares of EMCORE's common stock, 200,966 common stock purchase options and 47,118 common stock purchase warrants. The purchase price was approximately \$32.8 million, including direct acquisition costs of approximately \$500,000. MODE was a development stage company (incorporated in August 1995) and had 18 employees at the date of acquisition. MODE's activities were substantially directed towards the research and development of optical laser devices. The following unaudited pro forma consolidated statement of operations is based on the historical financial statements of EMCORE and MODE, adjusted to give the effect to the acquisition of MODE by EMCORE. The unaudited pro forma consolidated statements of operations assume that the acquisition of MODE by EMCORE occurred as of October 1, 1997. The pro forma financial information reflects the purchase method of accounting for the acquisition of MODE. The accompanying unaudited pro forma information does not give effect to any cost savings that may be realized as a result of the integration of EMCORE and MODE, or to any changes in the revenues of the combined entity, resulting from such integration. The accompanying unaudited pro forma financial information should be read in conjunction with EMCORE's historical financial statements and the notes thereto and the MODE historical financial statements and the notes thereto included herein. Such unaudited pro forma financial information does not purport to be indicative of the results of operations of EMCORE in the future or what its financial position and results of operations would have been had the acquisition occurred at the dates indicated above.

EMCORE's acquisition of MODE, a development stage company, constituted a significant and strategic investment for EMCORE to acquire and gain access to MODE's in-process research and development of micro-optical technology. EMCORE's over-riding investment consideration was that if MODE's research and development efforts, with continued research and development funding contemplated and required after acquisition, yielded commercial products for targeted applications, EMCORE would possess a broader array of enabling advanced technologies and would be better positioned for entry into certain existing large and/or high growth technology-dependent markets. The primary value enhancing asset acquired in the MODE acquisition was the technology under development by MODE as part of its planned micro-laser and optical subassembly products. 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 had six primary micro-optical laser research and development projects in process. EMCORE expects MODE's microlasers and optical subassemblies to provide design, performance and significant cost advantages over their technical predecessors such as edge-emitting solid state lasers. Through the integration of vertical cavity surface emitting lasers (VCSELs) with leading original equipment manufacturer systems design, VCSELs are expected to provide enhanced performance benefits to market applications such as Internet access, onboard photonics, Gigabit Ethernet, local area networks, microarea network, digital video discs (DVDs) and fiberoptic switching. In developing EMCORE's financial projections for future revenues and costs, new micro-optical laser product introductions were expected to commence in fiscal 1998 and reflected the

impact of entering new markets such as the data communications and telecommunications industries. Should EMCORE be unable to complete the development of any of the six projects, EMCORE may not realize the product, market and financial benefits expected from this acquisition. In February 1998, MODE announced the introduction of its first commercial product, a Gigalase VCSEL. Subsequent to such announcement, MODE's Gigalase product efforts were primarily directed toward engineering, testing and quality control activities to facilitate commercial production which commenced in May 1998. On December 14, 1998, MODE announced its second commercial product, a Gigarray VCSEL.

As part of the acquisition, EMCORE incurred a one-time in-process research and development write-off of \$19.5 million which is reflected in the accompanying financial statements. EMCORE also recorded goodwill of approximately \$13.2 million. This is being charged against operations over a three year period, and will therefore impact financial results through December 2000.

	YEAR ENDED SEPTEMBER 30, 1998			
	HISTORICAL		PRO FORMA	
	EMCORE	MODE	ADJUSTMENTS	COMBINED
	(IN THOUSANDS, EXCEPT PER SHARE DATA)			
Revenues.....	\$43,760	\$100	\$ --	\$ 43,860
Cost of sales.....	24,676	161	--	24,836
Gross profit.....	19,084	(61)	--	19,024
Operating expenses				
Selling, general and administrative...	14,082	346	--	14,428
Goodwill amortization(2).....	3,638	--	738	4,393
Research and development:(3)				
One-time acquired in-process.....	19,516	--	(19,516)	--
Recurring.....	16,495	283	--	16,778
Total operating expenses.....	53,731	629	(18,778)	35,599
Operating loss.....	(34,647)	(690)	18,778	(16,575)
Other expenses				
Stated interest expense (income),				
net.....	973	(4)	--	970
Imputed warrant interest, non-cash....	601	--	--	601
Equity in net loss of unconsolidated				
affiliate.....	198	--	--	198
Total other expense.....	1,772	(4)	--	1,769
Loss before income taxes and				
extraordinary item.....	(36,419)	(686)	18,778	(18,344)
Provision for income taxes.....	--	--	--	--
Net loss.....	(36,419)	(686)	18,778	(18,344)
Shares used in computation of net				
loss.....	8,775			8,775
Net loss per share before extraordinary				
item.....	\$ (4.15)			\$ (2.09)
Net loss per share.....	\$ (4.15)			\$ (2.09)

Notes to Pro Forma Statement of Operations

(1) EMCORE acquired MODE on December 5, 1997 in exchange for (i) the issuance of 1,461,866 shares of common stock, and (ii) the assumption of (x) up to 200,966 common stock purchase options at exercise prices ranging from \$0.43 to \$0.59 and (y) 47,118 common stock purchase warrants at exercise prices ranging from \$4.32 to \$5.92. The transaction purchase price amounted to approximately \$32,800,000, including approximately \$500,000 of direct acquisition costs. EMCORE's

common stock was valued based upon the average closing price of EMCORE's common stock for the five days before and after the announcement of the acquisition. The purchase price was allocated to the assets acquired (approximately \$2,801,000) and liabilities assumed (approximately \$2,645,000), based upon the fair value at the date of acquisition. In addition, EMCORE recorded a one-time write-off of approximately \$19,516,000 (as restated) relating to purchased in-process research and development. Goodwill of approximately \$13,157,000 (as restated) was recorded as a result of the acquisition.

- (2) To reflect the amortization of goodwill over a period of three years.
- (3) To reverse the non-recurring, one-time write-off of \$19,516,000 (as restated) relating to purchased in-process research and development.
- (4) The operating results of MODE are from the period of October 1, 1997 through the date of acquisition. Subsequent to the date of acquisition, MODE's operations are included with those of EMCORE.

The pro forma statement of operations for the year ended September 30, 1998, does not reflect the non-recurring write-off of the acquired in-process research and development.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents have been filed by EMCORE with the Commission under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are incorporated herein by reference:

- 1. EMCORE's Annual Report on Form 10-K and 10-K/A for the fiscal year ended September 30, 1998;
- 2. EMCORE's Quarterly Reports on Form 10-Q and 10-Q/A for the period ended December 31, 1998 and on Form 10-Q for the period ended March 31, 1999;
- 3. EMCORE's Current Report on Form 8-K dated May 13, 1999; and
- 4. The description of the common stock, contained in EMCORE's Registration Statement on Form 8-A filed pursuant to Section 12 of the Exchange Act and all amendments thereto and reports filed for the purpose of updating such description.

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act: (1) subsequent to the initial filing of this prospectus and prior to the date it is declared effective; and (2) subsequent to the date of this prospectus and prior to the termination of this offering are incorporated by reference and become a part of this prospectus and to be a part hereof from their date of filing. Any statement contained in this prospectus to the extent that a statement contained in any such document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

On request, we will provide anyone who receives a copy of this prospectus with a copy of any or all of the documents incorporated in this prospectus by reference. We will provide this information at no cost to you. Written or telephone requests for such copies should be directed to our principal office: EMCORE Corporation, 394 Elizabeth Avenue, Somerset, New Jersey 08872, Attn: Thomas G. Werthan, Secretary, Telephone (732) 271-9090.

AVAILABLE INFORMATION

We file reports, proxy statement and other information with the Commission. Those reports, proxy statements and other information may be obtained:

- At the Public Reference Room of the Commission, Room 1024 -- Judiciary Plaza, 450 Fifth Street, N.W., Washington, DC 20549 (for information, please call 1-800-SEC-0330);
- At the public reference facilities at the Commission's regional offices located at Seven World Trade Center, 13th Floor, New York, New York 10048 or Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661;
- By writing to the Commission, Public Reference Section, Judiciary Plaza, 450 Fifth Street, N.W., Washington, DC 20549;
- At the offices of the National Association of Securities Dealers, Inc., Reports Section, 1735 K Street, N.W., Washington, DC 20006; or
- From the Internet site maintained by the Commission at <http://www.sec.gov> which contains reports, proxy and information statements and other information regarding issuers that file electronically with the Commission.

Some locations may charge prescribed or modest fees for copies.

EMCORE has filed with the Commission a Registration Statement on Form S-3 (together with any amendments or supplements thereto, the "Registration Statement") under the Securities Act covering the shares of common stock offered hereby. As permitted by the Commission, this prospectus, which constitutes a part of the Registration Statement, does not contain all the information included in the Registration Statement. Such additional information may be obtained from the locations described above. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. You should refer to the contract or other document for all the details.

EMCORE CORPORATION

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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. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements 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.

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. These financial statements schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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.

Coopers & Lybrand L.L.P.

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

EMCORE CORPORATION
CONSOLIDATED BALANCE SHEETS

	AS OF SEPTEMBER 30,		AS OF MARCH 31, 1999
	1997	1998 (AS RESTATED SEE NOTE 20)	(UNAUDITED) (AS RESTATED SEE NOTE 20)
Current assets:			
Cash and cash equivalents.....	\$ 3,653,145	\$ 4,455,836	\$ 1,640,437
Restricted cash.....	312,500	62,500	--
Accounts receivable, net of allowance for doubtful accounts of approximately \$697,000, \$611,000 and \$577,000 at September 30, 1997, September 30, 1998 and March 31, 1999, respectively.....	8,439,704	7,437,822	11,462,660
Accounts receivable -- related parties.....	2,500,000	500,000	2,746,731
Inventories, net.....	7,185,626	12,445,326	12,684,046
Costs in excess of billings on uncompleted contracts.....	--	77,531	93,962
Prepaid expenses and other current assets.....	120,393	130,075	199,919
Total current assets.....	22,211,368	25,109,090	28,827,755
Property, plant and equipment, net.....	16,797,833	36,209,831	43,259,928
Goodwill, net.....	--	9,519,000	7,322,000
Investments in unconsolidated affiliates.....	--	291,504	4,391,762
Other assets, net.....	453,608	2,090,219	1,269,705
Total assets.....	\$ 39,462,809	\$ 73,219,644	\$ 85,071,150
Current liabilities:			
Note payable -- related party.....	\$ --	\$ 7,000,000	\$ --
Accounts payable.....	4,050,216	12,022,628	9,131,425
Accrued expenses.....	3,867,589	4,197,405	5,457,262
Advanced billings.....	1,998,183	3,180,370	6,682,305
Capitalized lease obligation -- current.....	15,030	673,036	731,908
Other current liabilities.....	124,279	52,778	161,815
Total current liabilities.....	10,055,297	27,126,217	22,164,715
Long-term debt:			
Bank loans.....	--	17,950,000	23,000,000
Subordinated notes, net.....	7,499,070	7,808,772	8,002,588
Capitalized lease obligation, net of current portion.....	77,870	754,517	470,242
Other liabilities.....	--	--	1,097,389
Total liabilities.....	17,632,237	53,639,506	54,734,934
Mandatorily redeemable convertible preferred stock, 1,550,000 shares issued and outstanding at March 31, 1999 (redeemable at maturity for \$21,700,000).....	--	--	21,368,476
Shareholders' equity:			
Preferred stock, \$.0001 par value, 5,882,353 shares authorized, no shares outstanding in all periods.....	--	--	--
Common stock, no par value, 23,529,411 shares authorized, 6,000,391, 9,375,952, and 9,446,347 issued and outstanding September 30, 1997, September 30, 1998 and March 31, 1999, respectively.....	45,816,774	87,443,237	87,855,450
Accumulated deficit.....	(23,777,658)	(60,196,454)	(71,221,065)
Notes receivable from warrant issuances and stock sales.....	(208,544)	(7,666,645)	(7,666,645)
Total shareholders' equity.....	21,830,572	19,580,138	8,967,740
Total shareholders' equity and mandatorily redeemable convertible preferred stock.....	21,830,572	19,580,138	30,336,216
Total liabilities, shareholders' equity, and mandatorily redeemable convertible preferred stock.....	\$ 39,462,809	\$ 73,219,644	\$ 85,071,150

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

EMCORE CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED SEPTEMBER 30,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998 (AS RESTATED SEE NOTE 20)	1998 (AS RESTATED SEE NOTE 20) (UNAUDITED)	1999 (AS RESTATED SEE NOTE 20) (UNAUDITED)
Revenues:					
Systems and materials.....	\$24,066,506	\$46,591,662	\$ 42,820,791	\$25,881,555	\$ 26,048,272
Services.....	3,712,379	1,160,910	939,192	283,020	148,402
Total revenues.....	27,778,885	47,752,572	43,759,983	26,164,575	26,196,674
Cost of sales:					
Systems and materials.....	16,121,938	29,309,898	24,148,783	13,808,098	15,165,847
Services.....	2,484,482	784,117	526,706	101,071	52,998
Total cost of sales.....	18,606,420	30,094,015	24,675,489	13,909,169	15,218,845
Gross profit.....	9,172,465	17,658,557	19,084,494	12,255,406	10,977,829
Operating expenses:					
Selling, general and administrative.....	6,524,482	9,346,329	14,082,438	5,753,766	6,367,485
Goodwill amortization.....	--	--	3,637,941	1,441,941	2,197,000
Research and development -- recurring.....	5,401,413	9,001,188	16,494,888	5,876,593	10,272,376
Research and development -- one-time acquired in-process, non-cash.....	--	--	19,516,000	19,516,000	--
Total operating expenses...	11,925,895	18,347,517	53,731,267	32,588,300	18,836,861
Operating loss.....	(2,753,430)	(688,960)	(34,646,773)	(20,332,894)	(7,859,032)
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, and \$192,000 and \$285,000 for the six months ended March 31, 1998 and 1999, respectively.....	297,093	519,422	972,992	115,922	693,112
Imputed warrant interest expense, non-cash.....	125,791	3,988,390	600,536	192,121	632,973
Equity in net loss of unconsolidated affiliate.....	--	--	198,495	--	1,671,021
Loss before income taxes and extraordinary item.....	(3,176,314)	(5,196,772)	(36,418,796)	(20,640,937)	(10,856,138)
Provision for income taxes.....	--	137,000	--	20,000	--
Net loss before extraordinary item.....	(3,176,314)	(5,333,772)	(36,418,796)	(20,660,937)	(10,856,138)
Extraordinary item -- loss on early extinguishment of debt.....	--	285,595	--	--	--
Net loss.....	\$(3,176,314)	\$(5,619,367)	\$(36,418,796)	\$(20,660,937)	\$(10,856,138)
Per share data:					
Weighted average basic and diluted shares used in per share data calculations.....	2,994,466	4,668,822	8,775,270	8,189,112	9,408,570
Net loss per basic and diluted share before extraordinary item.....	\$ (1.06)	\$ (1.14)	\$ (4.15)	\$ (2.52)	\$ (1.17)
Net loss per basic and diluted share.....	\$ (1.06)	\$ (1.20)	\$ (4.15)	\$ (2.52)	\$ (1.17)

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
 AND THE SIX-MONTH PERIOD ENDED MARCH 31, 1999

	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, see Note 20)....			(36,418,796)		(36,418,796)
BALANCE AT SEPTEMBER 30, 1998 (AS RESTATED, SEE NOTE 20).....	9,375,952	87,443,237	(60,196,454)	(7,666,645)	19,580,138
Preferred stock dividends.....			(144,663)		(144,663)
Periodic accretion of redeemable preferred stock to mandatory redemption value.....			(23,810)		(23,810)
Stock purchase warrant exercise.....	359	1,157			1,157
Stock option exercise.....	55,564	200,069			200,069
Compensatory stock issuances.....	14,472	210,987			210,987
Net loss.....			(10,856,138)		(10,856,138)
BALANCE AT MARCH 31, 1999 (UNAUDITED)...	9,446,347	\$87,855,450	\$(71,221,065)	\$(7,666,645)	\$ 8,967,740

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

EMCORE CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEARS ENDED SEPTEMBER 30,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998 (AS RESTATED SEE NOTE 20)	1998 (UNAUDITED) (AS RESTATED SEE NOTE 20)	1999 (AS RESTATED SEE NOTE 20)
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net loss.....	\$ (3,176,314)	\$ (5,619,367)	\$ (36,418,796)	\$ (20,660,937)	\$ (10,856,138)
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	19,516,000	--
Depreciation and amortization.....	1,871,016	3,187,755	8,767,105	4,087,116	5,661,977
Provision for doubtful accounts.....	146,418	515,000	1,118,000	(80,200)	120,000
Provision for inventory valuation.....	105,000	120,000	120,000	60,000	--
Deferred gain on sale to associated company.....	--	--	--	--	1,259,204
Detachable warrant accretion and debt issuance cost amortization.....	125,792	3,988,390	600,536	192,121	632,973
Extraordinary loss on early extinguishment of debt.....	--	285,595	--	--	--
Equity in net loss of an unconsolidated affiliate....	--	--	198,495	--	1,671,021
Compensatory stock issuances...	--	35,431	351,397	169,833	210,987
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	(2,559,591)	(4,144,838)
Accounts receivable -- related party.....	--	(2,500,000)	2,000,000	--	(2,246,731)
Inventories.....	(4,410,566)	339,414	(5,243,187)	(2,636,638)	(238,719)
Costs in excess of billings on uncompleted contracts.....	(2,882)	19,322	(77,531)	(19,281)	(16,431)
Prepaid expenses and other current assets.....	(26,784)	(60,458)	12,632	(258,792)	(69,844)
Other assets.....	(468,565)	27,568	(623,775)	(168,226)	315,876
Accounts payable.....	3,398,078	(2,029,154)	7,949,760	1,413,423	(2,891,203)
Accrued expenses.....	777,899	1,880,943	(970,148)	(1,255,438)	1,259,857
Advanced billings.....	1,122,667	(1,308,279)	1,182,187	(1,912,317)	3,501,935
Billings in excess of costs on uncompleted contracts.....	(306,359)	--	--	--	--
Unearned service revenue.....	12,315	111,964	(71,501)	(94,279)	(52,778)
Total adjustments.....	1,302,073	(1,258,742)	34,831,852	16,453,731	4,973,286
Net cash and cash equivalents used for operating activities.....	(1,874,241)	(6,878,109)	(1,586,944)	(4,207,206)	(5,882,852)
CASH FLOWS FROM INVESTING ACTIVITIES:					
Purchase of property, plant, and equipment.....	(7,090,869)	(11,631,642)	(22,132,071)	(4,995,579)	(10,448,436)
Acquisition, cash acquired....	--	--	192,799	192,799	--
Investments in unconsolidated affiliates.....	--	--	(490,000)	--	(5,771,279)
(Funding) payments of restricted cash.....	--	(312,500)	250,000	124,999	62,501
Net cash and cash equivalents used for investing activities.....	(7,090,869)	(11,944,142)	(22,179,272)	(4,677,781)	(16,157,214)

EMCORE CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS -- (CONTINUED)

	YEARS ENDED SEPTEMBER 30,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998 (AS RESTATED SEE NOTE 20)	1998 (UNAUDITED) (AS RESTATED SEE NOTE 20)	1999 (AS RESTATED SEE NOTE 20)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from preferred stock offering -- net of issuance costs of \$500,000.....	--	--	--	--	21,200,000
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	7,950,000	5,050,000
Proceeds (payments) from notes payable, related party, net.....	--	--	7,000,000	--	(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	19,131	308
Proceeds from exercise of stock options.....	--	53,640	83,486	41,926	199,763
Payments on capital lease obligations.....	(3,000,000)	(5,723)	(487,671)	(187,105)	(225,403)
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	7,823,952	19,224,668
Net (decrease) increase in cash and cash equivalents.....	(955,510)	2,285,759	802,691	(1,061,035)	(2,815,398)
Cash and cash equivalents at beginning of period.....	2,322,896	1,367,386	3,653,145	3,653,145	4,455,835
Cash and cash equivalents at end of period.....	\$ 1,367,386	\$ 3,653,145	\$ 4,455,836	\$ 2,592,110	\$ 1,640,437
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:					
Cash paid for interest.....	\$ 276,000	\$ 600,000	\$ 1,347,000	314,521	865,087
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	\$ 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	\$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. For the year ended September 30, 1998, the Company 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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Interim Financial Information. The financial information as of March 31, 1999 and for the six-month periods ended March 31, 1998 and 1999 is unaudited, but includes all adjustments (consisting only of normal recurring accruals) that the Company considers necessary for a fair presentation of the financial position at such date and the operating results and cash flows for those periods. Operating results for the six months ended March 31, 1999 are not necessarily indicative of the results that may be expected for the entire year.

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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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 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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.

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,			SIX MONTHS ENDED MARCH 31,	
	1996	1997	1998	1998	1999
				(UNAUDITED)	
Net loss.....	\$(3,176,314)	\$(5,619,367)	\$(36,418,796)	\$(20,660,937)	\$(10,856,138)
Preferred stock dividends.....	--	--	--	--	(144,663)
Periodic accretion of preferred stock to redemption value...	--	--	--	--	(23,810)
Net loss available to common shareholders.....	\$(3,176,314)	\$(5,619,367)	\$(36,418,796)	\$(20,660,937)	\$(11,024,611)
Loss per common share-- basic.....	\$ (1.06)	\$ (1.20)	\$ (4.15)	\$ (2.52)	\$ (1.17)
Loss per common share-- diluted.....	\$ (1.06)	\$ (1.20)	\$ (4.15)	\$ (2.52)	\$ (1.17)
Common shares -- basic.....	2,994,466	4,668,822	8,775,270	8,189,112	9,408,570
Effect of dilutive securities: Stock options and warrants.....	--	--	--	--	--
Preferred Stock.....	--	--	--	--	--
Common shares -- diluted....	2,994,466	4,668,822	8,775,270	8,189,112	9,408,570

The effect of outstanding common stock purchase options and warrants and the number of shares to be issued upon the conversion of the Company's Series I Preferred Stock 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.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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 is 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 per basic and diluted 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.....	<u>\$11,938,516</u>	<u>\$17,616,159</u>	<u>\$15,845,613</u>

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

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.

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,		AS OF
	1997	1998	MARCH 31, 1999 (UNAUDITED)
Raw materials.....	\$6,513,379	\$11,346,487	\$ 9,926,968
Work-in-process.....	672,247	1,091,971	2,743,897
Finished goods.....	--	6,868	13,181
Total.....	<u>\$7,185,626</u>	<u>\$12,445,326</u>	<u>\$12,684,046</u>

NOTE 6. PROPERTY, PLANT AND EQUIPMENT

Major classes of property and equipment are summarized below:

	AS OF SEPTEMBER 30,		AS OF
	1997	1998	MARCH 31, 1999 (UNAUDITED)
Land.....	\$ --	\$ 1,028,902	\$ 1,028,902
Building.....	--	7,493,385	8,915,945
Equipment.....	19,190,770	28,367,324	34,379,727
Furniture and fixtures.....	2,300,146	3,255,680	3,999,342
Leasehold improvements.....	6,085,256	9,948,121	10,283,521
Fixed assets under capital leases.....	98,623	2,042,728	3,956,157
	<u>27,674,795</u>	<u>52,136,140</u>	<u>62,563,594</u>
Less: accumulated depreciation and amortization.....	<u>(10,876,962)</u>	<u>(15,926,309)</u>	<u>(19,303,666)</u>
Total.....	<u>\$ 16,797,833</u>	<u>\$ 36,209,831</u>	<u>\$ 43,259,928</u>

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.....	\$ 754,517
	=====

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, 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,		AS OF
	1997	1998	MARCH 31, 1999
			(UNAUDITED)
Accrued payroll, vacation and other employee expenses.....	\$1,659,428	\$2,113,765	\$2,197,670
Installation and warranty costs.....	1,411,120	704,114	1,255,646
Interest.....	272,445	346,250	402,140
Other.....	524,596	1,033,276	1,601,806
	-----	-----	-----
Total.....	\$3,867,589	\$4,197,405	\$5,457,262
	=====	=====	=====

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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 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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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.

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%
	=====	=====	=====

EMCORE CORPORATION

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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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 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
Granted.....	9,000	25.06
Exercised.....	(11,466)	3.29
Canceled.....	(23,489)	12.00
	-----	-----
Outstanding as of March 31, 1999 (unaudited).....	1,009,459	10.44
	=====	=====

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 , x # \$5.00.....	242,219	7.96	295,423
\$5.00 , x # \$10.00.....	22,500	9.88	--
\$10.00 , x # \$15.00.....	661,975	9.17	178,873
\$15.00 , x # \$20.00.....	74,720	9.19	767
\$20.00 , x # \$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 \$0.49.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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
Granted.....	--	--
Exercised.....	(9,634)	0.54
Cancelled.....	(5,170)	0.58
	-----	-----
Outstanding as of March 31, 1999 (unaudited).....	162,508	\$0.49
	=====	=====

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: 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

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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

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- (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 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

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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. During the six months ended March 31, 1999, the Company sold three compound semiconductor production systems to the UTC Venture totaling \$5.3 million in revenues. The Company eliminated gross profit of approximately \$1.3 million on such sales to the extent of its minority interest. Such deferred gross profit will be recognized ratably over the assigned life of the UTC Venture's production systems. For the six months and the year ended March 31, 1999 and September 30, 1998, respectively, the Company recognized a loss of \$1.0 million and \$198,000 related to this venture, which has been recorded as a component of other income and expense. As of March 31, 1999, the Company's investment in this venture amounted to \$4.3 million.

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. During the six months ended March 31, 1999, sales made through Hakuto amounted to approximately \$5.1 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) (IN THOUSANDS,	NET INCOME (LOSS) EXCEPT PER SHARE DATA)	NET INCOME (LOSS) PER BASIC AND DILUTED SHARE
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 \$19.5 million 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.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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 is being accreted by periodic charges to accumulated deficit in the absence of additional paid in 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.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

In connection with the GELcore venture, General Electric will fund the Company's initial capital contribution of \$7.8 million into GELcore. The funding will be in the form of a subordinated debenture (the "Debenture") with an interest rate of 4.75% that 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.

In addition, General Electric will also receive 282,010 warrants to purchase common stock at \$22.875 per share. The warrants are exercisable at any time and will expire in 2006. For the three months ended March 31, 1999, the Company recognized a loss of \$497,000 related to this venture which has been recorded as a component of other income and expense. On a fully diluted basis, General Electric will own approximately 5% of the common stock of the Company.

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. The Amended Note is guaranteed by the Company's Chairman and Chief Executive Officer.

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.

EMCORE CORPORATION

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

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		FOR THE YEAR ENDED SEPTEMBER 30, 1998		FOR THE SIX MONTHS ENDED MARCH 31, 1998	
	AS PREVIOUSLY REPORTED	AS RESTATED	AS PREVIOUSLY REPORTED	AS RESTATED	AS PREVIOUSLY REPORTED	AS RESTATED
	BALANCE SHEET DATA:					
Goodwill, net.....	\$ 2,457,000	\$ 9,519,000				
Accumulated deficit.....	(67,258,454)	(60,196,454)				
STATEMENT OF OPERATIONS DATA:						
Goodwill amortization.....	\$ 921,941	\$ 3,637,941	\$ 355,000	\$ 1,442,000		
Research and development -- one time acquired in-process, non-cash.....	29,294,000	19,516,000	--	--		
Net loss.....	(43,480,796)	(36,418,796)	(29,351,937)	(20,660,937)		
Net loss per basic and diluted share.....	\$(4.95)	\$(4.15)	\$(3.58)	\$(2.52)		

ARTHUR ANDERSEN LLP

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Stockholders and Board of Directors of
MicroOptical Devices, Inc.:

We have audited the accompanying balance sheets of MICROOPTICAL DEVICES, INC. (a Delaware corporation in the development stage) (the "Company") as of December 31, 1996 and 1995, and the related statements of operations, stockholders' equity and cash flows for the year ended December 31, 1996 and for the period from inception (August 3, 1995) through December 31, 1995 and 1996. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with 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 MicroOptical Devices, Inc. as of December 31, 1996 and 1995, and the results of its operations and its cash flows for the year ended December 31, 1996 and for the period from inception (August 3, 1995) through December 31, 1995 and 1996, in conformity with generally accepted accounting principles.

ARTHUR ANDERSEN LLP

Albuquerque, New Mexico
March 21, 1997

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

BALANCE SHEETS
AS OF SEPTEMBER 30, 1997 (UNAUDITED), DECEMBER 31, 1996 AND 1995

	SEPTEMBER 30, 1997 (UNAUDITED)	DECEMBER 31, ----- 1996 1995 ----- -----	
ASSETS			
Current assets:			
Cash and cash equivalents.....	\$ 643,542	\$ 991,066	\$125,837
Trade accounts receivable.....	173,710	3,850	150
Inventory.....	131,931	83,926	--
Other current assets.....	22,314	26,544	9,029
	-----	-----	-----
Total current assets.....	971,497	1,105,386	135,016
Property and equipment, net.....	2,405,541	2,388,953	5,220
Organization costs, net.....	2,247	2,814	3,571
	-----	-----	-----
Total assets.....	\$3,379,285	\$3,497,153	\$143,807
	=====	=====	=====
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable.....	70,589	\$ 29,580	\$ 18,148
Accrued liabilities.....	755,568	74,600	746
Current portion of obligations under capital leases.....	91,664	38,676	--
Deferred revenue.....	--	125,000	--
	-----	-----	-----
Total current liabilities.....	917,821	267,856	18,894
	-----	-----	-----
Long-term liabilities:			
Obligations under capital leases, net of current portion.....	1,753,994	107,648	--
	-----	-----	-----
Commitments and contingencies (Notes 8 and 9)			
Stockholders' equity:			
Series A Convertible Preferred Stock, \$.001 par value; 1,200,000 shares authorized; 666,666 shares issued and outstanding.....	666	666	222
Series B Convertible Preferred Stock, \$.001 par value; 5,333,334 shares authorized, 4,076,088 shares issued and outstanding....	4,076	4,076	--
Common Stock, \$.001 par value; 6,000,000 shares authorized: 3,000,000 shares issued and outstanding....	3,015	3,000	1,000
Additional paid-in capital.....	3,275,592	3,251,532	181,596
Deficit accumulated during development stage....	(2,575,879)	(137,625)	(57,905)
	-----	-----	-----
Total stockholders' equity.....	707,470	3,121,649	124,913
	=====	=====	=====
Total liabilities and stockholders' equity.....	\$3,379,285	\$3,497,153	\$143,807
	=====	=====	=====

The accompanying notes to financial statements are an integral part of these balance sheets.

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

STATEMENTS OF OPERATIONS
FOR THE PERIOD FROM INCEPTION (AUGUST 3, 1995)
THROUGH DECEMBER 31, 1996,
THE YEAR ENDED DECEMBER 31, 1996,
THE PERIOD FROM INCEPTION THROUGH DECEMBER 31, 1995
AND FOR THE NINE MONTH PERIOD
ENDED SEPTEMBER 30, 1997 (UNAUDITED)

	NINE MONTH PERIOD ENDED SEPTEMBER 30, 1997 (UNAUDITED)	INCEPTION (AUGUST, 1995) THROUGH DECEMBER 31, 1996	YEAR ENDED DECEMBER 31, 1996	PERIOD FROM INCEPTION TO DECEMBER 31, 1995
Revenues.....	\$ 342,610	\$ 661,350	\$ 661,350	\$ --
Cost of goods sold...	365,084	222,967	222,967	--
Gross margin.....	(22,474)	438,383	438,383	--
Expenses:				
Research and development.....	1,683,176	339,696	292,592	47,104
General and administrative...	659,654	192,105	178,540	13,565
Sales and marketing.....	112,198	85,169	85,169	--
Total expenses...	2,455,028	616,970	556,301	60,669
Operating (loss).....	(2,477,502)	(178,587)	(117,918)	(60,669)
Interest income.....	39,248	40,962	38,198	2,764
Net Loss.....	\$ (2,438,254)	\$ (137,625)	\$ (79,720)	\$ (57,905)
Net loss per share...	\$ (0.81)	\$ (.05)	\$ (.03)	\$ (.02)
Weighted Average Number of Post- Split Common Shares Outstanding.....	3,000,000	3,000,000	3,000,000	3,000,000

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

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE PERIOD FROM INCEPTION (AUGUST 3, 1995)
THROUGH SEPTEMBER 30, 1997 (UNAUDITED)

	SERIES A CONVERTIBLE PREFERRED STOCK		SERIES B CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	DEFICIT ACCUMULATED DURING DEVELOPMENT STAGE	TOTAL
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT			
Balance, at inception.....	--	\$ --	--	\$ --	--	\$ --	\$ --	\$ --	\$ --
Issuance of Common Stock.....	--	--	--	--	1,000,000	1,000	--	--	1,000
Issuance of Series A Convertible Preferred Stock:									
Net of \$18,182 in issuance costs.....	222,222	222	--	--	--	--	181,596	--	181,818
Net loss.....		--	--	--				(57,905)	(57,905)
Balance, December 31, 1995...	222,222	222	--	--	1,000,000	1,000	181,596	(57,905)	124,913
Issuance of Series B Convertible Preferred Stock:									
Net of \$48,545 in issuance costs.....	--	--	1,293,479	1,294	--	--	2,925,162	--	2,926,456
Conversion of Note Payable...	--	--	65,217	65	--	--	149,935	--	150,000
Three for one stock split....	444,444	444	2,717,392	2,717	2,000,000	2,000	(5,161)	--	--
Net loss.....		--	--	--				(79,720)	(79,720)
Balance, December 31, 1996...	666,666	\$666	4,076,088	\$4,076	3,000,000	\$3,000	\$3,251,532	\$ (137,625)	\$3,121,649
Issuance of Common Stock upon exercise of options.....					15,000	15	1,560		1,575
TVC finders fee forgiven.....							22,500		22,500
Net loss.....								(2,438,254)	(2,438,254)
Balance, September 30, 1997 (unaudited).....	666,666	\$666	4,076,088	\$4,076	3,015,000	\$3,015	\$3,275,592	\$(2,575,879)	\$ 707,470

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

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

STATEMENTS OF CASH FLOWS
FOR THE PERIOD FROM INCEPTION (AUGUST 3, 1995)
THROUGH DECEMBER 31, 1996
AND FOR THE YEAR ENDED DECEMBER 31, 1996
AND FOR THE PERIOD FROM INCEPTION THROUGH DECEMBER 31, 1995
AND FOR THE NINE MONTH PERIOD ENDED SEPTEMBER 30, 1997 (UNAUDITED)

	NINE MONTH PERIOD ENDED SEPTEMBER 30, 1997	INCEPTION (AUGUST, 1995) THROUGH DECEMBER 31, 1996	YEAR ENDED DECEMBER 31, 1996	PERIOD FROM INCEPTION (AUGUST, 1995) THROUGH DECEMBER 31, 1995
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss.....	\$(2,438,254)	\$ (137,625)	\$ (79,720)	\$(57,905)
Adjustments to reconcile net loss to net cash provided by operating activities --				
Depreciation and amortization.....	302,540	32,430	31,894	536
	-----	-----	-----	-----
	(2,135,714)	(105,195)	(47,826)	(57,369)
	-----	-----	-----	-----
Changes in certain operating accounts --				
Trade accounts receivable.....	(169,860)	(3,850)	(3,700)	(150)
Inventory.....	(48,005)	(83,926)	(83,926)	--
Other current assets.....	4,229	(26,544)	(17,515)	(9,029)
Accounts payable.....	41,009	29,580	11,432	18,148
Accrued liabilities.....	703,467	74,600	73,854	746
Deferred revenue.....	(125,000)	125,000	125,000	--
	-----	-----	-----	-----
	405,840	114,860	105,145	9,715
	-----	-----	-----	-----
Net cash provided by (used in) operating activities.....	(1,729,874)	9,665	57,319	(47,654)
	-----	-----	-----	-----
CASH FLOWS USED BY INVESTING ACTIVITIES:				
Additions to equipment.....	(318,559)	(2,420,513)	(2,414,970)	(5,543)
Proceeds from sale and leaseback of equipment....	--	150,234	150,234	--
Additions to organization costs.....	--	(3,784)	--	(3,784)
	-----	-----	-----	-----
Net cash used in investing activities.....	(318,559)	(2,274,063)	(2,264,736)	(9,327)
	-----	-----	-----	-----
CASH FLOWS PROVIDED BY FINANCING ACTIVITIES:				
Proceeds from issuance of notes payable.....	1,699,334	150,000	150,000	--
Repayments of obligations under capital leases...	--	(3,810)	(3,810)	--
Net proceeds from issuance of preferred stock....	--	3,108,274	2,926,456	181,818
Net proceeds from issuance of common stock.....	1,575	1,000	--	1,000
	-----	-----	-----	-----
Net cash provided by financing activities.....	1,700,909	3,255,464	3,072,646	182,818
	-----	-----	-----	-----
Net increase in cash and cash equivalents.....	(347,524)	991,066	865,229	125,837
Cash and cash equivalents, beginning of period...	991,066	--	125,837	--
	-----	-----	-----	-----
Cash and cash equivalents, end of period.....	643,542	\$ 991,066	\$ 991,066	\$125,837
	=====	=====	=====	=====
SUPPLEMENTAL CASH FLOW INFORMATION:				
Cash paid for interest.....		\$ 1,776	\$ 1,776	\$ --
		=====	=====	=====
NON CASH STOCK ACTIVITY:				
Conversion of note payable to preferred stock....		\$ 150,000	\$ 150,000	\$ --
		=====	=====	=====
NON-CASH FINANCING ACTIVITY:				
Equipment capital leases.....		\$ 146,000	\$ 146,000	\$ --
		=====	=====	=====

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

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS
FOR THE PERIOD FROM INCEPTION (AUGUST 3, 1995)
THROUGH DECEMBER 31, 1996
AND FOR THE YEAR ENDED DECEMBER 31, 1996
AND FOR THE PERIOD FROM INCEPTION THROUGH DECEMBER 31, 1995

NOTE 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT RISK FACTORS

MicroOptical Devices, Inc. (the "Company" or "MODE"), was incorporated under the laws of the State of Delaware on August 3, 1995 for the purpose of developing technology and manufacturing of advanced optoelectronic components and systems for specific use in commercial identification and communications markets.

The Company funded its marketing, development and operational activities to date from the proceeds of two equity offerings. Since inception, the Company has devoted substantially all of its efforts and resources to marketing and development of its technology and remains in the development stage. Ultimately, the Company's ability to achieve profitable operations is dependent, in large part, upon making the transition to a manufacturing company.

On July 16, 1996, an amendment to the Certificate of Incorporation of MODE (the "Amendment") was filed, which (a) increased the total number of its common shares, which the Company is authorized to issue from two million to four million, and (b) increased the total number of authorized shares of its Convertible Preferred Stock, from four thousand to two million (222,222 shares of Series A Convertible Preferred Stock and 1,777,778 shares of Series B Convertible Preferred Stock).

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Basis. The financial books and records of the Company are maintained on the accrual basis of accounting. As a development stage company, cumulative results of operations from inception are presented.

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 and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash Equivalents. For the purposes of presenting cash flows, cash and cash equivalents represent cash balances and highly liquid investments with original maturities of less than 90 days.

Inventory. Inventories are stated at the lower of standard cost (which approximates actual cost using the first-in, first-out method) or market and consist of raw materials.

Property and Equipment. Equipment is stated at cost, net of accumulated depreciation. Depreciation is computed on the straight-line method based on estimated useful lives ranging from three to five years. Leasehold improvements are amortized

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

using the straight-line method over the shorter of the estimated useful life of the asset or the remaining term of the lease.

Organization Costs. Costs to organize the Company are capitalized and amortized on a straight-line basis over five years.

Research and Development. The costs of research and development activities are charged to expense as incurred.

Fair Value of Financial Instruments. The carrying value of all financial instruments approximates fair market value at December 31, 1996 and 1995.

Stock-Based Compensation. The Company accounts for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25 ("APB Opinion No. 25"), "Accounting for Stock Issued to Employees," and related Interpretations. Accordingly, compensation cost for stock options is measured as the excess, if any, of the quoted market price of the Company's stock at the date of the grant over the amount an employee must pay to acquire the stock. Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), was issued in 1995 and the Company has adopted the disclosure requirements of SFAS 123 (see Note 6).

Income Taxes. MODE accounts for income taxes using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under Financial Accounting Standards Board Statement No. 109, "Accounting for Income Taxes" ("SFAS No. 109"), the effect on deferred tax assets and liabilities of a change in tax rates is recognized in operations in the period that includes the enactment date.

Net Loss Per Share. Net loss per share for each period was calculated based upon the weighted average number of Common Stock outstanding during each period, using post split shares resulting from the three- for-one stock split effective August 1996. Common Stock equivalents were excluded in the calculation of weighted average shares outstanding since their inclusion would have had an anti-dilutive effect.

Accounting Pronouncement Not Yet Adopted. The Financial Accounting Standards Board issued SFAS No. 128, "Earnings Per Share," which is effective for calendar years beginning after December 15, 1997 at which time it will require restatement of prior years earnings per share calculations. Management has not yet determined the effect, if any, of SFAS No. 128 on the financial statements.

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 3. PROPERTY AND EQUIPMENT

Property and equipment at December 31 by major classification are as follows:

	1996	1995
Manufacturing equipment.....	\$1,781,487	\$ --
Leasehold improvements.....	570,397	--
Furniture and fixtures.....	68,529	5,543
	-----	-----
	2,420,413	5,543
Less accumulated depreciation and amortization.....	31,460	323
	-----	-----
	\$2,388,953	\$5,220
	=====	=====

NOTE 4. CAPITAL LEASES

In 1996, the Company financed certain manufacturing equipment, leasehold improvements, and furniture and fixtures under a Master Equipment Lease Agreement ("the Lease") expiring June 30, 1997, which provides for financing of up to \$2,000,000. The Company had only nominal borrowings under the Lease at December 31, 1996. The capital leases have terms of 42 months and are collateralized by manufacturing equipment. The transactions under the Lease are accounted for as a financing, whereby the property remains on the books and continues to be depreciated and amortized. Obligations under capital leases representing the proceeds was recorded, and is reduced based on payments under capital lease obligations. All items are sold and leasedback at original purchase price, therefore no gain or loss was recorded on such transactions during 1996.

At December 31, 1996, approximately \$146,000 of manufacturing equipment was under capital lease. The future minimum lease payments for assets under capital lease and the present value of the net minimum lease payments at December 31, 1996, are as follows:

FISCAL YEAR	MINIMUM PAYMENT
1997.....	\$ 49,964
1998.....	49,964
1999.....	49,964
2000.....	20,575

Total minimum lease payments.....	170,467
Less amount representing interest.....	24,143

Present value of net minimum lease payments.....	146,324
Less current portion.....	38,676

	\$107,648
	=====

In connection with the Lease, the Company issued a warrant to purchase 208,695 shares of MODE's Series B convertible preferred stock, on a post stock split basis (see Note 5), exercisable at any time for a period of up to ten years ending on August 21,

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

2006 at a price of \$.77 per share. The warrant may terminate sooner in connection with certain significant corporate events.

NOTE 5. STOCKHOLDERS' EQUITY

Effective August, 1996, the Company declared a stock split on all existing preferred and common shares at a ratio of three to one. The accompanying financial statements for the year ended December 31, 1996, have been adjusted to reflect the stock split.

On July 17, 1996, the Company issued 4,076,088 shares, on a post stock split basis, of its Series B Convertible Preferred Stock ("Series B"). Each share of Series B, which has a liquidation preference of \$.77, is convertible to one share of the Company's Common Stock and earns dividends at the rate declared for each share of Common Stock. No such dividends have been declared as of December 31, 1996. Terms of the agreements with Preferred Shareholders require the Company to comply with terms similar to those specified in the Series A issuance.

As specified in the Series A Convertible Preferred Stock ("Series A") issuance, the Series A Preferred Stockholder purchased \$150,000 of Convertible Promissory Notes (the "Notes"), during 1996. The Notes, which bore interest at the prime rate compounded monthly, were convertible at a price equal to the per share purchase price of the Series B stock issuance. On July 17, 1996, the Notes and the related interest of \$1,169 were converted to Series B convertible preferred stock in conjunction with the Series B stock issuance.

On August 29, 1995, the Company issued 666,666 shares, on a post stock split basis, of its Series A. Each share of Series A, which has a liquidation preference of \$.3, is convertible to one share of the Company's Common Stock and earns dividends at the rate declared for each share of Common Stock. No such dividends have been declared as of December 31, 1996. An agreement with the Series A Preferred Stockholder requires the Company to, among other items, maintain keyman life insurance on certain key employees, and obtain the Preferred Stockholders' approval to make key changes in the operations of the Company.

On August 3, 1995, the Company issued 3,000,000 shares, on a post stock split basis, of its Common Stock at a par value of \$.001 per share.

NOTE 6. DEFERRED COMPENSATION PLAN

In July 1996, the Company adopted the 1996 Stock Option Plan (the "Plan"), where options granted to an employee are qualified "incentive stock options" under the Internal Revenue Code and options granted to a non-employee are "non-statutory stock options", for which 1,800,000 shares were reserved, on a post stock split basis. The Company accounts for options granted to employee's under this Plan in accordance with APB Opinion No. 25, under which no compensation cost has been recognized. The compensation costs for the Plan determined consistent with SFAS 123

MICROOPTICAL DEVICES, INC.
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NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

is immaterial. Options granted to non-employee's under this Plan are accounted for in accordance with the provisions of SFAS 123.

The Company has granted options on 645,500 shares through December 31, 1996. Under the Plan, the option exercise price equals the common stocks market price on date of grant. All options are immediately exercisable and expire ten years from date of grant. The options granted to MODE's founders are subject to repurchase by the Company, at the original exercise price, upon the cessation of service prior to vesting in such shares. Such shares vest in a series of 72 successive equal monthly installments over a six year period, however, such vesting shall accelerate to 48 successive equal monthly installments upon the Company meeting performance milestones as provided for by the Board. At December 31, 1996, the Company has achieved two out of five of its performance measures. All other shares vest at the rate of 25 percent of the shares upon the optionee's continued service to the Company through the initial vesting date, with the remaining shares vesting in a series of 36 successive equal monthly installments. The vesting period accelerates in connection with certain significant corporate events.

A summary of the status of the Company's option Plan at December 31, 1996, and changes during the year then ended is presented in the table and narrative below:

	SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at beginning of year.....	--	\$ --
Granted.....	645,500	.077
Exercised.....	--	--
Forfeited.....	--	--
Expired.....	--	--
	=====	=====
Outstanding at end of year.....	645,500	\$.077
	=====	=====
Exercisable at end of year.....	645,500	\$.077
Weighted average fair value of options granted during the year.....	\$.02	

The options outstanding at December 31, 1996, have a weighted average remaining contractual life of 9.5 years.

The fair value of each option grant is estimated on the date of grant using Black-Scholes option pricing model with the following average assumptions used: risk-free interest rate of 6.65%; expected lives of ten years; a divided yield of 0%; and expected volatility of .01%.

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 7. INCOME TAXES

MODE had no income tax expense and there were no income taxes currently payable for the year ended December 31, 1996 and period ended December 31, 1995. Deferred income taxes at December 31, 1996 and 1995, are offset by a valuation allowance as follows:

	1996	1995
Deferred tax asset:		
Net operating loss.....	\$16,197	\$14,000
Deferred revenue.....	48,750	--
	-----	-----
	64,947	14,000
Valuation allowance.....	(40,926)	(14,000)
	-----	-----
	24,021	--
	-----	-----
Deferred tax liability:		
Depreciation and amortization.....	(22,535)	--
Other.....	(1,486)	--
	-----	-----
	(24,021)	--
	-----	-----
Net deferred taxes.....	\$ --	\$ --
	=====	=====

The Company has established a valuation allowance for the entire deferred tax asset due to the uncertainty of future earnings (see Note 1). A net operating loss carry forward of \$46,214 is available to offset future taxable income for the next fifteen years.

NOTE 8. COMMITMENTS AND CONTINGENCIES

Technology Assistance and Royalty Agreement. On February 22, 1996, the Company entered into a technical assistance and royalty agreement (as subsequently amended) in which the Company agreed to further develop laser technology in return for eight years of co-exclusive rights to five existing patents covering this technology. The Company is required to pay \$7,500 in 1997, plus royalty payments beginning in 1998 of 1.5% to 2.5%, subject to minimum annual payments ranging from up to \$50,000 over the life of the patents provided that the technology is developed and the related products are manufactured in Albuquerque, New Mexico. In the event that the Company fails to develop or abandons development of this technology, all rights to the technology become nonexclusive. The Company paid \$7,500 under this Agreement in 1996.

In October, 1996, the Company signed an agreement for research and development, which expires March 31, 1998. Under the Agreement, the Buyer paid the Company \$95,000 for non-recurring engineering expense, plus all applicable fees and taxes, which payment is non-refundable. Buyer will pay MODE the balance of the payment upon demonstration of feasibility.

MICROOPTICAL DEVICES, INC.
(A DEVELOPMENT STAGE CORPORATION)

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

Keyman Life Insurance. The Company is beneficiary to \$500,000 of term life insurance for each of its two founders.

Licensing Agreement. On March 21, 1996, the Company signed a license agreement (the "Agreement") with a major manufacturer in the identification market (the "Manufacturer"). Under the Agreement, the Manufacturer paid the Company a \$500,000 license fee (the "Payment") plus all applicable gross receipts tax that the Company is required to pay thereon.

The Manufacturer retains exclusive rights to use and sell any products or components which the Company develops for the Manufacturer's portion of the identification market (the "Product") for a limited period of time. After the exclusive rights period expires, the Company is required to first offer these Products, if achieved to the Manufacturer under similar sales terms as the Products are offered to any other party for a limited period of time.

Within approximately one year of the receipt of the Payment, the Company and the Manufacturer will negotiate in good faith to enter into a supply agreement for the Product, if achieved. If no agreement is reached, then the Company can elect to sell the Product, if achieved to the Manufacturer for an additional license fee and, for each Product sold, the cost of the Product plus a specified factor for overhead and profit.

Should the Company fail to pursue development or sell the Product to the Manufacturer, the Manufacturer will be granted certain nonexclusive sub-licensing rights.

At December 31, 1996, \$325,000 has been earned under the terms of this agreement.

Leased Property. The Company leases its facility under an operating lease with a term of three years. Rental expense under operating leases was \$18,214 for the year end December 31, 1996. There was no rental expense incurred for the period from inception through December 31, 1995. The minimum future lease commitments for all operating leases are \$34,332 for each of the years ending December 31, 1997 and 1998 and \$17,166 for year end December 31, 1999.

NOTE 9. SUBSEQUENT EVENT

Purchase and Supply Agreement. On February 14, 1997, the Company signed a purchase and supply contract (the "Contract"). Under the Contract, MODE established the terms and conditions controlling potential sales of vertical-cavity surface-emitting laser ("VCSEL") chips, devices and arrays in the event they occur. The initial term of the Contract is five years, and can be canceled by either party upon written notice 360 days prior to the end of the initial term or any subsequent term. The Contract also may terminate prior to the five year period under certain circumstances. Products sold under the agreement are subject to a warranty period not to exceed the earlier of 18 months from the date the product is delivered to customer,

MICROOPTICAL DEVICES, INC.
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NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

or one year from the date of delivery by customer to its end-users, or one year from the date the products are placed in service.

Sale/Leaseback of Assets. Subsequent to year end, the Company financed an additional \$1,850,000 of its property via a sale-leaseback transaction with a leasing company under the terms of the Master Equipment Lease Agreement (see Note 4).

, 1999

(EMCORE LOGO) EMCORE CORPORATION

3,897,441 SHARES OF COMMON STOCK

PROSPECTUS

DONALDSON, LUFKIN & JENRETTE

PRUDENTIAL SECURITIES

NEEDHAM & COMPANY, INC.

SOUNDVIEW TECHNOLOGY GROUP

DLJDIRECT INC.

We have not authorized any dealer, salesperson or other person to give you written information other than this prospectus or to make representations as to matters not stated in this prospectus. You must not rely on unauthorized information. This prospectus is not an offer to sell these securities or our solicitation of your offer to buy the securities in any jurisdiction where that would not be permitted or legal. Neither the delivery of this prospectus nor any sales made hereunder after the date of this prospectus shall create an implication that the information contained herein or the affairs of the company have not changed since the date hereof.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses in connection with the sale and distribution of the securities being registered, other than underwriting discounts and commissions. All amounts shown are estimates except the Securities and Exchange Commission registration fee and the NASD filing fee.

	TO BE PAID BY THE REGISTRANT
Securities and Exchange Commission registration fee.....	\$ 22,890.00
NASD filing fee.....	8,000.00
Accounting fees and expenses.....	150,000.00
Printing expenses.....	300,000.00
Transfer agent and registrar fees.....	15,000.00
Legal fees and expenses.....	300,000.00
Other expenses.....	75,000.00

Total.....	\$870,890.00 =====

* to be provided

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

EMCORE's Restated Certificate of Incorporation provides that the Company shall indemnify its directors and officers to the full extent permitted by New Jersey law, including in circumstances in which indemnification is otherwise discretionary under New Jersey law.

Section 14A:2-7 of the New Jersey Business Corporation Act provides that a New Jersey corporation's:

"certificate of incorporation may provide that a director or officer shall not be personally liable, or shall be liable only to the extent therein provided, to the corporation or its shareholders for damages for breach of any duty owed to the corporation or its shareholders, except that such provision shall not relieve a director or officer from liability for any breach of duty based upon an act or omission (a) in breach of such person's duty of loyalty to the corporation or its shareholders, (b) not in good faith or involving a knowing violation of law or (c) resulting in receipt by such person of an improper personal benefit. As used in this subsection, an act or omission in breach of a person's duty of loyalty means an act or omission which that person knows or believes to be contrary to the best interests of the corporation or its shareholders in connection with a matter in which he has a material conflict of interest."

In addition, Section 14A:3-5 (1995) of the New Jersey Business Corporation Act (1995) provides as follows:

INDEMNIFICATION OF DIRECTORS, OFFICERS AND EMPLOYEES

(1) As used in this section,

(a) "Corporate agent" means any person who is or was a director, officer, employee or agent of the indemnifying corporation or of any constituent corporation absorbed by the indemnifying corporation in a consolidation or merger and any person who is or was a director, officer, trustee, employee or agent of any other enterprise, serving as such at the request of the indemnifying corporation, or of any such constituent corporation, or the legal representative of any such director, officer, trustee, employee or agent;

(b) "Other enterprise" means any domestic or foreign corporation, other than the indemnifying corporation, and any partnership, joint venture, sole proprietorship, trust or other enterprise, whether or not for profit, served by a corporate agent;

(c) "Expenses" means reasonable costs, disbursements and counsel fees;

(d) "Liabilities" means amounts paid or incurred in satisfaction of settlements, judgments, fines and penalties;

(e) "Proceeding" means any pending, threatened or completed civil, criminal, administrative or arbitral action, suit or proceeding, and any appeal therein and any inquiry or investigation which could lead to such action, suit or proceeding; and

(f) References to "other enterprises" include employee benefit plans; references to "fines" include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the indemnifying corporation" include any service as a corporate agent which imposes duties on, or involves services by, the corporate agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner the person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

(2) Any corporation organized for any purpose under any general or special law of this State shall have the power to indemnify a corporate agent against his expenses and liabilities in connection with any proceeding involving the corporate agent by reason of his being or having been such a corporate agent, other than a proceeding by or in the right of the corporation, if

(a) such corporate agent acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation; and

(b) with respect to any criminal proceeding, such corporate agent had no reasonable cause to believe his conduct was unlawful. The termination of any proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not of itself create a presumption that such

corporate agent did not meet the applicable standards of conduct set forth in paragraphs 14A:3-5(2)(a) and 14A:3-5(2)(b).

(3) Any corporation organized for any purpose under any general or special law of this State shall have the power to indemnify a corporate agent against his expenses in connection with any proceeding by or in the right of the corporation to procure a judgment in its favor which involves the corporate agent by reason of his being or having been such corporate agent, if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation. However, in such proceeding no indemnification shall be provided in respect of any claim, issue or matter as to which such corporate agent shall have been adjudged to be liable to the corporation, unless and only to the extent that the Superior Court or the court in which such proceeding was brought shall determine upon application that despite the adjudication of liability, but in view of all circumstances of the case, such corporate agent is fairly and reasonably entitled to indemnity for such expenses as the Superior Court or such other court shall deem proper.

(4) Any corporation organized for any purpose under any general or special law of this State shall indemnify a corporate agent against expenses to the extent that such corporate agent has been successful on the merits or otherwise in any proceeding referred to in subsections 14A:3-5(2) and 14A:3-5(3) or in defense of any claim, issue or matter therein.

(5) Any indemnification under subsection 14A:3-5(2) and, unless ordered by a court, under subsection 14A:3-5(3) may be made by the corporation only as authorized in a specific case upon a determination that indemnification is proper in the circumstances because the corporate agent met the applicable standard of conduct set forth in subsection 14A:3-5(2) or subsection 14A:3-5(3). Unless otherwise provided in the certificate of incorporation or bylaws, such determination shall be made

(a) by the board of directors or a committee thereof, acting by a majority vote of a quorum consisting of directors who were not parties to or otherwise involved in the proceeding; or

(b) if such a quorum is not obtainable, or, even if obtainable and such quorum of the board of directors or committee by a majority vote of the disinterested directors so directs, by independent legal counsel, in a written opinion, such counsel to be designated by the board of directors; or

(c) by the shareholders if the certificate of incorporation or bylaws or a resolution of the board of directors or of the shareholders so directs.

(6) Expenses incurred by a corporate agent in connection with a proceeding may be paid by the corporation in advance of the final disposition of the proceeding as authorized by the board of directors upon receipt of an undertaking by or on behalf of the corporate agent to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified as provided in this section.

(7) (a) If a corporation upon application of a corporate agent has failed or refused to provide indemnification as required under subsection 14A:3-5(4) or permitted under subsections 14A:3-5(2), 14A:3-5(3) and 14A:3-5(6), a corporate agent may apply to a court for an award of indemnification by the corporation, and such court

(i) may award indemnification to the extent authorized under subsections 14A:3-5(2) and 14A:3-5(3) and shall award indemnification to the extent required under subsection 14A:3-5(4), notwithstanding any contrary determination which may have been made under subsection 14A:3-5(5); and

(ii) may allow reasonable expenses to the extent authorized by, and subject to the provisions of, subsection 14A:3-5(6), if the court shall find that the corporate agent has by his pleadings or during the course of the proceeding raised genuine issues of fact or law.

(b) Application for such indemnification may be made:

(i) in the civil action in which the expenses were or are to be incurred or other amounts were or are to be paid; or

(ii) to the Superior Court in a separate proceeding. If the application is for indemnification arising out of a civil action, it shall set forth reasonable cause for the failure to make application for such relief in the action or proceeding in which the expenses were or are to be incurred or other amounts were or are to be paid.

The application shall set forth the disposition of any previous application for indemnification and shall be made in such manner and form as may be required by the applicable rules of court or, in the absence thereof, by direction of the court to which it is made. Such application shall be upon notice to the corporation. The court may also direct that notice shall be given at the expense of the corporation to the shareholders and such other persons as it may designate in such manner as it may require.

(8) The indemnification and advancement of expenses provided by or granted pursuant to the other subsections of this section shall not exclude any other rights, including the right to be indemnified against liabilities and expenses incurred in proceedings by or in the right of the corporation, to which a corporate agent may be entitled under a certificate of incorporation, bylaw, agreement, vote of shareholders, or otherwise; provided that no indemnification shall be made to or on behalf of a corporate agent if a judgment or other final adjudication adverse to the corporate agent establishes that his acts or omissions (a) were in breach of his duty of loyalty to the corporation or its shareholders, as defined in subsection (3) of N.J.S.14A:2-7, (b) were not in good faith or involved a knowing violation of law or (c) resulted in receipt by the corporate agent of an improper personal benefit.

(9) Any corporation organized for any purpose under any general or special law of this State shall have the power to purchase and maintain insurance on behalf of any corporate agent against any expenses incurred in any proceeding and any liabilities asserted against him by reason of his being or having been a corporate agent, whether or not the corporation would have the power to indemnify him against such expenses and liabilities under the provisions of this section. The corporation may purchase such insurance from, or such insurance may be reinsured in whole or in part by, an insurer owned by or otherwise affiliated with the corporation, whether or not such insurer does business with other insureds.

(10) The powers granted by this section may be exercised by the corporation, notwithstanding the absence of any provision in its certificate of incorporation or bylaws authorizing the exercise of such powers.

(11) Except as required by subsection 14A:3-5(4), no indemnification shall be made or expenses advanced by a corporation under this section, and none shall be ordered by a court, if such action would be inconsistent with a provision of the certificate of incorporation, a bylaw, a resolution of the board of directors or of the shareholders, an agreement or other proper corporate action, in effect at the time of the accrual of the alleged cause of action asserted in the proceeding, which prohibits, limits or otherwise conditions the exercise of indemnification powers by the corporation or the rights of indemnification to which a corporate agent may be entitled.

(12) This section does not limit a corporation's power to pay or reimburse expenses incurred by a corporate agent in connection with the corporate agent's appearance as a witness in a proceeding at a time when the corporate agent has not been made a party to the proceeding.

The Underwriting Agreement provides for indemnification by the Underwriters of the Registrant and its officers and directors for certain liabilities, including liabilities under the Securities Act.

ITEM 16. EXHIBITS

The following exhibits are filed with this Registration Statement:

EXHIBIT NO.	DESCRIPTION
1.1	-- Form of Underwriting Agreement.
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).
3.2	-- Amended By-Laws, as amended January 11, 1989 (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
3.3	-- Certificate of Amendment to the Certificate of Incorporation, dated November 19, 1998 (incorporated by reference to Exhibit 3.3 to the registrant's annual report on Form 10-K for the fiscal year ended September 30, 1998 (the "1998 10-K"))
4.1	-- Specimen certificate for shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 24, 1997).
4.2	-- Form of \$4.08 Warrant (incorporated by reference to Exhibit 10.10 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
4.3	-- Form of \$10.20 Warrant (incorporated by reference to Exhibit 10.12 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).

EXHIBIT NO.	DESCRIPTION
4.4	-- Form of \$11.375 Warrant (incorporated by reference to Exhibit 4.2 to the 1998 10-K).
5.1	-- Form of White & Case LLP Opinion.*
10.1	-- 1995 Incentive and Non-Statutory Stock Option Plan (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.2	-- 1996 Amendment to Option Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.3	-- Specimen Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
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 "[*]" (incorporated by reference to Exhibit 10.4 to the 1998 10-K).
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 Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.6	-- Registration Rights Agreement relating to September 1996 warrant issuance (incorporated by reference to Exhibit 10.6 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.7	-- Registration Rights Agreement relating to December 1996 warrant issuance (incorporated by reference to Exhibit 10.7 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.8	-- Form of 6% Subordinated Note Due May 1, 2001 (incorporated by reference to Exhibit 10.8 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.9	-- Form of 6% Subordinated Note Due September 1, 2001 (incorporated by reference to Exhibit 10.9 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).

EXHIBIT NO.	DESCRIPTION
10.10	-- 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 Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997). Confidential treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "[*]".
10.11	-- Purchase Agreement, dated November 30, 1998, by and between the Company, Hakuto UMI and UTC (incorporated by reference to Exhibit 10.15 to the 1998 10-K).
10.12	-- Registration Rights Agreement, dated November 30, 1998 by and between the Company, Hakuto, UMI and UTC (incorporated by reference to Exhibit 10.16 to the 1998 10-K).
10.13	-- Long Term Purchase Agreement dated November 24, 1998 by and between the Company and Space Systems/Loral, Inc. (incorporated by reference to Exhibit 10.17 to the 1998 10-K). Confidential treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "[*]."
10.14	-- Promissory Note, dated April 29, 1999 by EMCORE in favor of First Union National Bank.
10.15	-- Second Amendment to Revolving Loan and Security Agreement, dated as of November 30, 1998 between the Company and First Union National Bank (incorporated by reference to Exhibit 10.19 to the 1998 10-K).
10.16	-- Agreement and Plan of Merger, dated as of December 5, 1997, among the Company, the Merger Subsidiary, MODE and the Principal Shareholders named therein (incorporated by reference to Exhibit 2 to the Company's report on Form 8-K filed with the Commission on December 22, 1997).
10.17	-- Transaction Agreement, dated January 26, 1999, by and between EMCORE and General Electric Company (incorporated by reference to Exhibit 10.1 to EMCORE's Quarterly Report on Form 10-Q for the quarter ended December 31, 1999). Confidential treatment has been requested by EMCORE with respect to portions of this document. Such portions are indicated by "[*]."
10.18	-- Note Purchase Agreement, dated as of May 26, 1999, by and between EMCORE Corporation and GE Capital Equity Investments, Inc.*
10.19	-- Registration Rights Agreement, dated as of May 26, 1999, by and between EMCORE Corporation and GE Capital Equity Investments, Inc.*
10.20	-- \$22.875 Warrant issued to General Electric Company*
21	-- Subsidiaries of the registrant.
23.1	-- Consent of Deloitte & Touche LLP*
23.2	-- Consent of PricewaterhouseCoopers LLP*
23.3	-- Consent of Arthur Andersen LLP*

EXHIBIT NO.	DESCRIPTION
23.4	-- Consent of White & Case (included in Exhibit 5.1).*
23.5	-- Consent of Lerner David Littenberg Krumholz & Mentlik.*
99.1	-- Form of Power of Attorney and Custody Agreement for selling shareholders.

- - - - -

* Filed herewith

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of a registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Amendment No. 2 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Somerset, State of New Jersey, on June 8, 1999.

EMCORE CORPORATION

By _____
 Reuben
 F.
 Richards,
 Jr.
 President
 and
 Chief
 Executive
 Officer

Pursuant to the requirements of the Securities Act, this Amendment No. 2 on Form S-3 has been signed by the following persons in the capacities indicated, on June 8, 1999.

SIGNATURE	TITLE
* ----- Thomas J. Russell	Chairman of the Board and Director
* ----- Reuben F. Richards, Jr.	President, Chief Executive Officer and Director (Principal Executive Officer)
/s/ THOMAS G. WERTHAN ----- Thomas G. Werthan	Vice President, Chief Financial Officer, Secretary and Director (Principal Accounting and Financial Officer)
* ----- Richard A. Stall	Director
* ----- Charles Scott	Director
* ----- Robert Louis-Dreyfus	Director
* ----- Hugh H. Fenwick	Director
* ----- Shigeo Takayama	Director
/s/ JOHN J. HOGAN, JR. ----- John J. Hogan, Jr.	Director
*By: /s/ THOMAS G. WERTHAN ----- Thomas G. Werthan Attorney-in-Fact	

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
1.1	-- Form of Underwriting Agreement.
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).
3.2	-- Amended By-Laws, as amended January 11, 1989 (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
3.3	-- Certificate of Amendment to the Certificate of Incorporation, dated November 19, 1998 (incorporated by reference to Exhibit 3.3 to the registrant's annual report on Form 10-K for the fiscal year ended September 30, 1998 (the "1998 10-K"))
4.1	-- Specimen certificate for shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 24, 1997).
4.2	-- Form of \$4.08 Warrant (incorporated by reference to Exhibit 10.10 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
4.3	-- Form of \$10.20 Warrant (incorporated by reference to Exhibit 10.12 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
4.4	-- Form of \$11.375 Warrant (incorporated by reference to Exhibit 4.2 to the 1998 10-K).
5.1	-- Form of White & Case LLP Opinion.*
10.1	-- 1995 Incentive and Non-Statutory Stock Option Plan (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.2	-- 1996 Amendment to Option Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
10.3	-- Specimen Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).

EXHIBIT NO.	DESCRIPTION
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 "[*]" (incorporated by reference to Exhibit 10.4 to the 1998 10-K).
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 Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 6, 1997).
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99.1	-- Form of Power of Attorney and Custody Agreement for selling shareholders.

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* Filed herewith

WHITE & CASE LLP OPINION

June 8, 1999

Emcore Corporation Company
394 Elizabeth Avenue
Somerset, New Jersey, 08873

Re: EMCORE Corporation
Public offering of shares of Common Stock

Ladies and Gentlemen:

On the date hereof EMCORE Corporation, a New Jersey corporation (the "Company"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (No. 333-71791) a Registration Statement on Form S-3 (the "Registration Statement"). Such Registration Statement relates to the sale by the Company of up to 3,584,616 shares of the Company's Common Stock, no par value per share (the "Common Stock") and 897,441 shares of Common Stock by selling shareholders.

We have acted as counsel to the Company in connection with the preparation of the Registration Statement. We are familiar with the proceedings of the Board of Directors of the Company in connection with the authorization, issuance and sale of the Shares. We have examined such certificates of public officials and certificates of officers of the Company and the selling shareholders, and the originals (or copies thereof, certified to our satisfaction) of such corporate documents and records of the Company, and such other documents, records and papers as we have deemed relevant in order to give the opinions hereinafter set forth. In this connection, we have assumed the genuineness of signatures, the authenticity of all documents submitted to us as

Page 2

originals and the conformity to authentic original documents of all documents submitted to us as certified, conformed, facsimile or photostatic copies. In addition, we have relied, to the extent that we deem such reliance proper, upon such certificates of public officials and of officers of the Company with respect to the accuracy of material factual matters contained therein which were not independently established.

We do not express or purport to express any opinions with respect to laws other than the Federal laws of the United States. As to all matters governed by the laws of the State of New Jersey involved in our opinions set forth below, we have relied, with your consent, upon an opinion of Dillon Bitar & Luther dated today and addressed to us.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and delivered by the Company against payment therefor as provided by the Underwriting Agreement will be validly issued, fully paid and non-assessable, and may be issued free of restrictive legends.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of our name under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement.

Very truly yours,

White & Case LLP

NOTE PURCHASE AGREEMENT

NOTE PURCHASE AGREEMENT, dated as of May 26, 1999, by and between Emcore Corporation, a New Jersey corporation ("Company"), and GE Capital Equity Investments, Inc., a Delaware corporation ("GE Capital" or "Purchaser").

W I T N E S S E T H :

WHEREAS, Company has agreed to issue and sell to Purchaser, and Purchaser has agreed to purchase from Company, upon the terms and conditions hereinafter provided, a subordinated convertible promissory note in the principal amount of \$7,800,000, which is initially convertible into 340,984 shares of Common Stock (as defined herein) of Company (the "Note");

NOW, THEREFORE, in consideration of the premises and the covenants hereinafter contained, it is agreed as follows:

1. DEFINITIONS

"Affiliate" shall mean, with respect to any Person, (i) each Person that controls, is controlled by or is under common control with such Person or any Affiliate of such Person, (ii) each of such Person's executive officers and directors, (iii) any trust or beneficiary of a trust of which such Person is the sole trustee or (iv) any lineal descendants, ancestors, spouse or former spouses (as part of a marital dissolution) of such Person (or any trust for the benefit of such Person). For the purpose of this definition, "control" of a Person shall mean the possession, directly or indirectly, of the power to direct or cause the direction of its management or policies, whether through the ownership of voting securities, by contract or otherwise.

"Agreement" shall mean this Note Purchase Agreement including all amendments, modifications and supplements hereto and any appendices, exhibits and schedules hereto or thereto, and shall refer to the Agreement as the same may be in effect at the time such reference becomes operative.

"Business Day" shall mean any day that is not a Saturday, a Sunday or a day on which banks are required or permitted to be closed in the State of New York.

"Change of Control" shall mean any of the following: (a) any person or group of persons (within the meaning of the Exchange Act) (other than GE Capital and its Affiliates and those existing shareholders of Company set forth on Schedule 1(A) hereto) shall have acquired beneficial ownership (within the meaning of Rule 13d-3 promulgated by the SEC under the Exchange Act) of 30% or more of the issued and outstanding shares of Common Stock of Company; (b) Company shall be a party to a merger or consolidation in which Company is not the survivor or in which Company's

stockholders immediately prior thereto own less than a majority of the outstanding voting stock of the survivor; or (c) Company shall have sold, leased or otherwise transferred all or substantially all of its assets.

"Charges" shall mean all federal, state, county, city, municipal, local, foreign or other governmental (including, without limitation, PBGC) taxes at the time due and payable, levies, assessments, charges, liens, claims or encumbrances upon or relating to (i) Company's or any of its Subsidiaries' employees, payroll, income or gross receipts, (ii) Company's or any of its Subsidiaries' ownership or use of any of its assets, or (iii) any other aspect of Company's or any of the Subsidiaries' business.

"Closing" shall have the meaning set forth in Section 2.2 hereof.

"Closing Date" shall have the meaning set forth in Section 2.2 hereof.

"Closing Price" shall mean, in respect of any share of Common Stock on any date herein specified which is a Business Day, (i) the last sale price on such day on the principal stock exchange or NASDAQ National Market System ("NASDAQ/NMS") on which such Common Stock is then listed or admitted to trading or (ii) if no sale takes place on such day on such exchange or NASDAQ/NMS, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange or NASDAQ/NMS.

"Common Stock" shall mean the common stock, no par value, of Company.

"Conversion" shall have the meaning set forth in Section 7.1(a) hereof.

"Conversion Price" shall have the meaning set forth in Section 7.1 hereof.

"Current Market Price" shall mean, in respect of any share of Common Stock on any date herein specified, the average of the daily market prices for 30 consecutive Business Days commencing 45 days before such date. The daily market price for each such Business Day shall be (i) the last sale price on such day on the principal stock exchange or NASDAQ National Market System ("NASDAQ-NMS") on which such Common Stock is then listed or admitted to trading, (ii) if no sale takes place on such day on any such exchange or NASDAQ-NMS, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange or NASDAQ-NMS, (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange or NASDAQ-NMS, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the National Association of Securities Dealers ("NASD") selected mutually by the Required Holders and Company or, if they cannot agree upon such selection, as selected by two such members of the

NASD, one of which shall be selected by the Required Holders and one of which shall be selected by the Company.

"Default" shall mean any event which, with the passage of time or notice or both, would, unless cured or waived, become an Event of Default.

"EBITDA" shall mean consolidated operating income (before extraordinary items, interest, taxes, depreciation and amortization) of such Person and its consolidated Subsidiaries determined in accordance with GAAP.

"Environmental Laws" shall mean all federal, state and local laws, statutes, ordinances and regulations, now or hereafter in effect, and in each case as amended or supplemented from time to time, and any judicial or administrative interpretation thereof, including, without limitation, any applicable judicial or administrative order, consent decree or judgment, relative to the applicable Real Estate, relating to the regulation and protection of human health, safety, the environment and natural resources (including, without limitation, ambient air, surface water, groundwater, wetlands, land surface or subsurface strata, wildlife, aquatic species and vegetation). Environmental Laws include but are not limited to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. ss. 9601 et seq.) ("CERCLA"); the Hazardous Material Transportation Act, as amended (49 U.S.C. ss. 1801 et seq.); the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. ss. 136 et seq.); the Resource Conservation and Recovery Act, as amended (42 U.S.C. ss. 6901 et seq.) ("RCRA"); the Toxic Substance Control Act, as amended (15 U.S.C. ss. 2601 et seq.); the Clean Air Act, as amended (42 U.S.C. ss. 740 et seq.); the Federal Water Pollution Control Act, as amended (33 U.S.C. ss. 1251 et seq.); the Occupational Safety and Health Act, as amended (29 U.S.C. ss. 651 et seq.) ("OSHA"); and the Safe Drinking Water Act, as amended (42 U.S.C. ss. 300f et seq.), and any and all regulations promulgated thereunder, and all analogous state and local counterparts or equivalents and any transfer of ownership notification or approval statutes.

"Event of Default" shall have the meaning set forth in Section 8.1 hereof.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and all rules and regulations promulgated thereunder.

"GAAP" shall mean generally accepted accounting principles in the United States of America as in effect from time to time.

"GE Capital" shall have the meaning set forth in the first paragraph of this Agreement.

"Governmental Authority" shall mean any nation or government, any state or other political subdivision thereof, and any agency, department or other entity exercising executive, legislative, judicial, regulatory or administrative functions of government.

"Guaranteed Indebtedness" shall mean, as to any Person, any obligation of such Person guaranteeing any Indebtedness, lease, dividend, or other obligation ("primary obligations") of any other Person (the "primary obligor") in any manner including, without limitation, any obligation or arrangement of such Person (a) to purchase or repurchase any such primary obligation, (b) to advance or supply funds (i) for the purchase or payment of any such primary obligation or (ii) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency or any balance sheet condition of the primary obligor, (c) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation, or (d) to indemnify the owner of such primary obligation against loss in respect thereof.

"Holder" shall have the meaning assigned to such term in Section 9.1 hereof.

"Indebtedness" of any Person shall mean without duplication (i) all indebtedness of such Person for borrowed money or for the deferred purchase price of property or services (including, without limitation, reimbursement and all other obligations with respect to surety bonds, letters of credit and bankers' acceptances, whether or not matured, but not including obligations to trade creditors incurred in the ordinary course of business), (ii) all obligations evidenced by notes, bonds, debentures or similar instruments, (iii) all Guaranteed Indebtedness, and (iv) all Indebtedness referred to in clause (i), (ii) or (iii) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien upon or in property (including, without limitation, accounts and contract rights) owned by such Person, even though such Person has not assumed or become liable for the payment of such Indebtedness.

"Interest Payment Date" shall have the meaning assigned to such term in Section 2.6(a) hereof.

"IRC" shall mean the Internal Revenue Code of 1986, as amended, and any successor thereto.

"IRS" shall mean the Internal Revenue Service, or any successor thereto.

"Lien" shall mean any mortgage or deed of trust, pledge, hypothecation, assignment, lien, charge, security interest, easement or encumbrance, or preference, priority or other security agreement granting a lender an interest in the Company's property (including, without limitation, any title retention agreement, any financing lease having substantially the same economic effect as any of the foregoing, and the filing of, or agreement to give, any financing statement perfecting a security interest as to assets owned by the relevant Person under the Uniform Commercial Code or comparable law of any jurisdiction).

"Loan Documents" shall mean this Agreement, the Note and all other agreements, instruments, documents and certificates, including, without limitation, pledges, powers of attorney, consents, assignments, contracts, notices, and all other written matter whether heretofore, now or hereafter executed by or on behalf of Company, and delivered to Purchaser, in its capacity as a purchaser of the Note hereunder, in connection with this Agreement or the transactions contemplated hereby.

"Material Adverse Effect" shall mean material adverse effect on the business, assets, operations or financial condition of Company and its Subsidiaries, if any, taken as a whole.

"Material Subsidiary" shall mean a "significant subsidiary" as defined in Regulation S-X as adopted by the SEC.

"Maximum Lawful Rate" shall have the meaning assigned to such term in Section 2.6(d) hereof.

"Note" shall mean the subordinated convertible promissory note of Company in the principal amount of \$7,800,000 to be issued to Purchaser hereunder, substantially in the form of Exhibit A hereto.

"Obligations" shall mean all amounts owing by Company to Purchaser and any of its assignees pursuant hereto or the Note, including, without limitation, all principal, interest, fees, expenses, attorneys' fees and any other sum chargeable to Company under any of the Loan Documents.

"Permitted Liens" shall mean the following (i) Liens for taxes or assessments or other governmental charges or levies, either not yet due and payable or to the extent that nonpayment thereof is permitted by the terms of this Agreement; (ii) pledges or deposits securing obligations under workmen's compensation, unemployment insurance, social security or public liability laws or similar legislation; (iii) pledges or deposits securing bids, tenders, contracts (other than contracts for the payment of money) or leases to which Company or any of its Subsidiaries is a party as lessee made in the ordinary course of business; (iv) Liens arising solely by virtue of any statutory or common law provision relating to bankers' liens, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a creditor depository institution; (v) workers, mechanics, suppliers, carriers, warehousemen's or other similar liens arising in the ordinary course of business and securing indebtedness, not yet due and payable; (vi) deposits securing or in lieu of surety, appeal or customs bonds in proceedings to which Company or any of its Subsidiaries is a party; (vii) Liens arising in the ordinary course of business in connection with obligations that are not overdue or which are being contested in good faith and by appropriate proceedings, including, but not limited to, Liens under bid, performance and other surety bonds, supersedes and appeal bonds, landlord Liens arising under leases of real property, Liens on advance or progress payments received from customers under contracts for the sale, lease or license of goods, software or services and upon the products being sold or licensed, in each case securing performance of the underlying contract or the repayment of such advances in the

event final acceptance of performance under such contracts does not occur, and Liens upon funds collected temporarily from others pending payment or remittance on their behalf; (viii) zoning restrictions, easements, licenses, or other restrictions on the use of real property or other minor irregularities in title (including leasehold title) thereto, so long as the same do not materially impair the use, value, or marketability of such real property, leases or leasehold estates; and (ix) Liens existing on the date hereof and described on Schedule 1 (B) hereto.

"Permitted Senior Debt" shall have the meaning assigned to such term in Section 5.2(c) hereof.

"Person" shall mean any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, entity or government (whether federal, state, county, city, municipal or otherwise, including, without limitation, any instrumentality, division, agency, body or department thereof).

"Purchaser" shall have the meaning set forth in the first paragraph of this Agreement.

"Registration Rights Agreement" shall mean the Registration Rights Agreement by and between Company and Purchaser, substantially in the form attached hereto as Exhibit B, as such agreement may be amended, supplemented or otherwise modified from time to time in accordance with the terms thereof.

"Required Holders" shall mean Persons who hold at least a majority of the outstanding principal amount of the Note.

"SEC" shall mean the U.S. Securities and Exchange Commission, or any successor thereto.

"Securities Act" shall mean the Securities Act of 1933, as amended, and all rules and regulations promulgated thereunder.

"Senior Debt" shall mean:

(a) all principal of and premium, if any, and interest (including interest at the applicable post-default interest rate) on, and all other amounts owing (including post-petition interest whether or not such post-petition interest is allowed as a claim under the Bankruptcy Code) in respect of Indebtedness for borrowed money (other than the Note) of Company listed on Schedule 5.2(d) ("Specified Senior Debt");

(b) all principal of and premium, if any, and interest (including interest at the applicable post-default interest rate) on, and all other amounts owing (including post-petition interest whether or not such post-petition interest is allowed as a claim under the Bankruptcy Code) in respect of Indebtedness for borrowed money (other than the Note) of Company which is not expressly pari passu with or subordinated to the payment of the Obligations and other than Indebtedness listed on Schedule 5.2(d); and

(c) any and all increases, refinancings, replacements, or refundings, of any of the amounts referred to in clauses (a) and (b) above;

provided that the aggregate principal of Senior Debt, including any committed (subject to usual and customary conditions to funding any particular advance under such commitments), but unfunded Specified Senior Debt with the Specified Senior Creditor, shall not exceed, at any one time outstanding, the amount permitted by the terms of Section 5.2(c) hereof, and provided further that the aggregate principal amount of Specified Senior Debt, including any committed (subject to usual and customary conditions to funding any particular advance under such commitments), but unfunded portion thereof by the Specified Senior Creditor, shall be deemed to be Senior Debt provided that such amount does not exceed the amount of Permitted Senior Debt as defined in Section 5.2(c) hereof.

"Senior Debt Ceiling" shall have the meaning assigned to such term in Section 5.2(d) hereof.

"Senior Debt Document" shall mean any agreement, note, instrument or other document, governing, securing, supporting, or evidencing any Senior Debt.

"Specified Senior Creditor" shall mean First Union National Bank and its successors and assigns as the Agent or the sole lender under the Specified Senior Debt, provided that written notice of such successor or assign is given to Purchaser by the Specified Senior Creditor or Company.

"Specified Senior Debt" shall have the meaning assigned to such term in clause (a) of the definition of "Senior Debt" herein.

"Stock" shall mean all shares, options, warrants, general or limited partnership interests, limited liability company membership interest, participations or other equivalents (regardless of how designated) of or in a corporation, partnership, limited liability company or equivalent entity whether voting or nonvoting, including, without limitation, common stock, preferred stock, or any other "equity security" (as such term is defined in Rule 3a11-1 of the General Rules and Regulations promulgated by the SEC under the Exchange Act).

"Subordinated Debt" shall have the meaning set forth in Section 9.1 hereof.

"Subsidiary" shall mean, with respect to any Person, (a) any corporation of which an aggregate of more than 50% of the outstanding Stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, Stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, owned legally or beneficially by such Person and/or one or more Subsidiaries of such Person, and (b) any partnership or other entity in which such Person and/or one or more Subsidiaries of such Person shall have an interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

"Taxes" shall have the meaning set forth in Section 2.12(a) hereof.

"Transaction Documents" shall mean this Agreement, the Note and the Registration Rights Agreement.

Any accounting term used in this Agreement shall have, unless otherwise specifically provided herein, the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed, unless otherwise specifically provided herein, in accordance with GAAP consistently applied. That certain terms or computations are explicitly modified by the phrase "in accordance with GAAP" shall in no way be construed to limit the foregoing. The words "herein," "hereof" and "hereunder" and other words of similar import refer to this Agreement as a whole, including the Exhibits and Schedules hereto, as the same may from time to time be amended, modified or supplemented, and not to any particular section, subsection or clause contained in this Agreement. Wherever from the context it appears appropriate, each term stated in either the singular or plural shall include the singular and the plural, and pronouns stated in the masculine, feminine or neuter gender shall include the masculine, the feminine and the neuter.

2. PURCHASE OF NOTE

2.1 Purchase of Note. Subject to the terms and conditions set forth in this Agreement, Purchaser agrees to purchase from Company, and Company agrees to issue and sell to Purchaser, on the Closing Date, the Note for an aggregate purchase price of \$7,800,000, containing the terms set forth herein and in Exhibit A hereto. The principal amount of the Note shall be \$7,800,000, and the maturity date thereof shall be May 26, 2006.

2.2 Closing. The closing of the purchase and sale of the Note (the "Closing") shall take place within five Business Days after the satisfaction or waiver of the conditions set forth in Section 6 hereof or such date and time as shall be mutually agreed to by the parties hereto (the "Closing Date") at the offices of White & Case LLP, 1155 Avenue of the Americas, New York, New York 10036-2787, or such other place as shall be mutually agreed to by the parties hereto.

On the Closing Date, Company will deliver to Purchaser the Note payable to Purchaser against delivery by Purchaser of the purchase price therefor by wire transfer of funds to the account of Company.

2.3 Optional Prepayment. Subject to the applicable provisions of Article 9 hereof, so long as after the third anniversary of the Closing Date the Closing Price of a share of Common Stock is at least 150% of the then current Conversion Price (which as of the Closing Date shall be a Closing Price of \$34.31) for a period of thirty (30) consecutive days, Company shall have the right, without premium or penalty, and on ten (10) days' prior written notice to Purchaser, to voluntarily prepay all or any portion (in multiples of not less than \$500,000 or the amount outstanding on the Note) of the Note; provided, however, Purchaser shall retain conversion rights in respect of the Note for

such period of ten (10) days after Company has given such notice. Each prepayment shall be accompanied by the payment of accrued and unpaid interest on the amount being prepaid, through the date of prepayment. Company shall not have any other right to prepay the Note.

2.4 Mandatory Redemption. Upon the occurrence of a Change of Control, Purchaser, by written notice to Company and the Specified Senior Creditor within thirty (30) days of the occurrence thereof, may require Company to redeem all or a portion of the Note for a price equal to the outstanding principal amount thereof, together with a payment of all accrued and unpaid interest on the amount being prepaid through the date of prepayment. Company shall give Purchaser and the Specified Senior Creditor written notice of the occurrence of a Change of Control within ten (10) days after the occurrence thereof.

2.5 Use of Proceeds. Company shall use the proceeds of the purchase price to make its initial capital contribution pursuant to Section 3.01 (a)(i) of the Transaction Agreement dated January 20, 1999 between the Company and General Electric Company.

2.6 Interest on Note. Company shall pay interest to Purchaser, semi-annually in arrears on the last day of each October and April, commencing on October 31, 1999 (each, an "Interest Payment Date"), at a rate equal to 4.75% per annum, based on a year of 360 days for the actual number of days elapsed, and based on the amounts outstanding from time to time under the Note.

(a) If Company has not consummated a public offering of equity securities registered under the Securities Act with gross proceeds of at least \$40 million by June 15, 1999 and until Company does consummate such an offering, the interest rate applicable to the Note shall be at a rate equal to 13.00% per annum. After Company consummates such an offering, the interest rate applicable to the Note shall return to 4.75% per annum.

(b) If any payment on the Note becomes due and payable on a day other than a Business Day, the maturity thereof shall be extended to the next succeeding Business Day and, with respect to payments of principal, interest thereon shall be payable at the then applicable rate during such extension.

(c) Notwithstanding anything to the contrary set forth in this Section 2.6, if at any time until payment in full of the Note, the interest rate payable thereon exceeds the highest rate of interest permissible under any law which a court of competent jurisdiction shall, in a final determination, deem applicable hereto (the "Maximum Lawful Rate"), then in such event and so long as the Maximum Lawful Rate would be so exceeded, the rate of interest payable on the Note shall be equal to the Maximum Lawful Rate; provided, however, that if at any time thereafter the interest rate payable thereon is less than the Maximum Lawful Rate, Company shall continue to pay interest thereunder at the Maximum Lawful Rate until such time as the total interest received by Purchaser is equal to the total interest which it would have received had the interest rate on the Note been (but for the operation of this paragraph) the interest rate payable since the Closing

Date. Thereafter, the interest rate payable shall be the stated interest rate unless and until such rate again exceeds the Maximum Lawful Rate, in which event this paragraph shall again apply. In no event shall the total interest received by Purchaser pursuant to the terms hereof exceed the amount which it could lawfully have received had the interest due hereunder been calculated for the full term hereof at the Maximum Lawful Rate. In the event the Maximum Lawful Rate is calculated pursuant to this paragraph, such interest shall be calculated at a daily rate equal to the Maximum Lawful Rate divided by the number of days in the year in which such calculation is made. In the event that a court of competent jurisdiction, notwithstanding the provisions of this Section 2.6(d), shall make a final determination that Purchaser has received interest hereunder or under any of the Loan Documents in excess of the Maximum Lawful Rate, Purchaser shall, to the extent permitted by applicable law, promptly apply such excess first to any interest due and not yet paid under the Note, then to the outstanding principal of the Note, then to other unpaid Obligations and thereafter shall refund any excess to Company or as a court of competent jurisdiction may otherwise order.

2.7 Receipt of Payments. Company shall make each payment under the Note not later than 2:00 P.M. (New York City time) on the day when due in lawful money of the United States of America in immediately available funds to Purchaser's depository bank in the United States as designated by Purchaser from time to time for deposit in Purchaser's depository account.

2.8 Application of Payments. Company irrevocably waives the right to direct the application of any and all payments at any time or times hereafter received by Purchaser from or on behalf of Company pursuant to the terms of this Agreement, and Company irrevocably agrees that Purchaser shall have the continuing exclusive right to apply any and all such payments against the then due and payable Obligations of Company and in repayment of the Note as it may deem advisable. In the absence of a specific determination by Purchaser with respect thereto, the same shall be applied in the following order: (i) then due and payable interest payments on the Note; and (ii) then due and payable principal payments on the Note.

2.9 Sharing of Payments. If any holder of the Note or a portion thereof shall obtain any payment (whether voluntary, involuntary, through the exercise of any right of set-off, or otherwise) on account of the Note held by it in excess of its ratable share of payments on account of the Notes held by all holders thereof, such holder shall forthwith purchase from each other holder such participations in the Note held by it as shall be necessary to cause such purchasing holder to share the excess payment ratably with each other holder; provided, however, that if all or any portion of such excess payment is thereafter recovered from such purchasing holder, such purchase shall be rescinded and such holder shall repay to the purchasing holder the purchase price to the extent of such recovery together with an amount equal to such holder's ratable share (according to the proportion of (i) the amount of such holder's required repayment to (ii) the total amount so recovered from the purchasing holder) of any interest or other amount paid or payable by the purchasing holder in respect of the total amount so recovered. Company agrees that any holder so purchasing a participation from another holder pursuant to this Section 2.9 may, to the fullest extent permitted by law, exercise all

its rights of payment (including the right of set-off) with respect to such participation as fully as if such holder were the direct creditor of Company in the amount of such participation. Company further agrees to make all payments on the Note to all holders thereof on a pro rata basis, based on the principal amount of the Note held by each.

2.10 Indemnity. (a) Company shall indemnify and hold Purchaser and each of its officers, directors and Affiliates harmless from and against any and all suits, actions, proceedings, claims, damages, losses, liabilities and expenses (including, without limitation, reasonable attorneys' fees and disbursements, including those incurred upon any appeal) which may be instituted or asserted by a third party against or incurred by Purchaser or such other indemnified person as the result of Purchaser having entered into this Agreement or any of the other Loan Documents or purchased the Note hereunder or arising out of any Environmental Law applicable to Company or its Subsidiaries or otherwise relating to or arising out of the transactions contemplated hereby; provided, however, that Company shall not be liable for such indemnification to such indemnified Person to the extent that any such suit, action, proceeding, claim, damage, loss, liability or expense results from such indemnified Person's gross negligence or willful misconduct.

2.11 Access. Purchaser and any of its officers, employees and/or agents shall have the right, during normal business hours, to visit and inspect the properties and facilities of Company and its Subsidiaries and to inspect, audit and make extracts from all of Company's and its Subsidiaries' records, files, corporate books and books of account and to discuss the affairs, finances and accounts of Company and its Subsidiaries with the principal officers of Company, all at such reasonable times and upon reasonable notice as Purchaser may reasonably request. Company shall deliver any document or instrument reasonably necessary for Purchaser, as it may request, to obtain records from any service bureau maintaining records for Company or its Subsidiaries. In connection with its rights under this Section 2.11, Purchaser shall be bound by the confidentiality provisions applicable to General Electric Company contained in the Confidentiality Agreement dated May 26, 1999 among the Company, General Electric Company and GELcore, LLC.

2.12 Taxes. Any and all payments by Company hereunder or under the Note shall be made, in accordance with this Section 2.12, free and clear of and without deduction for any and all present or future taxes, levies, imposts, deductions, charges or withholdings, and all liabilities with respect thereto, excluding taxes imposed on or measured by the net income or net profits of Purchaser, or any franchise or similar tax imposed on or measured by the net income of Purchaser, by the jurisdiction under the laws of which it is organized or any political subdivision thereof (all such non-excluded taxes, levies, imposts, deductions, charges, withholdings and liabilities being hereinafter referred to as "Taxes"). If Company shall be required by law to deduct any Taxes from or in respect of any sum payable hereunder or under the Note to Purchaser, (i) the sum payable shall be increased as may be necessary so that after making all required deductions (including deductions applicable to additional sums payable under this Section 2.12) Purchaser receives an amount equal to the sum it would have received had no such deductions been made, (ii) Company shall make such deductions, and (iii)

Company shall pay the full amount deducted to the relevant taxing or other authority in accordance with applicable law.

(a) In addition, Company agrees to pay any present or future stamp or documentary taxes or any other sales, or exercise taxes, charges or similar levies that arise from any payment made hereunder or under the Note or from the execution, sale, delivery or registration of, or otherwise with respect to, any of the Transaction Documents (hereinafter referred to as "Other Taxes").

(b) Within 45 days after the date of any payment of Taxes, Company shall furnish to Purchaser the original or a certified copy of a receipt evidencing payment thereof.

(c) Without prejudice to the survival of any other agreement of Company hereunder, the agreements and obligations of Company contained in this Section 2.12 shall survive the payment in full of the Note.

3. PURCHASER'S REPRESENTATIONS AND WARRANTIES

Purchaser makes the following representations and warranties to Company, each and all of which shall survive the execution and delivery of this Agreement and the Closing hereunder:

3.1 Investment Intention. Purchaser is purchasing the Note for its own account, for investment purposes and not with a view to the distribution thereof. Purchaser will not, directly or indirectly, offer, transfer, sell, assign, pledge, hypothecate or otherwise dispose of the Note (or solicit any offers to buy, purchase, or otherwise acquire any of the Note), except in compliance with the Securities Act.

3.2 Accredited Investor. Purchaser is an "accredited investor" (as that term is defined in Rule 501 of Regulation D under the Securities Act) and by reason of its business and financial experience, it has such knowledge, sophistication and experience in business and financial matters as to be capable of evaluating the merits and risks of the prospective investment, is able to bear the economic risk of such investment and is able to afford a complete loss of such investment.

3.3 Corporate Existence. Purchaser is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware.

3.4 Corporate Power; Authorization; Enforceable Obligations. The execution, delivery and performance by Purchaser of this Agreement and the other Transaction Documents to be executed by it: (i) are within Purchaser's corporate power; (ii) have been duly authorized by all necessary corporate action; (iii) are not in contravention of any provision of Purchaser's certificate of incorporation or by-laws; and (iv) will not violate any law or regulation, or any order or decree of any court or governmental instrumentality binding on Purchaser. This Agreement and the other Transaction Documents to which Purchaser is a party have each been duly executed and delivered by Purchaser and constitute the legal, valid and binding obligations of

Purchaser, enforceable against it in accordance with their respective terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity, including principles of commercial reasonableness, good faith and fair dealing (regardless of whether enforcement is sought in a proceeding at law or in equity).

4. COMPANY'S REPRESENTATIONS AND WARRANTIES

Company makes the following representations and warranties to Purchaser, each and all of which shall survive the execution and delivery of this Agreement and the Closing hereunder:

4.1 Authorization and Issuance of Note. Upon delivery to Purchaser of the Note against payment in accordance with the terms hereof, the Note will have been validly issued, free and clear of all pledges, liens, encumbrances and preemptive rights. The issuance of shares of Common Stock upon conversion of the Note has been duly authorized by all necessary corporate action on the part of Company and, when issued upon conversion of the Note, such Common Stock will have been validly issued and fully paid and non-assessable. Company has duly reserved 340,984 shares of Common Stock for issuance pursuant to the terms of the Note.

4.2 Corporate Existence; Compliance with Law. Company and each of its Subsidiaries, if any, (i) is a corporation duly organized, validly existing and in good standing under the laws of the State of New Jersey in the case of Company and as set forth on Schedule 4.2 in the case of its Subsidiaries; (ii) is duly qualified as a foreign corporation and in good standing under the laws of each jurisdiction where its ownership or lease of property or the conduct of its business requires such qualification (except for jurisdictions in which such failure to so qualify or to be in good standing would not have a Material Adverse Effect); (iii) has the requisite corporate power and authority and the legal right to own, pledge, mortgage or otherwise encumber and operate its properties, to lease the property it operates under lease, and to conduct its business as now being conducted; (iv) has, or has applied for, all material licenses, permits, consents or approvals from or by, and has made all material filings with, and has given all material notices to, all Governmental Authorities having jurisdiction, to the extent required for such ownership, operation and conduct; (v) is in compliance with its certificate or articles of incorporation and by-laws; and (vi) is in compliance with all applicable provisions of law, except for such non-compliance which would not have a Material Adverse Effect.

4.3 Securities Laws. In reliance on the investment representations contained in Sections 3.1 and 3.2, the offer, issuance, sale and delivery of the Note, as provided in this Agreement, are exempt from the registration requirements of the Securities Act and all applicable state securities laws, and are otherwise in compliance with such laws. Neither Company nor any Person acting on its behalf has taken or will take any action (including, without limitation, any offering of any securities of Company under circumstances which would require the integration of such offering with the offering of the Note under the Securities Act and the rules and regulations of the SEC

thereunder) which might subject the offering, issuance or sale of the Note, to the registration requirements of Section 5 of the Securities Act.

4.4 Corporate Power; Authorization; Enforceable Obligations.

The execution, delivery and performance by Company of this Agreement, the other Transaction Documents to which it is a party and all instruments and documents to be delivered by Company, the issuance and sale of the Note and the consummation of the other transactions contemplated by any of the foregoing: (i) are within Company's corporate power and authority; (ii) have been duly authorized by all necessary or proper corporate action; (iii) are not in contravention of any provision of Company's certificate of incorporation or by-laws; (iv) will not violate any law or regulation, or any order or decree of any court or governmental instrumentality; (v) will not conflict with or result in the breach or termination of, constitute a default under or accelerate any performance required by, any indenture, mortgage, deed of trust, lease, agreement or other instrument to which Company or any of its Subsidiaries is a party or by which Company, any of its Subsidiaries or any of their property is bound; (vi) will not result in the creation or imposition of any Lien upon any of the property of Company or any of its Subsidiaries; and (vii) do not require on the part of Company the consent or approval of, or any filing with, any Governmental Authority or any other Person (except (A) for those filings required by the Registration Rights Agreement and (B) to the extent previously obtained or made). At or prior to the Closing Date, each of this Agreement and the other Transaction Documents shall have been duly executed and delivered by Company and each shall then constitute a legal, valid and binding obligation of Company, enforceable against it in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity, including principles of commercial reasonableness, good faith and fair dealing (regardless of whether enforcement is sought in a proceeding at law or in equity).

4.5 Financial Statements. The audited consolidated balance sheet of Company as at September 30, 1998, and the related consolidated statements of income and cash flows for the year then ended, with the opinion thereon of Pricewaterhouse Coopers LLP, and the unaudited consolidated balance sheet of Company as at March 31, 1999 (the "Balance Sheet") and the related unaudited consolidated statements of income, and cash flows for the six months then ended, copies of which have previously been delivered to Purchaser, have been, except as noted therein, prepared in conformity with GAAP consistently applied throughout the periods involved and present fairly in all material respects the consolidated financial position of Company as at the dates thereof, and the consolidated results of its operations and cash flows for the periods then ended, subject, in the case of the interim financial statements, to normal year-end audit adjustments.

4.6 Brokers. No broker or finder acting on behalf of Company or any of its Subsidiaries brought about the consummation of the transactions contemplated pursuant to this Agreement and neither Company nor any of its Subsidiaries has any obligation to any Person in respect of any finder's or brokerage fees (or any similar

obligation) in connection with the transactions contemplated by this Agreement. Company is solely responsible for the payment of all such finder's or brokerage fees.

4.7 Patents, Trademarks, Copyrights and Licenses. Company and each of its Subsidiaries owns or has a license or other right to use all patents, patent applications, copyrights, service marks, trademarks and registrations and applications for registration thereof, and trade names necessary to continue to conduct its business as heretofore conducted by it and now being conducted by it, except where the failure to have such right would not be reasonably expected to have a Material Adverse Effect. To Company's knowledge, there are no pending or threatened claims alleging or potential claims that could reasonably be expected to be alleged, that any or all such intellectual property rights of Company and its Subsidiaries infringes or conflicts with the intellectual property rights of others.

4.8 No Material Adverse Effect. Except as set forth on Schedule 4.8, no event has occurred since December 31, 1998 which has had or could be reasonably expected to have a Material Adverse Effect.

4.9 SEC Documents. Company has made available to Purchaser a true and complete copy of each report, schedule, registration statement and definitive proxy statement filed by Company with the SEC since January 1, 1998 and prior to the date of this Agreement (the "Company SEC Documents"), which are all the documents (other than preliminary material) that Company was required to file with the SEC since such date. As of their respective dates, the Company SEC Documents complied in all material respects with the requirements of the Securities Act or the Exchange Act, as the case may be, and the rules and regulations of the SEC thereunder applicable to such Company SEC Documents, and none of the Company SEC Documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

4.10 Full Disclosure. No information contained in this Agreement, any other Transaction Document or any financial statements furnished by or on behalf of Company pursuant to the terms of this Agreement contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading in light of the circumstances under which made.

5. COVENANTS

5.1 Affirmative Covenants. Company covenants and agrees that from and after the date hereof (except as otherwise provided herein, or unless the Required Holders have given their prior written consent) so long as the Note is outstanding:

(a) Tax Compliance. Company shall pay all transfer, excise or similar taxes (not including income, profits or franchise taxes) in connection with the issuance, sale, delivery or transfer by Company to Purchaser of the Note and the Common Stock issuable upon conversion thereof, and shall indemnify and save Purchaser harmless

without limitation as to time against any and all liabilities with respect to such taxes. Company shall not be responsible for any taxes in connection with the transfer of the Note or such Common Stock by the holder thereof. The obligations of Company under this Section 5.1(a) shall survive the payment, prepayment or redemption of the Note and the termination of this Agreement.

(b) Insurance. Company shall and shall cause each Subsidiary of Company to maintain insurance covering, without limitation, fire, theft, burglary, public liability, property damage, product liability, workers' compensation, directors' and officers' insurance and insurance on all property and assets material to the operation of the business, all in amounts customary for the industry. Company shall, and shall cause each of its Subsidiaries to, pay all insurance premiums payable by them.

(c) Compliance with Law. Company shall, and shall cause each of its Subsidiaries to, comply with all laws, including Environmental Laws, applicable to it, except where the failure to comply would not be reasonably likely to result in a Material Adverse Effect.

(d) Maintenance of Existence. Company shall, and shall cause each of its Subsidiaries to do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, and its rights and franchises.

(e) Senior Debt Compliance. As soon as available and in any event within 45 days after the end of each fiscal quarter, Company shall deliver to Purchaser a certificate of the chief financial officer of Company certifying Company's compliance with the covenant contained in Section 5.2(c) hereof as of the last day of the immediate preceding fiscal quarter, showing the calculation thereof.

5.2 Negative Covenants. Company covenants and agrees that from and after the date hereof (except as otherwise provided herein, or unless the Required Holders have given their prior written consent) so long as the Note is outstanding:

(a) Sales of Assets; Liquidation. Company shall not, and shall not permit any Material Subsidiary of Company to, (i) sell, transfer, convey or otherwise dispose of all or substantially all of its assets or properties or (ii) liquidate, dissolve or wind up Company, or any of its Material Subsidiaries, except for transfers to Company, whether voluntary or involuntary; provided, however, that the foregoing shall not prohibit (i) the sale of inventory in the ordinary course of business, (ii) the sale of surplus or obsolete equipment and fixtures, (iii) transfers resulting from any casualty or condemnation of assets or properties or (iv) sales as to which the net proceeds are either (x) reinvested in Company's or, if sold by a Material Subsidiary, such Material Subsidiary's or Company's existing or related lines of business or (y) applied to repay Indebtedness, within 180 days after such sale.

(b) Transactions with Affiliates. Company shall not and shall not permit any Subsidiary of Company to enter into or be a party to any transaction involving \$250,000 or more in any single transaction or \$1,000,000 or more in the aggregate for all

such transactions with any Affiliate of Company or such Subsidiary, except (i) transactions expressly permitted hereby, (ii) transactions in the ordinary course of and pursuant to the reasonable requirements of Company's or such Subsidiary's business and upon fair and reasonable terms that are fully disclosed to Purchaser and are no less favorable to Company or such Subsidiary than would be obtained in a comparable arm's-length transaction (as determined by disinterested members of the board of directors of Company) with a Person not an Affiliate of Company or such Subsidiary, (iii) transactions between Company and its wholly-owned Subsidiaries or between such Subsidiaries and (iv) payment of compensation to employees and directors' fees. For the avoidance of doubt, Company and Purchaser hereby acknowledge that the foregoing shall not restrict or prohibit certain transactions between Company and certain of its Affiliates which are in any way related to the guaranty of, or collateral security provided for, any and all of the Specified Senior Debt.

(c) Senior Debt. Company shall not and shall not permit any Subsidiary of Company to incur or suffer to exist Senior Debt in an aggregate principal amount in excess of the greater of (X) the Permitted Senior Debt and (Y) the product obtained by multiplying Company's EBITDA (determined on the basis of the immediately preceding four fiscal quarters ending on the last day of the most recent fiscal quarter) by four (such greater amount, as may be adjusted from time to time, the "Senior Debt Ceiling"). For purposes hereof, "Permitted Senior Debt" shall be an aggregate principal amount equal to \$30 million plus any additional amounts of which Purchaser is given notice by Company which would constitute an Event of Default and as a result of which Purchaser does not elect to accelerate the amounts due under the Note in accordance with the provisions of Section 8.2 hereof. Notwithstanding the foregoing, if the amount of Senior Debt outstanding exceeds the Senior Debt Ceiling pursuant to the calculation of the amount in clause (Y) above, it shall not be deemed a Default or an Event of Default hereunder so long as such excess Senior Debt does not exceed fifteen percent (15%) of the total amount of Senior Debt outstanding.

(d) Indebtedness. Company shall not, and shall not permit any Subsidiary of Company to, incur or suffer to exist any Indebtedness other than (i) Senior Debt permitted pursuant to Section 5.2(c) hereof, (ii) Indebtedness listed on Schedule 5.2(d) and (iii) Indebtedness subordinated to the Note on terms and conditions (including, without limitation, subordination terms) reasonably acceptable to Purchaser. It is understood that Purchaser shall be acting reasonably in not agreeing to any subordinated Indebtedness which has payments of principal (other than, with respect to all subordinated Indebtedness, an aggregate principal amount of \$1,000,000) prior to the payment in full of the Note or which has interest payments Purchaser reasonably believes to be excessive.

(e) Liens. Company shall not, and shall not permit any Subsidiary of Company to, incur or suffer to exist any Liens on any of its assets, except Permitted Liens and Liens securing Senior Debt permitted hereunder.

(f) Mergers. Company shall not, directly or indirectly, by operation of law or otherwise, merge with, consolidate with, or otherwise combine with any Person where there is a Change in Control or would result in a Default or Event of Default.

6. CONDITIONS PRECEDENT

6.1 Conditions Precedent. The obligation of Purchaser to purchase the Note pursuant to Section 2.1 hereof, is subject to the condition that Purchaser shall have received, on the Closing Date, the following, each dated the Closing Date unless otherwise indicated, in form and substance satisfactory to Purchaser:

(a) Favorable opinions of White & Case, special counsel to Company, and Dillon, Bitar & Luther, L.L.C., special New Jersey counsel to Company, substantially in the form attached hereto as Exhibits C-1 and C-2, respectively.

(b) Resolutions of the board of directors of Company, certified by the Secretary or Assistant Secretary of Company, as of the Closing Date, to be duly adopted and in full force and effect on such date, authorizing (i) the consummation of each of the transactions contemplated by this Agreement and (ii) specific officers to execute and deliver this Agreement and each other Transaction Document to which it is a party.

(c) Governmental certificates, dated the most recent practicable date prior to the Closing Date, with telegram updates where available, showing that Company is organized and in good standing in the State of New Jersey and is qualified as a foreign corporation and in good standing in all other jurisdictions in which it is qualified to transact business.

(d) A copy of the certificate of incorporation and all amendments thereto of Company, certified by the Secretary or Assistant Secretary of Company, and copies of Company's by-laws, certified by the Secretary or Assistant Secretary of Company as true and correct as of the Closing Date.

(e) The Registration Rights Agreement duly executed by the parties thereto.

(f) Certificates of the Secretary or an Assistant Secretary of Company, dated the Closing Date, as to the incumbency and signatures of the officers of Company executing this Agreement, the Note, each other Transaction Document to which it is a party and any other certificate or other document to be delivered pursuant hereto or thereto, together with evidence of the incumbency of such Secretary or Assistant Secretary.

(g) Certificate of the President of Company, dated the Closing Date, stating that all of the representations and warranties of Company contained herein or in the other Transaction Documents are true and correct on and as of the Closing Date as if made on such date and that no breach of any covenant contained in Article V has occurred or would result from the Closing hereunder.

(h) Receipt of all requisite third-party consents to the transactions contemplated hereby, including an acknowledgment from the Specified Senior Creditor concerning the incurrence of the Obligations hereunder as constituting "Subordinated Debt", as defined in the Specified Senior Creditor's Senior Debt Documents and consenting to the use of proceeds described in Section 2.5 hereof.

6.2 Additional Conditions. The obligation of Purchaser to purchase the Note pursuant to Section 2.1 is subject to the additional conditions precedent that:

(a) Except as disclosed pursuant to Article IV, there shall not have occurred any event or condition since December 31, 1998 which could have a Material Adverse Effect.

(b) All of the representations and warranties of Company contained herein or in the other Transaction Documents shall be true and correct on and as of the Closing Date as if made on such date and no breach of any covenant contained in Article V shall have occurred or would result from the Closing hereunder.

(c) The Closing shall have occurred no later than May 27, 1999.

7. CONVERSION

7.1 Conversion of Note.

(a) Subject to the provisions for adjustment hereinafter set forth, the Note shall be convertible, in whole or in part, at any time and from time to time, at the option of the holder thereof (a "Conversion"), up to the outstanding principal amount of the Note held by Purchaser at the time of such conversion into a number of fully paid and nonassessable shares of Common Stock equal to the quotient obtained by dividing (A) the principal amount of the Note to be converted by (B) the Conversion Price (as hereinafter defined). The Conversion Price shall initially be \$22.875 per share of Common Stock and shall be subject to further adjustments from time to time pursuant to Section 7.1(f) below.

No fractional shares shall be issued upon the conversion of the Note. All shares of Common Stock (including fractions thereof) issuable upon conversion of the Note by Purchaser shall be aggregated for purposes of determining whether conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fraction of a share of Common Stock, Company shall, in lieu of issuing any fractional share, pay Purchaser a sum in cash equal to the Current Market Price of such fraction on the date of conversion.

(b) A conversion of the Note may be effected by Purchaser upon the surrender to Company at the principal office of Company of the Note to be converted accompanied by a written notice stating that Purchaser elects to convert all or a specified amount of its Note in accordance with the provisions of this Section 7.1 and specifying the name or names in which Purchaser wishes the certificate or certificates for shares of Common Stock to be issued.

(c) In case the written notice specifying the name or names in which Purchaser wishes the certificate or certificates for shares of Common Stock to be issued shall specify a name or names other than that of Purchaser, such notice shall be accompanied by payment of all transfer taxes payable upon the issuance of shares of Common Stock in such name or names. Other than such taxes, Company will pay any and all issue and other taxes (other than taxes based on income) that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Note pursuant hereto. As promptly as practicable, and in any event within five Business Days after the surrender of the Note and the receipt of such notice relating thereto and, if applicable, payment of all transfer taxes (or the demonstration to the satisfaction of Company that such taxes have been paid), Company shall deliver or cause to be delivered (1) certificate(s) representing the number of validly issued, fully paid and nonassessable full shares of Common Stock to which the holder of the Note being converted shall be entitled and (2) if less than all of principal amount of the Note evidenced by the surrendered Note is being converted, in exchange for the Note surrendered, a new Note, of like tenor, in a principal amount equal the full principal amount of the Note surrendered less the principal amount being converted.

(d) A conversion shall be deemed to have been made at the close of business on the date of giving the written notice referred to in the first sentence of (b) above and of such surrender of the certificate or certificates representing the Note to be converted so that the rights of the holder thereof as to the Note being converted shall cease except for the right to receive shares of Common Stock in accordance herewith, and the Person entitled to receive the shares of Common Stock shall be treated for all purposes as having become the record holder of such shares of Common Stock at such time.

(e) Company shall at all times reserve, and keep available for issuance upon the conversion of the Note, such number of its authorized but unissued shares of Common Stock as will from time to time be sufficient to permit the conversion of all of the outstanding principal balance of the Note, and shall take all action required to increase the authorized number of shares of Common Stock if necessary to permit the conversion of all of the outstanding principal balance of the Note.

(f) The Conversion Price will be subject to adjustment from time to time as follows:

(i) In case Company shall at any time or from time to time after the Closing Date (A) pay a dividend, or make a distribution, on the outstanding shares of Common Stock in shares of Common Stock, (B) subdivide the outstanding shares of Common Stock, (C) combine the outstanding shares of Common Stock into a smaller number of shares or (D) issue by reclassification of the shares of Common Stock any shares of capital stock of Company, then, and in each such case, the Conversion Price in effect immediately prior to such event or the record date therefor, whichever is earlier, shall be adjusted so that the holder of any Note thereafter surrendered for conversion shall be entitled to receive the

number of shares of Common Stock or other securities of Company which Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Note been surrendered for conversion immediately prior to the happening of such event or the record date therefor, whichever is earlier. An adjustment made pursuant to this clause (i) shall become effective (x) in the case of any such dividend or distribution, immediately after the close of business on the record date for the determination of holders of shares of Common Stock entitled to receive such dividend or distribution, or (y) in the case of such subdivision, reclassification or combination, at the close of business on the day upon which such corporate action becomes effective. No adjustment shall be made pursuant to this clause (i) in connection with any transaction to which Section 7.1(g) applies.

(ii) In case Company shall issue shares of Common Stock (or rights, warrants or other securities convertible into or exchangeable for shares of Common Stock) after the Closing Date, other than (A) pursuant to existing obligations, including, without limitation, under agreements with existing lenders, outstanding options, rights, warrants or other securities convertible into or exchangeable for shares of Common Stock, or pursuant to any existing employee benefit plan, (B) pursuant to any joint venture or other strategic alliance, with the prior written consent of Purchaser, (C) issuances covered by clause (i) above, and (D) issuances pursuant to a registration statement under the Securities Act, for consideration in an amount per share of Common Stock (or having an exercise, conversion or exchange price per share) less than an amount equal to 25% below the Current Market Price, then (i) the number of shares of Common Stock for which this Note is convertible shall be adjusted to equal the product obtained by multiplying the number of shares of Common Stock for which this Note is convertible immediately prior to such issue or sale by a fraction (A) the numerator of which shall be the number of shares of Common Stock outstanding immediately after such issue or sale, and (B) the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue or sale plus the number of shares which the aggregate offering price of the total number of such additional shares of Common Stock would purchase at the then Current Market Price; and (ii) the Conversion Price as to the number of shares for which this Note is convertible prior to such adjustment shall be adjusted by multiplying such Conversion Price by a fraction (X) the numerator of which shall be the number of shares for which this Note is convertible immediately prior to such issue or sale; and (Y) the denominator of which shall be the number of shares of Common Stock purchasable immediately after such issue or sale. An example of the calculation required pursuant to this clause (ii) is annexed hereto as Exhibit D.

(iii) An adjustment made pursuant to clause (ii) above shall be made on the next Business Day following the date on which any such issuance is made and shall be effective retroactively immediately after the close of business on such date. No adjustment shall be made pursuant to clause (ii) in respect of any issuance of shares of Common Stock on or prior to the Closing Date. For purposes of clause (ii), the aggregate consideration received by Company in connection with the issuance of shares of Common Stock or of rights, warrants or other securities exchangeable or convertible into shares of Common Stock shall be deemed to be equal to the sum of the aggregate offering price of all such Common Stock and such rights, warrants, or other exchangeable or convertible securities plus the aggregate amount, if any, receivable upon exchange or conversion of any such exchangeable or convertible securities into shares of Common Stock.

(iv) In case Company shall at any time or from time to time after the Closing Date declare, order, pay or make a dividend or other distribution (including, without limitation, any distribution of stock or other securities or property or rights or warrants to subscribe for securities of Company or any of its Subsidiaries by way of dividend or spinoff), on its Common Stock, other than dividends or distributions of shares of Common Stock which are referred to in clause (i) above and cash dividends paid out of retained earnings, then the Conversion Price shall be adjusted so that it shall equal the price determined by multiplying (A) the applicable Conversion Price on the day immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution by (B) a fraction, the numerator of which shall be the Current Market Price per share of Common Stock on the day immediately prior to such record date less the amount of such dividend or distribution per share of Common Stock, and the denominator of which shall be such Current Market Price per share of Common Stock on the day immediately prior to such record date. No adjustment shall be made pursuant to this clause (iv) in connection with any transaction to which Section 7.1(g) applies.

(v) For purposes of this Section 7.1(f), the number of shares of Common Stock at any time outstanding shall not include any shares of Common Stock then owned or held by or for the account of Company or any of its Subsidiaries.

(vi) If Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend or other distribution, and shall thereafter and before the distribution to stockholders thereof legally abandon its plan to pay or deliver such dividend or distribution, then thereafter no adjustment in the number of shares of Common Stock issuable upon exercise of the right of conversion

granted by this Section 7.1(f) or in the Conversion Price then in effect shall be required by reason of the taking of such record.

(vii) Anything in this Section 7.1(f) to the contrary notwithstanding, Company shall not be required to give effect to any adjustment in the Conversion Price unless and until the net effect of one or more adjustments (each of which shall be carried forward), determined as above provided, shall have resulted in a change of the Conversion Price by at least 1%, and when the cumulative net effect of more than one adjustment so determined shall be to change the Conversion Price by at least one cent, such change in Conversion Price shall thereupon be given effect.

(viii) If any option or warrant expires or is cancelled without having been exercised, then, for the purposes of the adjustments set forth above, such option or warrant shall have been deemed not to have been issued and the Conversion Price shall be adjusted accordingly. No holder of Common Stock which was previously issued upon conversion of the Note shall have any obligation to redeem or cancel any such shares of Common Stock as a result of the operation of this clause (viii).

(g) In case of any reorganization of capital, reclassification of capital stock (other than a reclassification of capital subject to 7.1(f)(i)), consolidation or merger with or into another corporation, or sale, transfer or disposition of all or substantially all the property, assets or business of Company to another corporation (any one or more of such events being an "Organic Change"), the Note then outstanding, shall thereafter be convertible into, in lieu of the Common Stock issuable upon such conversion prior to consummation of such Organic Change, the kind and amount of shares of stock and other securities and property receivable (including cash) upon the consummation of such Organic Change by a holder of that number of shares of Common Stock into which the Note was convertible immediately prior to such Organic Change (including, on a pro rata basis, the cash, securities or property received by holders of Common Stock in any tender or exchange offer that is a step in such Organic Change). In case securities or property other than Common Stock shall be issuable or deliverable upon conversion as aforesaid, then all references in this Section 7.1(g) shall be deemed to apply, so far as appropriate and nearly as may be, to such other securities or property.

(h) In case at any time or from time to time Company shall pay any stock dividend or make any other non-cash distribution to the holders of its Common Stock, or shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or any other right, or there shall be any capital reorganization or reclassification of the Common Stock of Company or consolidation or merger of Company with or into another corporation, or any sale or conveyance to another corporation of the property of Company as an entirety or substantially as an entirety, or there shall be a voluntary or involuntary dissolution, liquidation or winding up of Company, then, in any one or more of said cases, Company shall give at least 20 days' prior written notice to the registered holder of the Note at the address of each as shown

on the books of Company as of the date on which (i) the books of Company shall close or a record shall be taken for such stock dividend, distribution or subscription rights or (ii) such non-bankruptcy reorganization, reclassification, consolidation, merger, sale or conveyance, dissolution, liquidation or winding up shall take place, as the case may be, provided that in the case of any Organic Change to which Section 7.1(g) applies Company shall give at least 20 days' prior written notice as aforesaid. Such notice shall also specify the date as of which the holders of the Common Stock of record shall participate in such dividend, distribution or subscription rights or shall be entitled to exchange their Common Stock for securities or other property deliverable upon such non-bankruptcy reorganization, reclassification, consolidation, merger, sale or conveyance or participate in such dissolution, liquidation or winding up, as the case may be. Failure to give such notice shall not invalidate any action so taken.

(i) Upon any adjustment of the Conversion Price then in effect and any increase or decrease in the number of shares of Common Stock issuable upon the operation of the conversion set forth in this Section 7.1, then, and in each such case, Company shall promptly deliver to the holder of the Note, a certificate signed by the President or a Vice President and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary of Company setting forth in reasonable detail the event requiring the adjustment and the method by which such adjustment was calculated and specifying the Conversion Price then in effect following such adjustment and the increased or decreased number of shares issuable upon the conversion granted by this Section 7.1, and shall set forth in reasonable detail the method of calculation of each and a brief statement of the facts requiring such adjustment.

8. EVENTS OF DEFAULT; RIGHTS AND REMEDIES

8.1 Events of Default. The occurrence of any one or more of the following events (regardless of the reason therefor) shall constitute an "Event of Default" hereunder and under the Note:

(a) Company shall fail to make any payment of principal of, or interest on or any other amount owing in respect of, the Note, or any of the other Obligations when due and payable or declared due and payable, including pursuant to Section 2.4 hereof, which, other than principal or interest, shall have remained unremedied for a period of ten (10) days.

(b) Company shall fail or neglect to perform, keep or observe any of the provisions of Section 5.2 hereof (other than Section 5.2(c)).

(i) Company shall fail or neglect to perform, keep or observe any of the provisions of Section 5.2(c) hereof and such non-compliance shall have remained unremedied for a period of 45 days after the last day of the fiscal quarter during which such non-compliance occurred.

(c) Company shall fail or neglect to perform, keep or observe any other provision of this Agreement or of any of the other Loan Documents, and the same shall

remain unremedied for a period of thirty (30) days after Company shall receive written notice of any such failure from Purchaser.

(d) A default shall occur under any other agreement, document or instrument to which Company or any Subsidiary is a party or by which Company or any of its Subsidiaries or any of their property is bound, and such default (i) involves the failure to make any payment (whether of principal, interest or otherwise) due at the scheduled final maturity date thereof beyond the period of grace, if any, applicable thereto in respect of any Indebtedness of Company or any of its Subsidiaries in an aggregate amount exceeding \$1,000,000, or (ii) causes such Indebtedness or a portion thereof in an aggregate amount exceeding \$1,000,000, to become due prior to its stated maturity.

(e) Any representation or warranty herein or in any Loan Document or in any written statement pursuant thereto or hereto, report, financial statement or certificate made or delivered to Purchaser by Company pursuant hereto or thereto shall be untrue or incorrect in any material respect, as of the date when made.

(f) Any of the assets of Company or any of its Subsidiaries shall be attached, seized, levied upon or subjected to a writ or distress warrant, or come within the possession of any receiver, trustee, custodian or assignee for the benefit of creditors of Company or any of its Subsidiaries and shall remain unstayed or undismitted for sixty (60) consecutive days; or Company or any of its Subsidiaries shall have concealed, removed or permitted to be concealed or removed, any part of its property, with intent to hinder, delay or defraud its creditors or any of them or made or suffered a transfer of any of its property or the incurring of an obligation which may be fraudulent under any bankruptcy, fraudulent conveyance or other similar law.

(g) A case or proceeding shall have been commenced against Company or any of its Subsidiaries in a court having competent jurisdiction seeking a decree or order in respect of Company or any of its Subsidiaries (i) under title 11 of the United States Code, as now constituted or hereafter amended, or any other applicable federal, state or foreign bankruptcy or other similar law, (ii) appointing a custodian, receiver, liquidator, assignee, trustee or sequestrator (or similar official) of Company or any of its Subsidiaries or of any substantial part of its or their properties, or (iii) ordering the winding-up or liquidation of the affairs of Company or any of its Subsidiaries and such case or proceeding shall remain undismitted or unstayed for sixty (60) consecutive days or such court shall enter a decree or order granting the relief sought in such case or proceeding.

(h) Company or any of its Subsidiaries shall (i) file a petition seeking relief under title 11 of the United States Code, as now constituted or hereafter amended, or any other applicable federal, state or foreign bankruptcy or other similar law, (ii) consent to the institution of proceedings thereunder or to the filing of any such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee or sequestrator (or similar official) of Company or any of its Subsidiaries or of any substantial part of its properties, (iii) fail generally to pay its debts

as such debts become due, or (iv) take any corporate action in furtherance of any such action.

(i) Final judgment or judgments (after the expiration of all times to appeal therefrom) for the payment of money in excess of \$1,000,000 in the aggregate shall be rendered against Company or any of its Subsidiaries and the same shall not be (i) fully covered by insurance, or (ii) vacated, stayed, bonded, paid or discharged for a period of thirty (30) days.

8.2 Remedies. (a) If any Event of Default specified in Section 8.1 other than a default specified in Section 8.1(b)(ii) shall have occurred and be continuing, Purchaser may, subject to the applicable provisions of Article 9, without notice, declare all Obligations to be forthwith due and payable, whereupon all such Obligations shall become and be due and payable, without presentment, demand, protest or further notice of any kind, all of which are expressly waived by Borrower; provided, however, that upon the occurrence of an Event of Default specified in Section 8.1(f), (g) or (h) hereof, such Obligations shall become due and payable without declaration, notice or demand by Purchaser.

(a) If an Event of Default specified in Section 8.1(b)(ii) shall have occurred and be continuing, Purchaser shall have 50 days after delivery of the certificate of Company required under Section 5.1(e) hereof or 50 days after the date such certificate is required to be delivered, if earlier, to declare, with notice to the Specified Senior Creditor, all Obligations due and payable; provided, however, that if prior to the time Purchaser makes such declaration Company has repaid its Senior Debt such that the Senior Debt is not in excess of the Senior Debt Ceiling, Purchaser shall not declare the Obligations due and payable. Purchaser shall give Company 10 days' notice prior to the time that it makes such declaration. If Purchaser elects not to make such declaration, such Event of Default under Section 8.1(b)(ii) shall be deemed to be waived for such fiscal quarter only. The amount payable upon an acceleration because of an Event of Default under Section 8.1(b)(ii) hereof shall include a premium equal to the percentage set forth below of the outstanding principal amount of the Note corresponding to the number of years after the Closing Date set forth below during which such acceleration occurs:

Year after Closing Date -----	Premium -----
Less than or equal to 1	19%
Greater than 1, but less than or equal to 2	17%
Greater than 2, but less than or equal to 3	15%
Greater than 3	12.5%

Subject to the applicable provisions of Article 9, Purchaser may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to

such Default or Event of Default as it shall deem advisable in its best interests, including any action (or the failure to act) pursuant to the Loan Documents.

In the event of a declaration of acceleration by Purchaser (an "Applicable Acceleration") because of an Event of Default set forth in Section 8.1(d) above has occurred and is continuing solely as a result of the acceleration of Senior Debt by the holders thereof (a "Senior Debt Acceleration"), such Applicable Acceleration shall be automatically annulled if the holders of such Senior Debt have rescinded such Senior Debt Acceleration within 20 days thereof (but not beyond 90 days after the occurrence of such Event of Default) and if (x) the annulment of such Applicable Acceleration would not conflict with any judgment or decree of a court of competent jurisdiction and (y) all existing Events of Default, except the non-payment of principal or interest on the Note hereunder which shall have become due solely because of such Applicable Acceleration, have been cured or waived.

8.3 Waivers by Company. Except as otherwise provided for in this Agreement and applicable law, Company waives (i) presentment, demand and protest and notice of presentment, dishonor notice of intent to accelerate and notice of acceleration, (ii) all rights to notice and a hearing prior to Purchaser's taking possession or control of, or to Purchaser's replevy, attachment or levy upon, the Collateral or any bond or security which might be required by any court prior to allowing Purchaser to exercise any of its remedies, and (iii) the benefit of all valuation, appraisal and exemption laws. Company acknowledges that it has been advised by counsel of its choice with respect to this Agreement, the other Loan Documents and the transactions evidenced by this Agreement and the other Loan Documents.

9. SUBORDINATION

9.1 Note Subordinated to Senior Debt. Company covenants and agrees, and Purchaser and any other holder of the Note (Purchaser and such holders being hereinafter referred to collectively as "Holder") by its acceptance thereof likewise covenants and agrees, that all payments of the principal of and interest on the Note and all other Obligations (whether in the form of distribution of assets, set-off of other claims or other forms of cash or non-cash exchanges) of Company pursuant to this Agreement or under the Note (collectively the "Subordinated Debt") shall be subordinated in accordance with the provisions of this Section 9 to the prior payment in full of all Senior Debt of Company. For purposes of this Section 9, the term "Senior Debt" shall mean the Senior Debt of Company and shall include principal of and premium, if any, and interest (including interest accruing at the rate provided for in the documents evidencing such Senior Debt after the commencement of any proceedings of the type referred to in Section 9.2(a) hereof, whether or not an allowed claim in such proceeding) on all loans and other extensions of credit under, and all expenses, fees, reimbursements, indemnities and other amounts owing pursuant to, the Senior Debt, to the extent permitted to be incurred pursuant hereto.

9.2 Priority and Payment Over of Proceeds in Certain Events.

(a) Subordination on Dissolution, Liquidation or Reorganization of Company. Upon payment or distribution of assets or securities of Company of any kind or character, whether in cash, property or securities, upon any dissolution or winding up or total or partial liquidation or reorganization of Company, whether voluntary or involuntary, or in bankruptcy, insolvency, receivership or other proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of Company (any such proceeding, an "Insolvency Proceeding"), all Senior Debt shall first be paid in full in cash, or payment provided for in cash or cash equivalents in a manner satisfactory to the holders of Senior Debt, before any direct or indirect payments or distributions, including, without limitation, by exercise of set-off, of any cash, property or securities on account of principal of (or premium, if any) or interest on the Note and to that end the holders of Senior Debt shall be entitled to receive (pro rata on the basis of the respective amounts of Senior Debt held by them) directly, for application to the payment thereof (to the extent necessary to pay all Senior Debt in full after giving effect to any substantially concurrent payment or distribution to or provision for payment to the holders of such Senior Debt), any payment or distribution of any kind or character, whether in cash, property or securities, in respect of the Subordinated Debt. The holders of Senior Debt are hereby authorized to file an appropriate claim for and on behalf of the Holders if they or any of them do not file, and there is not otherwise filed on behalf of the Holders, a proper claim or proof of claim in the form required in any such proceeding prior to 30 days before the expiration of the time to file such claim or claims.

(b) Subordination on Default in Senior Debt. No direct or indirect payment, prepayment pursuant to Section 2.3 hereof or payment incidental to the redemption of the Note pursuant to Section 2.4 hereof or pursuant to Section 8.2(b) hereof, by or on behalf of Company of principal of (premium, if any), or interest on, the Subordinated Debt, whether pursuant to the terms of the Note, upon acceleration or otherwise, shall be made if at the time of such payment there exists (i) a default in the payment of all or any portion of principal of (premium, if any), interest on, fees or other amounts owing in connection with any Senior Debt, or (ii) any other default (howsoever characterized) under any document or instrument governing, securing, supporting or evidencing any Senior Debt, and Purchaser has received written notice of such default (a "Blockage Notice") from a holder or representative of the holders of Senior Debt, and, in either case, such default shall not have been cured or waived in writing, provided however, that if within the period specified in the next sentence with respect to a default referred to in clause (ii) above, the holders of Senior Debt have not declared the Senior Debt to be immediately due and payable (or have declared such Senior Debt to be immediately due and payable and within such period have rescinded such acceleration), then and in that event, payment of principal of, and interest on, the Note shall be resumed. With respect to any default under clause (ii) above, the period referred to in the preceding sentence shall commence upon receipt by Purchaser of a Blockage Notice (which shall specify the defaults existing under the Senior Debt on the date of such notice which is the basis for the blockage of payments on the Note contemplated herein), and shall end at the completion of the 179th day after the beginning of such period (a "Blockage Period"). Only one such 179 day period may commence within any period of

360 consecutive days. Upon termination of any Blockage Period, Company shall resume payments on account of the principal of (premium, if any), and interest on, the Note, and on account of all other Subordinated Debt, subject to the provisions of Sections 9.1 and 9.2 hereof.

(c) Rights and Obligations of Holders.

(i) In the event that, notwithstanding the foregoing provision prohibiting such payment or distribution, the Holders shall have received any payment on account of the Subordinated Debt at a time when such payment is prohibited by such provision before the Senior Debt is paid in full, then and in such event, such payment or distribution shall be received and held in trust by the Holders apart from their other assets and paid over or delivered to the holders of the Senior Debt remaining unpaid to the extent necessary to pay in full in cash the principal of (premium, if any), and interest on, such Senior Debt in accordance with its terms and after giving effect to any concurrent payment or distribution to the holders of such Senior Debt.

(ii) Upon any payment or distribution of assets or securities referred to in this Section 9, the Holders shall be entitled to rely upon any order or decree of a court of competent jurisdiction in which such dissolution, winding up, liquidation or reorganization proceedings are pending, and upon a certificate of the receiver, trustee in bankruptcy, liquidating trustee, agent or other person making any such payment or distribution, delivered to the Holders for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of Senior Debt and other Indebtedness of Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Section 9.

9.3 Rights of Holders of Senior Debt Not To Be Impaired. No right of any present or future holder of any Senior Debt to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act by any such holder, or by any noncompliance by Company with the terms and provisions and covenants herein regardless of any knowledge thereof such holder may have or otherwise be charged with.

The provisions of this Section 9 are intended to be for the benefit of, and shall be enforceable directly by, the holders of the Senior Debt. Company and each Holder of a Note, by its acceptance thereof, acknowledges that the holders of the Senior Debt are relying upon the provisions of this Section 9 in extending such Senior Debt.

9.4 Limitation on Rights and Remedies; Notice of Exercise of Remedies.

(a) Notwithstanding anything contained herein to the contrary, for any period during which Holder shall be blocked from receiving payments in respect of the

Subordinated Debt pursuant to Section 9.2(b) hereof (but in no event exceeding 90 consecutive days, provided that the Holder complies with the notice requirements of clause (b) below), Holder shall not (i) accelerate any portion of the Subordinated Debt, (ii) initiate any judicial proceeding or action to collect any portion of the Subordinated Debt or (iii) initiate or join in any Insolvency Proceeding unless, prior to the expiration of such period, the holders of the Senior Debt shall take an action of such type in respect of the Senior Debt, provided, however, that this Section 9.4(a) shall not apply to an Event of Default under Section 8.1(b)(ii) hereof, except that Holder agrees that it shall not accelerate any portion of the Subordinated Debt or take any other action proscribed by this Section 9.4(a) pursuant to such Event of Default prior to 90 days after the end of the applicable fiscal quarter to which such Event of Default relates.

(b) Should the Holder desire to take any action of the type referred to in clauses (i), (ii) and (iii) of Section 9.4(a) hereof, Holder shall (i) give the Specified Senior Creditor not less than 30 days' notice (or in the case of an Event of Default under Section 8.1(b)(ii) hereof, 10 days' notice) of Holder's intent to take any such action (which notice may be given during the continuation of any period during which Holder is blocked from receiving payments under Section 9.2 hereof), which notice shall detail the facts and circumstances on which the Holder is basing its entitlement to take such action, and (ii) obtain the prior written consent of the Required Holders.

9.5 In Furtherance of Subordination.

(a) At all times during which any of the Senior Debt is outstanding or there shall be any commitment to extend credit to Company thereunder, without the prior written consent of the holders of Senior Debt, Holder shall not

(i) cancel or otherwise discharge any of the obligations of Company in respect of the Subordinated Debt or subordinate such obligations to any other Indebtedness of Company, other than the Senior Debt;

(ii) accept any voluntary or optional prepayment of the principal of, or interest on, the Subordinated Debt; or

(iii) amend, modify, supplement or restate (w) the definition of "Permitted Liens", "Permitted Senior Debt", "Senior Debt", "Senior Debt Ceiling", "Senior Debt Document", "Specified Senior Creditor", "Specified Senior Debt" or "Subordinated Debt" set forth in Section 1 hereof, (x) the principal amortization of the Note; (y) Sections 2.3, 2.4, 2.6, 5.2, 8.1, 9.1 through 9.12 hereof, or the amount of any premium payable pursuant to Section 8.2(b) hereof or (z) any other provision hereunder which expressly inures to the benefit of the Holder of the Senior Debt.

(b) In no event shall Holder commence or join in any action or proceeding to contest the validity of the provisions of this Article 9.

9.6 Subordination Hereunder Not Affected.

(a) The provisions of this Article 9 shall remain in full force and effect irrespective of:

(i) any lack of validity or enforceability of any of the Senior Debt Documents;

(ii) any change in the time, manner of place or payment of, or in any other term of, all or any part of the Senior Debt, or any other amendment or waiver of or any consent to any departure from the Senior Debt, including, without limitation, extending loans or other forms of credit above the amounts stated therein (subject, however, to the exclusion of such additional loans and credits in excess of the Senior Debt Ceiling from the benefit of this Section 9.6(a) as "Senior Debt"), whether resulting from the extension of additional credit to Company or any of its Subsidiaries or Affiliate or otherwise;

(iii) any taking, exchange, release or non-perfection of any other collateral, or any taking, release or amendment or waiver of or consent to any departure from any guaranty, for all or any of the Senior Debt;

(iv) any manner of application of collateral, or proceeds thereof, to all or any of the Senior Debt, or any manner of sale or other disposition of any collateral for all or any of the Senior Debt or any other assets of Company or any of its Subsidiaries; or

(v) any dissolution, merger, consolidation or other form of corporate restructuring of Company or the termination of corporate existence of Company.

(b) The provisions of this Section 9 constitute a continuing agreement and shall (i) remain in full force and effect until the payment in full in cash or cash equivalents acceptable to holders of the Senior Debt in their sole discretion, of the Senior Debt and the termination of any commitment to lend or otherwise extend credit thereunder, (ii) be binding upon any successors or assignees of Holders or subsequent holders of the Subordinated Debt, and (iii) inure to the benefit of, and be enforceable by, the holders of the Senior Debt and their respective successors, transferees and assigns.

9.7 Relative Rights. The provisions of this Article 9 are for the benefit of the holders of Senior Debt (and their successor and assigns) and shall be enforceable by them directly against each holder of the Note. Each Purchaser or holder of the Note acknowledges and agrees that any breach of the provisions of this Article 9 will cause irreparable harm for which the payment of monetary damages may be inadequate. For this reason, each holder of the Note agrees that, in addition to any remedies at law or equity to which a holder of the Senior Debt

may be entitled, a holder of the Senior Debt will be entitled to an injunction or other equitable relief to prevent breaches of the provisions of this Article 9 and/or to compel specific performance of such provisions.

9.8 Subrogation. Upon the payment in full of all Senior Debt and the termination of any commitment to extend credit thereunder, the Holders shall be subrogated to the extent of the payments or distributions made to the holders of, or otherwise applied to payment of, the Senior Debt pursuant to the provisions of this Section 9 and to the rights of the holders of Senior Debt to receive payments or distributions of assets of Company made on the Senior Debt until the Note shall be paid in full; and for the purposes of such subrogation, no payments or distributions to holders of Senior Debt of any cash, property or securities to which Holders of the Note would be entitled except for the provisions of this Section 9, no payment over pursuant to the provisions of this Section 9 to holders of Senior Debt by the Holders, shall, as between Company, its creditors other than holders of Senior Debt and the Holders, be deemed to be payment by Company to or on account of Senior Debt, it being understood that the provisions of this Section 9 are solely for the purpose of defining the relative rights of the holders of Senior Debt, on the one hand, and the Holders, on the other hand.

If any payment or distribution to which the Holders would otherwise have been entitled but for the provisions of this Section 9 shall have been applied, pursuant to the provisions of this Section 9, to the payment of Senior Debt, then and in such case, the Holders shall be entitled to receive from the holders of Senior Debt at the time outstanding any payments or distributions received by such holders of Senior Debt in excess of the amount sufficient to pay all Senior Debt in full.

9.9 Obligations of Company Unconditional. Nothing contained in this Section 9 or elsewhere in this Agreement or in the Note is intended to or shall impair, as between Company and the Holders, the obligations of Company, which are absolute and unconditional, to pay to the Holders the principal of (premium, if any), and interest on, the Note as and when the same shall become due and payable in accordance with their terms, or is intended to or shall affect the relative rights of the Holders and creditors of Company other than the holders of the Senior Debt, nor shall anything herein or therein prevent any Holder from exercising all remedies otherwise permitted by applicable law upon the occurrence of a Default or Event of Default under this Agreement, subject to the rights, if any, under this Section 9 of the holders of Senior Debt in respect of cash, property or securities of Company received upon the exercise of any such remedy.

The failure to make a payment on account of principal of, or interest on, the Note by reason of any provision of this Section 9 shall not be construed as preventing the occurrence of a Default or an Event of Default hereunder.

9.10 Notice to Holders. Company shall give prompt written notice to each Holder of any fact known to Company which would prohibit the making of any payment on or in respect of the Note, but failure to give such notice shall not affect the subordination of the Subordinated Debt to the Senior Debt provided in this Section 9. Notwithstanding the provisions of this Section 9 or any other provision of this Agreement or the Note, no Holder shall be charged with knowledge of the existence of any facts

which would prohibit the making of any payment to or in respect of the Note, unless and until the Holders shall have actual knowledge thereof or the Holders shall have received written notice thereof from Company or a representative of or holder of Senior Debt, and, prior to the receipt of any such written notice, subject to the provisions of this Section 9, the Holders shall be entitled in all respects to assume no such facts exist. Nothing contained in this Section 9.10 shall limit the right of the holders of Senior Debt to recover payments as contemplated by 9.1 and 9.2.

9.11 Right of Any Holder as Holder of Senior Debt. Any Holder in its individual capacity shall be entitled to all the rights set forth in this Section 9 with respect to any Senior Debt which may at any time be held by it, to the same extent as any other holder of Senior Debt, and nothing in this Agreement shall deprive such Holder of any of its rights as such holder.

9.12 Reinstatement. The provisions of this Section 9 shall continue to be effective or be reinstated, and the Senior Debt shall not be deemed to be paid in full, as the case may be, if at any time any payment of any of the Senior Debt is rescinded or must otherwise be returned by the holder thereof upon the insolvency, bankruptcy or reorganization of the Company or otherwise, all as though such payment had not been made.

10. [Intentionally omitted.]

11. MISCELLANEOUS

11.1 Complete Agreement; Modification of Agreement; Sale of Interest.

(a) The Transaction Documents constitute the complete agreement between the parties with respect to the subject matter hereof and may not be modified, altered or amended except as provided therein, or in the case of the Loan Documents by an agreement in writing signed by Company and Purchaser in accordance with Section 11.1(d) hereof. Company may not sell, assign or transfer any of the Loan Documents or any portion thereof, including, without limitation, Company's rights, title, interests, remedies, powers and duties hereunder or thereunder. Company hereby consents to Purchaser's sale of participations, assignment, transfer or other disposition, at any time or times, of any of the Loan Documents or of any portion thereof or interest therein, including, without limitation, Purchaser's rights, title, interests, remedies, powers or duties thereunder, whether evidenced by a writing or not.

(b) In the event Purchaser assigns or otherwise transfers all or any part of the Note, Company shall, upon the request of Purchaser issue new Notes to effectuate such assignment or transfer. Any such assignment or transfer must comply with applicable securities laws and, at the request of Company, Purchaser shall deliver to Company an opinion of counsel as to such compliance, which counsel may be in-house counsel to Purchaser.

(b) Subject to the provisions of clause (ii) below, Purchaser may sell, assign, transfer or negotiate to one or more other lenders, commercial

banks, insurance companies, other financial institutions or any other Person acceptable to Purchaser all or a portion of its rights and obligations under the Note held by Purchaser and this Agreement; provided, however, that acceptance of such assignment by any assignee shall constitute the agreement of such assignee to be bound by the terms of this Agreement applicable to Purchaser. From and after the effective date of such an assignment, (x) the assignees thereunder shall, in addition to the rights and obligations hereunder held by it immediately prior to such effective date, have the rights and obligations hereunder that have been assigned to it pursuant to such assignment and (y) the assignor thereunder shall, to the extent that rights and obligations hereunder have been assigned by it pursuant to such assignment, relinquish its rights and be released from its obligations under this Agreement (and, in the case of an assignment and acceptance covering all or the remaining portion of an assignor's rights and obligations under this Agreement, such assignor shall cease to be a party hereto).

(i) Purchaser shall not assign or otherwise transfer the Note to a Person which is not an Affiliate of Purchase unless Purchaser first gives Company a notice of its intention to do so. Company will then have a period of ten (10) Business Days to make an offer to purchase the Note or portion thereof which Purchaser indicates it intends to transfer. Purchaser may then either accept such offer or effectuate a transfer to a Person which is not an Affiliate of Purchaser at a price higher than that offered by Company, if any, provided that such transfer takes place no later than 90 days after the date of the notice by Purchaser to Company. If at the end of the 90-day period Purchaser has not completed the transfer of the Note, such transfer may not occur and the Note shall again be subject to the restriction in this Section 11.1(c).

(d) No amendment or waiver of any provision of this Agreement or the Note or any other Loan Document, nor consent to any departure by Company therefrom, shall in any event be effective unless the same shall be in writing and signed by the Required Holders, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that no amendment, waiver or consent shall, unless in writing and signed by each holder of a Note affected thereby do any of the following: (i) subject such holder to any additional obligations, (ii) reduce the principal of, or interest on, the Note or other amounts payable hereunder or release or discharge Company from its obligations to make such payments, (iii) postpone any date fixed for any payment of principal of, or interest on, the Note or other amounts payable hereunder, (iv) change the aggregate unpaid principal amount of the Note, or the number of holders thereof, which shall be required for such holders or any of them to take any action hereunder, or (v) amend this Section 11.1(d).

11.2 Fees and Expenses. If an Event of Default shall have occurred and be continuing and Purchaser shall employ counsel or other advisors for advice or other representation or shall incur reasonable legal or other costs and expenses in connection

with any attempt to enforce any rights of Purchaser against Company, any Subsidiary of Company or any other Person, that may be obligated to Purchaser by virtue of any of the Loan Documents then, and in any such event, the reasonable attorneys' and other parties' fees arising from such services, including those of any appellate proceedings, and all expenses, costs, charges and other fees incurred by such counsel and others in any way or respect arising in connection with or relating to any of the events or actions described in this Section shall be payable, on demand, by Company to Purchaser and shall be additional Obligations under this Agreement and the other Loan Documents. Without limiting the generality of the foregoing, such expenses, costs, charges and fees may include: paralegal fees, costs and expenses; accountants' and investment bankers' fees, costs and expenses; court costs and expenses; photocopying and duplicating expenses; court reporter fees, costs and expenses; long distance telephone charges; air express charges; telegram charges; secretarial overtime charges; and expenses for travel, lodging and food paid or incurred in connection with the performance of such legal services.

11.3 No Waiver by Purchaser. Purchaser's failure, at any time or times, to require strict performance by Company of any provision of this Agreement and any of the other Loan Documents shall not waive, affect or diminish any right of Purchaser thereafter to demand strict compliance and performance therewith. Any suspension or waiver by Purchaser of an Event of Default by Company under the Loan Documents shall not suspend, waive or affect any other Event of Default by Company under this Agreement and any of the other Loan Documents whether the same is prior or subsequent thereto and whether of the same or of a different type. None of the undertakings, agreements, warranties, covenants and representations of Company contained in this Agreement or any of the other Loan Documents and no Event of Default by Company under this Agreement and no defaults by Company under any of the other Loan Documents shall be deemed to have been suspended or waived by Purchaser, unless such suspension or waiver is by an instrument in writing signed by an officer of Purchaser and the Required Holders and directed to Company specifying such suspension or waiver.

11.4 Remedies. Purchaser's rights and remedies under this Agreement shall be cumulative and nonexclusive of any other rights and remedies which Purchaser may have under any other agreement, including without limitation, the Loan Documents, the other Transaction Documents, by operation of law or otherwise.

11.5 Waiver of Jury Trial. The parties hereto waive all right to trial by jury in any action or proceeding to enforce or defend any rights under the Transaction Documents.

11.6 Severability. Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.7 Binding Effect; Benefits. This Agreement and the other Transaction Documents shall be binding upon, and inure to the benefit of, the successors of Company and Purchaser and the assigns, transferees and endorsees of Purchaser.

11.8 Conflict of Terms. Except as otherwise provided in this Agreement or any of the other Loan Documents by specific reference to the applicable provisions of this Agreement, if any provision contained in this Agreement is in conflict with, or inconsistent with, any provision in any of the other Loan Documents, the provision contained in this Agreement shall govern and control.

11.9 Governing Law. Except as otherwise expressly provided in any of the Transaction Documents, in all respects, including all matters of construction, validity and performance, this Agreement and the Obligations arising hereunder shall be governed by, and construed and enforced in accordance with, the laws of the State of New York applicable to contracts made and performed in such state, without regard to the principles thereof regarding conflict of laws, and any applicable laws of the United States of America. Purchaser and Company agree to submit to personal jurisdiction and to waive any objection as to venue in the federal or New York State courts located in the County of New York, State of New York. Nothing herein shall preclude Purchaser or Company from bringing suit or taking other legal action in any other jurisdiction.

11.10 Notices. Except as otherwise provided herein, whenever it is provided herein that any notice, demand, request, consent, approval, declaration or other communication shall or may be given to or served upon any of the parties by another, or whenever any of the parties desires to give or serve upon another any such communication with respect to this Agreement, each such notice, demand, request, consent, approval, declaration or other communication shall be in writing and either shall be delivered in person with receipt acknowledged or by registered or certified mail, return receipt requested, postage prepaid, or by telecopy and confirmed by telecopy answerback addressed as follows:

If to Company:

Emcore Corporation
394 Elizabeth Avenue
Somerset, New Jersey 08873
Attn: Thomas G. Werthan, Chief Financial Officer
Telecopy Number: (732) 271-0477

with a copy to:

White & Case
First Union Financial Center
200 South Biscayne Boulevard
Miami, Florida 33131-2352
Attn: Jorge L. Freeland, Esq.
Telecopy Number: (305) 358-5744

If to Purchaser:

GE Capital Equity Investments, Inc.
120 Long Ridge Road
Stamford, Connecticut 06927
Attn: GE Equity Group-Emcore
Telecopy Number: (203) 357-6527

with copies to:

General Electric Capital Corporation
120 Long Ridge Road
Stamford, Connecticut 06927
Attention: GE Equity Group Legal Counsel
Telecopy Number: (203) 357-3047

and

Weil, Gotshal & Manges LLP
767 Fifth Avenue
New York, New York 10153
Attn: Ted S. Waksman, Esq.
Telecopy Number: (212) 310-8007

If to the Specified Senior Creditor:

First Union National Bank
370 Scotch Road - NJ 72330
West Trenton, New Jersey 08628
Attn: Kathleen H. Czarniewski, Senior Vice President
Telecopy Number: (609) 771-5860

or at such other address as may be substituted by notice given as herein provided. The giving of any notice required hereunder may be waived in writing by the party entitled to receive such notice. Every notice, demand, request, consent, approval, declaration or other communication hereunder shall be deemed to have been duly given or served on the date on which personally delivered, with receipt acknowledged, telecopied and confirmed by telecopy answerback, or three (3) Business Days after the same shall have been deposited with the United States mail. Failure or delay in delivering copies of any notice, demand, request, consent, approval, declaration or other communication to the Persons designated above to receive copies shall in no way adversely affect the effectiveness of such notice, demand, request, consent, approval, declaration or other communication.

11.11 Survival. The representations and warranties of Company in this Agreement shall survive the execution, delivery and acceptance hereof by the parties hereto and the closing of the transactions described herein or related hereto.

11.12 Section and Other Headings. The section and other headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

11.13 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument.

11.14 Publicity. Neither Purchaser nor Company shall issue any press release or make any public disclosure regarding the transactions contemplated hereby unless such press release or public disclosure is approved by the other party in advance, which approval shall not be unreasonably withheld. Notwithstanding the foregoing, each of the parties hereto may, in documents required to be filed by it with the SEC or other regulatory bodies, make such statements with respect to the transactions contemplated hereby as each may be advised by counsel is legally necessary or advisable, and may make such disclosure as it is advised by its counsel is required by law, subject to advance consultation with the other party.

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

EMCORE CORPORATION

By: _____
Name:
Title:

Purchaser:

GE CAPITAL EQUITY INVESTMENTS, INC.

By: _____
Name:
Title:

[SIGNATURE PAGE - NOTE PURCHASE AGREEMENT]

NOTE PURCHASE AGREEMENT

dated as of May 26, 1999

by and between

EMCORE CORPORATION

and

GE CAPITAL EQUITY INVESTMENTS, INC.

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REGISTRATION RIGHTS AGREEMENT

Registration Rights Agreement, dated as of May 26, 1999, by and between Encore Corporation, a New Jersey corporation ("Company"), and GE Capital Equity Investments, Inc. ("GE Capital" or "Purchaser").

W I T N E S S E T H :

WHEREAS, Company and Purchaser have entered into that certain Note Purchase Agreement, dated as of May 26, 1999 (the "Purchase Agreement"), pursuant to which Company has agreed to issue and sell to Purchaser, and Purchaser has agreed to purchase from Company, a senior subordinated convertible promissory note in the principal amount of \$7,800,000, which is initially convertible into 340,984 shares of Common Stock of Company (the "Note"); and

WHEREAS, in order to induce Purchaser to enter into the Purchase Agreement and to purchase the Note, Company has agreed to provide registration rights with respect thereto;

NOW, THEREFORE, in consideration of the premises and the covenants hereinafter contained, it is agreed as follows:

1. Definitions. Unless otherwise defined herein, terms defined in the Purchase Agreement are used herein as therein defined, and the following shall have (unless otherwise provided elsewhere in this Registration Rights Agreement) the following respective meanings (such meanings being equally applicable to both the singular and plural form of the terms defined):

"Agreement" shall mean this Registration Rights Agreement, including all amendments, modifications and supplements and any exhibits or schedules to any of the foregoing, and shall refer to the Agreement as the same may be in effect at the time such reference becomes operative.

"Business Day" shall mean any day that is not a Saturday, a Sunday or a day on which banks are required or permitted to be closed in the State of New York.

"Commission" shall mean the Securities and Exchange Commission or any other federal agency then administering the Securities Act and other federal securities laws.

"Conversion Shares" shall mean shares of Common Stock issued upon conversion of the Note.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

"Holder" shall mean the holder of the Note.

"NASD" shall mean the National Association of Securities Dealers, Inc., or any successor corporation thereto.

"Registrable Securities" shall mean the shares of Common Stock from time to time issued or issuable to the holder of the Note upon the conversion thereof. "Required Holders" shall mean Holders of at least a majority of the Registrable Securities.

"Securities Act" shall mean the Securities Act of 1933, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

2. Required Registration. Upon receipt of a written request from the holders of Registrable Securities requesting that Company effect a registration under the Securities Act covering at least 50% of the Registrable Securities initially outstanding, and specifying the intended method or methods of disposition thereof, Company shall promptly notify all Holders in writing of the receipt of such request and each such Holder, in lieu of exercising its rights under Section 3 may elect (by written notice sent to Company within 10 Business Days from the date of such Holder's receipt of the aforementioned Company's notice) to have Registrable Securities included in such registration thereof pursuant to this Section 2. Thereupon Company shall, as expeditiously as is possible, use its reasonable best efforts to effect the registration under the Securities Act of all shares of Registrable Securities which Company has been so requested to register by such Holders for sale, all to the extent required to permit the disposition (in accordance with the intended method or methods thereof, as aforesaid) of the Registrable Securities so registered; provided, however, that Company shall not be required to effect more than one (1) registration of any Registrable Securities pursuant to this Section 2, which registration shall not be underwritten; and provided further, however, that the right of the holders of Registrable Securities to request that Company effect a registration of any Registrable Securities pursuant to this Section 2 shall terminate when the Registrable Securities may be sold pursuant to Rule 144 under the Securities Act during any six-month period. A Holder may only request a registration of registrable securities which it has a present intention to sell and it shall so state in its request for registration.

3. Incidental Registration. If Company at any time proposes to file on its behalf and/or on behalf of any of its security holders (the "demanding security holders") a Registration Statement under the Securities Act on any form (other than a Registration Statement on Form S-4 or S-8 or any successor form for securities to be offered in a transaction of the type referred to in Rule 145 under the Securities Act or to employees of Company pursuant to any employee benefit plan, respectively) for the general registration of securities, it will give written notice to all Holders at least 15 days before the initial filing with the Commission of such Registration Statement, which notice shall set forth the intended method of disposition of the securities proposed to be registered by

Company. The notice shall offer to include in such filing the aggregate number of shares of Registrable Securities as such Holders may request.

Each Holder desiring to have Registrable Securities registered under this Section 3 shall advise Company in writing within 10 Business Days after the date of receipt of such offer from Company, setting forth the amount of such Registrable Securities for which registration is requested. Company shall thereupon include in such filing, the number of shares of Registrable Securities for which registration is so requested, subject to the next sentence, and shall use its reasonable best efforts to effect registration under the Securities Act of such shares if such offering proceeds. If the managing underwriter of a proposed public offering shall advise Company in writing that, in its opinion, the distribution of the Registrable Securities requested to be included in the registration concurrently with the securities being registered by Company or such demanding security holder would materially and adversely affect the distribution of such securities by Company or such demanding security holder, then all selling security holders, other than Company, (including the demanding security holder who initially requested such registration) shall reduce the amount of securities each intended to distribute through such offering on a pro rata basis. Except as otherwise provided in Section 5, all expenses of such registration shall be borne by Company.

4. Registration Procedures. If Company is required by the provisions of Section 2 or 3 to use its reasonable best efforts to effect the registration of any of its securities under the Securities Act, Company will, as expeditiously as possible:

(a) prepare and file with the Commission a Registration Statement with respect to such securities and use its reasonable best efforts to cause such Registration Statement to become and remain effective for a period of time required for the disposition of such securities by the holders thereof, but not to exceed 120 days;

(b) prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Registration Statement effective and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all securities covered by such Registration Statement until the earlier of such time as all of such securities have been disposed of in a public offering or the expiration of 120 days;

(c) furnish to such selling security holders such number of copies of a summary prospectus or other prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents, as such selling security holders may reasonably request;

(d) use its best efforts to register or qualify the securities covered by such Registration Statement under such other securities or blue sky laws of such jurisdictions within the United States as each holder of such securities shall request (provided, however, that Company shall not be obligated to qualify as a foreign corporation to do business under the laws of any jurisdiction in which it is not then

qualified or to file any general consent to service or process), and do such other reasonable acts and things as may be required of it to enable such holder to consummate the disposition in such jurisdiction of the securities covered by such Registration Statement;

(e) furnish, at the request of any Holder requesting registration of Registrable Securities pursuant to Section 2, on the date that such shares of Registrable Securities are delivered to the underwriters for sale pursuant to such registration or, if such Registrable Securities are not being sold through underwriters, on the date that the Registration Statement with respect to such shares of Registrable Securities becomes effective, (1) an opinion, dated such date, of the independent counsel representing Company for the purposes of such registration, addressed to the underwriters, if any, in customary form and covering matters of the type customarily covered in such legal opinions; and (2) a comfort letter dated such date, from the independent certified public accountants of Company, addressed to the underwriters, if any, and, if such accountants refuse to deliver such letter to such Holder, then to Company, in a customary form and covering matters of the type customarily covered by such comfort letters and as the underwriters or such Holder shall reasonably request;

(f) enter into customary agreements (including an underwriting agreement in customary form) and take such other actions as are reasonably required in order to expedite or facilitate the disposition of such Registrable Securities; and

(g) otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the Commission, and make available to its security holders, as soon as reasonably practicable, but not later than 18 months after the effective date of the Registration Statement, an earnings statement covering the period of at least 12 months beginning with the first full month after the effective date of such Registration Statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act.

It shall be a condition precedent to the obligation of Company to take any action pursuant to this Agreement in respect of the securities which are to be registered at the request of any Holder that such Holder shall furnish to Company such information regarding the securities held by such Holder and the intended method of disposition thereof as Company shall reasonably request and as shall be required in connection with the action taken by Company. Such Holder shall also enter into reasonably acceptable customary custody and other agreements in connection with any registration statements if requested by Company.

5. Expenses. All expenses incurred in complying with this Agreement, including, without limitation, all registration and filing fees (including all expenses incident to filing with the NASD), printing expenses, fees and disbursements of counsel for Company, the reasonable fees and expenses of counsel for the selling security holders (selected by those holding a majority of the shares being registered), expenses of any special audits incident to or required by any such registration and expenses of complying

with the securities or blue sky laws of any jurisdiction pursuant to Section 4(d), shall be paid by Company, except that:

(a) all such expenses in connection with any amendment or supplement to the Registration Statement or prospectus filed more than 180 days after the effective date of such Registration Statement because any Holder has not effected the disposition of the securities requested to be registered shall be paid by such Holder; and

(b) Company shall not be liable for any fees, discounts or commissions to any underwriter or any fees or disbursements of counsel for any underwriter in respect of the securities sold by such Holder.

6. Indemnification and Contribution.

(a) In the event of any registration of any Registrable Securities under the Securities Act pursuant to this Agreement, Company shall indemnify and hold harmless the holder of such Registrable Securities, such holder's directors and officers, and each other person (including each underwriter) who participated in the offering of such Registrable Securities and each other person, if any, who controls such holder or such participating person within the meaning of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which such holder or any such director or officer or participating person or controlling person may become subject under the Securities Act or any other statute or at common law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) any alleged untrue statement of any material fact contained, on the effective date thereof, in any Registration Statement under which such securities were registered under the Securities Act, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto, or (ii) any alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and shall reimburse such holder or such director, officer or participating person or controlling person for any legal or any other expenses reasonably incurred by such holder or such director, officer or participating person or controlling person in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any actual or alleged untrue statement or actual or alleged omission made in such Registration Statement, preliminary prospectus, prospectus or amendment or supplement in reliance upon and in conformity with written information furnished to Company by or on behalf of such holder specifically for use therein or (in the case of any registration pursuant to Section 2) so furnished for such purposes by or on behalf of any underwriter. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such holder or such director, officer or participating person or controlling person, and shall survive the transfer of such securities by such holder.

(b) Each Holder, by acceptance hereof, agrees to indemnify and hold harmless Company, its directors and officers and each other person, if any, who controls Company within the meaning of the Securities Act against any losses, claims,

damages or liabilities, joint or several, to which Company or any such director or officer or any such person may become subject under the Securities Act or any other statute or at common law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon information in writing provided to Company by or on behalf of such Holder specifically for use in the following documents and contained, on the effective date thereof, in any Registration Statement under which securities were registered under the Securities Act at the request of such holder, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto. Notwithstanding the provisions of this paragraph (b) or paragraph (d) below, no Holder shall be required to indemnify any person pursuant to this Section 6 or to contribute pursuant to paragraph (d) below in an amount in excess of the amount of the aggregate net proceeds received by such Holder in connection with any such registration under the Securities Act.

(c) Promptly after receipt by an indemnified party under Sections 6(a) or (b) above of notice of the assertion of any claim, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify each party against whom indemnification is to be sought in writing of the commencement thereof (but the failure so to notify an indemnifying party shall not relieve it from any liability that it may have under this Section 6 except to the extent that it has been prejudiced in any material respect by such failure or from any liability that it may have otherwise). In case any such action is brought against any indemnified party, and it notifies an indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein, and to the extent it may elect by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party. Notwithstanding the foregoing, the indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless (i) the employment of such counsel shall have been authorized in writing by one of the indemnifying parties in connection with the defense of such action, (ii) the indemnifying parties shall not have employed counsel to take charge of the defense of such action within a reasonable time after notice of commencement of the action, or (iii) such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them that are different from or additional to those available to one or all of the indemnifying parties (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party or parties with respect to such different defenses), in any of which events such fees and expenses shall be borne by the indemnifying parties. The indemnifying party under Sections 6(a) or (b) above shall only be liable for the legal expenses of one counsel for all indemnified parties in each jurisdiction in which any claim or action is brought; provided, however, that the indemnifying party shall be liable for separate counsel for any indemnified party in a jurisdiction, if counsel to the indemnified parties shall have reasonably concluded that there may be defenses available to such indemnified party that are different from or additional to those available to one or more of the other indemnified parties and that separate counsel for such indemnified party is prudent under the circumstances. Anything in this subsection to the contrary notwithstanding, an

indemnifying party shall not be liable for any settlement of any claim or action effected without its written consent; provided, however, that such written consent was not unreasonably withheld.

(d) If the indemnification provided for in this Section 6 from the indemnifying party is unavailable to an indemnified party hereunder in respect of any losses, claims, damages, liabilities or expenses referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages, liabilities or expenses in such proportion as is appropriate to reflect the relative fault of the indemnifying party and indemnified parties in connection with the actions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative fault of such indemnifying party and indemnified parties shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or relates to information supplied by, such indemnifying party or indemnified parties, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with any investigation or proceeding.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 6(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

7. Certain Limitations on Registration Rights.
Notwithstanding the other provisions of this Agreement:

(a) Company shall not be obligated to register the Registrable Securities of any Holder if, in the opinion of counsel to Company reasonably satisfactory to the Holder and its counsel (or, if the Holder has engaged an investment banking firm, to such investment banking firm and its counsel), the sale or other disposition of such Holder's Registrable Securities, in the manner proposed by such Holder (or by such investment banking firm), may be effected without registering such Registrable Securities under the Securities Act; and

(b) Company shall not be obligated to register the Registrable Securities of any Holder pursuant to Section 2 if Company has had a registration statement, under which such Holder had a right to have its Registrable Securities included pursuant to Section 2 or 3, declared effective within one year prior to the date of the request pursuant to Section 2; provided, however, that if any Holder elected to have

shares of its Registrable Securities included under such registration statement but some or all of such shares were excluded pursuant to the penultimate sentence of Section 3, then such one-year period shall be reduced to the greater of six months or any lock-up period agreed to by such Holder with an underwriter.

(c) Company shall have the right to delay the filing or effectiveness of a registration statement required pursuant to Section 2 hereof during one or more periods aggregating not more than 90 days in any twelve-month period in the event that (i) Company would, in accordance with the advice of its counsel, be required to disclose in the prospectus information not otherwise then required by law to be publicly disclosed and (ii) in the judgment of Company's Board of Directors, there is a reasonable likelihood that such disclosure, or any other action to be taken in connection with the prospectus, would materially and adversely affect any existing or prospective material business situation, transaction or negotiation or otherwise materially and adversely affect Company.

8. Market Stand-Off Agreement. Each Holder hereby agrees that, during the period of duration specified by Company and an underwriter of common stock or other securities of Company, following the effective date of a registration statement of Company filed under the Securities Act, it shall not, to the extent requested by Company and such underwriter, directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any securities of Company held by it at any time during such period except common stock included in such registration; provided, however, that such market stand-off time period shall not exceed 180 days and all officers and directors of Company enter into similar agreements.

In order to enforce the foregoing covenant, Company may impose stop-transfer instructions with respect to the Registrable Securities of each Holder (and the shares of securities of every other person subject to the foregoing restriction) until the end of such period.

9. Miscellaneous.

(a) No Inconsistent Agreements. Company will not hereafter enter into any agreement with respect to its securities which is inconsistent with the rights granted to the Holders in this Agreement. Except as set forth on Schedule 1 hereto, Company has not previously entered into any agreement with respect to any of its securities granting any registration rights to any person.

(b) Remedies. Each Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Agreement. Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Agreement and hereby agrees to waive the defense in any action for specific performance that a remedy at law would be adequate. In any action or proceeding brought to enforce any provision of this Agreement or where any provision

hereof is validly asserted as a defense, the successful party shall be entitled to recover reasonable attorneys' fees in addition to any other available remedy.

(c) Amendments and Waivers. Except as otherwise provided herein, the provisions of this Agreement may not be amended, modified or supplemented, and waivers or consents to departure from the provisions hereof may not be given unless Company has obtained the written consent of the Required Holders.

(d) Notice Generally. Any notice, demand, request, consent, approval, declaration, delivery or other communication hereunder to be made pursuant to the provisions of this Agreement shall be sufficiently given or made if in writing and either delivered in person with receipt acknowledged or sent by registered or certified mail, return receipt requested, postage prepaid, or by telecopy and confirmed by telecopy answerback, addressed as follows:

(i) If to any Holder, at its last known address appearing on the books of Company maintained for such purpose.

(ii) If to Company, at

Emcore Corporation
394 Elizabeth Avenue
Somerset, New Jersey 08873
Attention: Thomas G. Wertham,
Chief Financial Officer
Telecopy Number: (732) 271-0477

with a copy to:

White & Case
First Union Financial Center
200 South Biscayne Boulevard
Miami, Florida 33131-2352
Attention: Jorge L. Freeland, Esq.
Telecopy Number: (305) 358-5744

or at such other address as may be substituted by notice given as herein provided. The giving of any notice required hereunder may be waived in writing by the party entitled to receive such notice. Every notice, demand, request, consent, approval, declaration, delivery or other communication hereunder shall be deemed to have been duly given or served on the date on which personally delivered, with receipt acknowledged, telecopied and confirmed by telecopy answerback or three Business Days after the same shall have been deposited in the United States mail.

(e) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties hereto including any person to whom Registrable Securities are transferred.

(f) Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(g) Governing Law; Jurisdiction. This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of New York without giving effect to the conflict of laws provisions thereof. Each of the parties hereby submits to personal jurisdiction and waives any objection as to venue in the County of New York, State of New York. The parties hereto waive all right to trial by jury in any action or proceeding to enforce or defend any rights hereunder.

(h) Severability. Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

(i) Entire Agreement. This Agreement, together with the Purchase Agreement, represents the complete agreement and understanding of the parties hereto in respect of the subject matter contained herein and therein. This Agreement supersedes all prior agreements and understandings between the parties with respect to the subject matter hereof.

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

EMCORE CORPORATION

By: _____
Name:
Title:

GE CAPITAL EQUITY INVESTMENTS, INC.

By: _____
Name:
Title:

[SIGNATURE PAGE - REGISTRATION RIGHTS AGREEMENT]

Other Registration Rights

WARRANT
to Purchase Common Shares of
EMCORE CORPORATION

Warrant No. 1

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SIGNATURES

EXHIBITS

- Exhibit A - Subscription Form
- Exhibit B - Assignment Form

SCHEDULE

- Schedule 1 - Permitted Issuances

THIS WARRANT AND THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR PURSUANT TO ANY STATE SECURITIES LAWS AND REGULATIONS AND MAY NOT BE TRANSFERRED IN VIOLATION OF SUCH ACT, THE RULES AND REGULATIONS THEREUNDER OR THE PROVISIONS OF THIS WARRANT.

Warrant No. 1

WARRANT

To Purchase Common Shares of

EMCORE CORPORATION

THIS IS TO CERTIFY THAT GENERAL ELECTRIC COMPANY, or registered assigns, is entitled, at any time during the Exercise Period (as hereinafter defined), to purchase from EMCORE CORPORATION, a New Jersey corporation (the "Company"), the number of Common Shares (as hereinafter defined and subject to adjustment as provided herein) described herein, in whole or in part, including fractional parts, at a purchase price of \$22.875 per share (subject to adjustment as provided herein) all on the terms and conditions and pursuant to the provisions hereinafter set forth.

1. DEFINITIONS

Terms used in this Warrant have the respective meanings set forth below:

"Appraised Value" shall mean, in respect of any Common Share on any date herein specified, the fair saleable value of such Common Share (determined without giving affect to the discount for (i) a minority interest or (ii) any lack of liquidity of the Common Share or (iii) to the fact that the Company may have no class of equity registered under the Exchange Act) as of the most recent determination thereof for all other purposes, hereof, based on the equity value of the Company, as determined by an investment banking or valuation firm selected in accordance with the following sentences, divided by the number of Common Shares outstanding on a Fully Diluted Basis as determined in accordance with GAAP (assuming the payment of the exercise prices for such shares). The determination of the Appraised Value per Common Share shall be made by an investment banking or valuation firm of nationally recognized standing selected by the Company and acceptable to the Majority Holders. If the investment banking or valuation firm selected by Company is not acceptable to the Majority Holders and the Company and the Majority Holders cannot agree on a mutually acceptable investment banking or valuation firm, then the Majority Holders and the Company shall each choose one such investment banking or valuation firm and the respective chosen firms shall agree on another investment banking or valuation firm which shall make the determination. The Company shall retain, at its sole cost, such investment banking or valuation firm as may be necessary for the determination of Appraised Value required by the terms of this Warrant.

"Business Day" shall mean any day that is not a Saturday or Sunday or a day on which banks are required or permitted to be closed in the State of New York.

"Closing Date" shall have the meaning ascribed to such term in Section 4.1 of the Transaction Agreement, dated May 20, 1999, between the Company and General Electric Company.

"Commission" shall mean the Securities and Exchange Commission or any other federal agency then administering the Securities Act, the Exchange Act and other federal securities laws.

"Common Share" shall mean (except where the context otherwise indicates) a Common Share, no par value, of the Company as constituted on the date hereof, and any capital stock into which such Common Share may thereafter be changed, and shall also include (i) capital stock of the Company of any other class (regardless of how denominated) issued to the holders of Common Shares upon any reclassification thereof which is also not preferred as to dividends or assets over any other class of capital stock of the Company and which is not subject to redemption and (ii) capital stock of any successor or acquiring corporation received by or distributed to the holders of Common Shares of the Company in the circumstances contemplated by Section 4.4.

"Current Market Price" shall mean, in respect of any Common Share on any date herein specified (a) if there shall then be a public market for the Common Shares, the average of the daily market prices for 20 consecutive Business Days commencing 30 days before such date, or (b) if there shall then be no public market for the Common Shares, the Appraised Value per Common Share as at such date. The daily market price for each such Business Day shall be (i) the last sale price on such day on the principal stock exchange or NASDAQ-NMS on which such Common Shares are then listed or admitted to trading, or (ii) if no sale takes place on such day on any such exchange or NASDAQ-NMS, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange or NASDAQ-NMS, or (iii) if the Common Shares are not then listed or admitted to trading on any stock exchange or NASDAQ-NMS, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by the NASDAQ or the National Quotation Bureau, Inc., or (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the NASD selected mutually by the Majority Holders and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by the Majority Holders and one of which shall be selected by the Company.

"Current Warrant Price" shall mean, in respect of any Common Share at any date herein specified, the price at which such Common Share may be purchased pursuant to this Warrant on such date.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

"Exercise Period" shall mean the period during which this Warrant is exercisable pursuant to Section 2.1.

"Expiration Date" shall mean May 26, 2006.

"Fully Diluted Basis" means, with respect to any determination or calculation, that such determination or calculation is performed on a fully diluted basis (assuming the issuance of all Common Shares issuable under any then outstanding options, warrants or convertible securities of any kind) determined in accordance with GAAP for purposes of determining book value or net income per share.

"GAAP" shall mean generally accepted accounting principles in the United States of America as from time to time in effect.

"GE" shall mean General Electric Company, a New York corporation.

"Holder" shall mean the Person in whose name the Warrant set forth herein is registered on the books of the Company maintained for such purpose.

"Majority Holders" shall mean the holders of Warrants exercisable in excess of 50% of the aggregate number of Common Shares then purchasable upon exercise of all Warrants, whether or not then exercisable.

"NASD" shall mean the National Association of Securities Dealers, Inc., or any successor corporation thereto.

"NASDAQ" shall mean the National Association of Securities Dealers Automated Quotation System.

"NASDAQ-NMS" shall mean the NASDAQ National Market System.

"Organic Change" shall have the meaning set forth in Section 4.4.

"Permitted Issuances" shall mean issuances (a) pursuant to existing obligations, including, without limitation, under agreements with existing lenders, outstanding options, rights, warrants or other securities convertible into or exchangeable for Common Shares, or pursuant to any existing employee benefit plan, (b) pursuant to any joint venture or other strategic alliance, with the prior written consent of Holder, (c) covered by Section 4.1, and (d) pursuant to a registration statement under the Securities Act.

"Person" shall mean any individual, sole proprietorship, partnership limited liability the Company, joint venture, trust, incorporated organization, association, corporation, institution, public benefit corporation, entity or government (whether federal, state, county, city,

municipal or otherwise, including, without limitation, any instrumentality, division, agency, body or department thereof).

"Registration Statement" shall have the meaning set forth in Section 9.4.

"Restricted Common Shares" shall mean Common Shares that are, or upon their issuance on the exercise of this Warrant would be, evidenced by a certificate bearing the restrictive legend set forth in Section 9.1(a).

"Securities Act" shall mean the Securities Act of 1933, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Subsidiary" of any Person means any corporation, partnership, joint venture, limited liability the Company, association or other business entity in respect of which that Person owns securities or other ownership interests having ordinary voting power to elect a majority of the board of directors, partnership committee, board of managers or trustees or other managerial body thereof, whether directly or indirectly through one or more of the other Subsidiaries of such Person or a combination thereof. Unless otherwise specified, "Subsidiary" means a Subsidiary of the Company and "Subsidiaries" means all Subsidiaries of the Company.

"Transfer" shall mean any disposition of any Warrant or Warrant Share or of any interest in either thereof that would constitute a sale thereof within the meaning of the Securities Act.

"Transfer Notice" shall have the meaning set forth in Section 9.2.

"Warrants" shall mean this Warrant and all warrants issued upon transfer, division or combination of, or in substitution for, this Warrant. All Warrants shall at all times be identical as to terms and conditions and date, except as to the number of Common Shares for which they may be exercised.

"Warrant Price" shall mean an amount equal to (i) the number of Common Shares being purchased upon exercise of this Warrant pursuant to Section 2.1, multiplied by (ii) the Current Warrant Price as of the date of such exercise.

"Warrant Shares" shall mean the Common Shares issued or issuable to the holders of Warrants upon exercise of the Warrants.

2. EXERCISE OF WARRANT

2.1. MANNER OF EXERCISE. From and after the date hereof and until 5:00 P.M., New York time, on the Expiration Date (the "Exercise Period"), Holder may exercise this Warrant, on any Business Day, for all or any part of 282,010 Common Shares.

In order to exercise this Warrant, in whole or in part, Holder shall deliver to the Company at its principal office at 294 Elizabeth Avenue, Somerset, New Jersey 08873, or at the office or agency designated by the Company pursuant to Section 12: (i) a written notice of Holder's election to exercise this Warrant, which notice shall specify the number of Common Shares to be purchased, (ii) payment of the Warrant Price and (iii) this Warrant. Such notice shall be substantially in the form of the subscription form appearing at the end of this Warrant as Exhibit A, duly executed by Holder or its agent or attorney. Upon receipt thereof, the Company shall, as promptly as practicable, and in any event within five Business Days thereafter, execute or cause to be executed and deliver or cause to be delivered to Holder a certificate or certificates representing the aggregate number of full Common Shares issuable upon such exercise, together with cash in lieu of any fraction of a share, as hereinafter provided. The share certificate or certificates so delivered shall be, to the extent possible, in such denomination or denominations as such Holder shall request in the notice and shall be registered in the name of Holder or, subject to Section 9, such other name as shall be designated in the notice. This Warrant shall be deemed to have been exercised and such certificate or certificates shall be deemed to have been issued, and Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the notice, together with the cash or check or other payment as provided below and this Warrant, is received by the Company as described above and all taxes required to be paid by Holder, if any, pursuant to Section 2.2 prior to the issuance of such shares have been paid. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to Holder a new Warrant evidencing the rights of Holder to purchase the unpurchased Common Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or, at the request of Holder, appropriate notation may be made on this Warrant and the same returned to Holder.

Payment of the Warrant Price shall be made at the Option of Holder by (i) certified or official bank check, and/or (ii) by Holder's surrender to the Company of that number of Warrant Shares (or the right to receive such number of shares) or Common Shares having an aggregate Current Market Price equal to or greater than the Current Warrant Price for all shares then being purchased (including those being surrendered), or (iii) any combination thereof, duly endorsed by or accompanied by appropriate instruments of transfer duly executed by Holder or by Holder's attorney duly authorized in writing.

2.2. PAYMENT OF TAXES. All Common Shares issuable upon the exercise of this Warrant pursuant to the terms hereof shall be validly issued, fully paid and nonassessable and without any preemptive rights. The Company shall pay all expenses in connection with, and all taxes and other governmental charges that may be imposed with respect to, the issue or delivery thereof, unless such tax or charge is imposed by law upon Holder, in which case such taxes or charges shall be paid by Holder. The Company shall not be required, however, to pay any tax or other charge imposed in connection with any transfer involved in the issue of any certificate for Common Shares issuable upon exercise of this Warrant in any name other than that of Holder, and in such case the Company shall not be required to issue or deliver any share certificate until such tax or other charge has been paid or it has been established to the reasonable satisfaction of the Company that no such tax or other charge is due.

2.3. FRACTIONAL SHARES. The Company shall not be required to issue a fractional Common Share upon exercise of any Warrant. If any fraction of a share would, but for this Section, be issuable upon exercise of this Warrant, in lieu of such fractional share, the Company may, at its option, pay a cash adjustment in respect of such final fraction in an amount equal to the same fraction of the Current Market Price per Common Share on the date of exercise.

2.4. CONTINUED VALIDITY. A holder of Common Shares issued upon the exercise of this Warrant, in whole or in part (other than a holder who acquires such shares after the same have been publicly sold pursuant to a Registration Statement under the Securities Act or sold pursuant to Rule 144 thereunder), shall continue to be entitled with respect to such shares to all rights to which it would have been entitled as Holder under Sections 9, 10 and 15 of this Warrant. The Company will, at the time of each exercise of this Warrant, in whole or in part, upon the request of the holder of the Common Shares issued upon such exercise hereof, acknowledge in writing, in form reasonably satisfactory to such holder, its continuing obligation to afford to such holder all such rights; PROVIDED, HOWEVER, that if such holder shall fail to make any such request, such failure shall not affect the continuing obligation of the Company to afford to such holder all such rights.

3. TRANSFER, DIVISION AND COMBINATION

3.1. TRANSFER. Subject to compliance with Section 9 hereof, transfer of this Warrant and all rights hereunder, in whole or in part, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant at the principal office of the Company referred to in Section 2.1 or the office or agency designated by the Company pursuant to Section 12, together with a written assignment of this Warrant substantially in the form of Exhibit B hereto duly executed by Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall, subject to Section 9, execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. A Warrant, if properly assigned in compliance with Section 9, may be exercised by a new Holder for the purchase of Common Shares without having a new Warrant issued.

3.2. DIVISION AND COMBINATION. Subject to Section 9, this Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office or agency of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by Holder or its agent or attorney. Subject to compliance with Section 3.1 and with Section 9, as to any transfer that may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice.

3.3. EXPENSES. The Company shall prepare, issue and deliver at its own expense (other than transfer taxes) the new Warrant or Warrants under this Section 3.

3.4. MAINTENANCE OF BOOKS. The Company agrees to maintain, at its aforesaid office or agency, books for the registration and the registration of transfer of the Warrants.

4. ADJUSTMENTS

The number of Common Shares for which this Warrant is exercisable, or the price at which such shares may be purchased upon exercise of this Warrant, shall be subject to adjustment from time to time as set forth in this Section 4. The Company shall give each Holder notice of any event described below in accordance with Section 5.2.

4.1. SHARE DIVIDENDS, SUBDIVISIONS AND COMBINATIONS. In case the Company shall at any time or from time to time after the Closing Date:

(a) pay a dividend, or make a distribution, on the outstanding Common Shares in Common Shares,

(b) subdivide the outstanding Common Shares,

(c) combine the outstanding Common Shares into a smaller number of Common Shares, or

(d) issue by reclassification of the Common Shares any shares of capital stock of the Company

then the Current Warrant Price in effect immediately prior to such event or the record date therefor, whichever is earlier, shall be adjusted so that Holder, who thereafter exercises this Warrant, shall be entitled to receive the number of Common Shares or other securities of the Company which Holder would have owned or have been entitled to receive after the happening of any of the events described above, had the Warrant been exercised immediately prior to the happening of such event or the record date therefor, whichever is earlier. An adjustment made pursuant to this Section 4.1 shall become effective (x) in the case of any such dividend or distribution, immediately after the close of business on the record date for the determination of holders of Common Shares entitled to receive such dividend or distribution, or (y) in the case of such subdivision, reclassification or combination, at the close of business on the day upon which such corporate action becomes effective. No adjustment shall be made pursuant to this Section 4.1 in connection with any transaction to which Section 4.4 applies.

4.2 CERTAIN OTHER DISTRIBUTIONS AND ADJUSTMENTS. In case the Company shall at any time or from time to time after the Closing Date declare, order, pay or make a dividend or other distribution (including, without limitation, any distribution of stock or other securities or property or rights or warrants to subscribe for securities of the Company or any of its subsidiaries by way of dividend or spinoff), on its Common Shares, other than dividends or distributions of Common Shares which are referred to in Section 4.1 above and cash dividends paid out of retained earnings, then the Current Warrant Price shall be adjusted so that it shall equal the price determined by multiplying (A) the applicable Current Warrant Price on the day

immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution by (B) a fraction, the numerator of which shall be the Current Market Price per Common Share on the day immediately prior to such record date less the amount of such dividend or distribution per Common Share, and the denominator of which shall be such Current Market Price per Common Share on the day immediately prior to such record date. No adjustment shall be made pursuant to this Section 4.2) in connection with any transaction to which Section 4.4 applies.

4.3. ISSUANCE OF ADDITIONAL COMMON SHARES, WARRANTS OR OTHER RIGHTS.

(a) If at any time the Company shall issue Common Shares (or rights, warrants or other securities convertible into or exchangeable for Common Shares) after the Closing Date, other than Permitted Issuances, for consideration in an amount per Common Share (or having an exercise, conversion or exchange price per share) less than an amount equal to 25% below the Current Market Price, then (i) the number of Common Shares subject to purchase upon exercise of this Warrant shall be adjusted to equal the product obtained by multiplying the number of Common Shares subject to purchase upon exercise of this Warrant immediately prior to such issue or sale by a fraction (A) the numerator of which shall be the number of Common Shares outstanding immediately after such issue or sale, and (B) the denominator of which shall be the number of Common Shares outstanding immediately prior to such issue or sale plus the number of Common Shares which the aggregate offering price of the total number of such additional Common Shares would purchase at the then Current Market Price; and (ii) the Current Warrant Price as to the number of Common Shares subject to purchase upon exercise of this Warrant prior to such adjustment shall be adjusted by multiplying such Current Warrant Price by a fraction (X) the numerator of which shall be the number of Common Shares subject to purchase upon exercise of this Warrant immediately prior to such issue or sale; and (Y) the denominator of which shall be the number of Common Shares subject to purchase upon exercise of this Warrant immediately after such issue or sale.

(b) An adjustment made pursuant to Section 4.3(a) shall be made on the next Business Day following the date on which any such issuance is made and shall be effective retroactively immediately after the close of business on such date. For purposes of Section 4.3(a), the aggregate consideration received by the Company in connection with the issuance of Common Shares or of rights, warrants or other securities exchangeable or convertible into Common Shares shall be deemed to be equal to the sum of the aggregate offering price of all such Common Shares and such rights, warrants, or other exchangeable or convertible securities plus the aggregate amount, if any, receivable upon exchange or conversion of any such exchangeable or convertible securities into Common Shares.

4.4. ORGANIC CHANGE. In case of any reorganization of capital, reclassification of capital stock (other than a reclassification of capital subject to Section 4.1), consolidation or merger with or into another corporation, or sale, transfer or disposition of all or substantially all the property, assets or business of the Company to another corporation (any one or more of such events being an "Organic Change"), this Warrant shall thereafter be exercisable into, in lieu of the Common Shares issuable upon exercise of this Warrant prior to consummation of such Organic Change, the kind and amount of shares of stock and other securities and property

receivable (including cash) upon the consummation of such Organic Change by a holder of that number of Common Shares subject to purchase upon exercise of this Warrant immediately prior to such Organic Change (including, on a pro rata basis, the cash, securities or property received by holders of Common Shares in any tender or exchange offer that is a step in such Organic Change). In case securities or property other than Common Shares shall be issuable or deliverable upon exercise as aforesaid, then all references in this Section 4.4 shall be deemed to apply, so far as appropriate and nearly as may be, to such other securities or property.

4.5. OTHER PROVISIONS APPLICABLE TO ADJUSTMENTS UNDER THIS SECTION. The following provisions shall be applicable to the making of adjustments of the number of Common Shares for which this Warrant is exercisable and the Current Warrant Price provided for in this Section 4:

(a) For purposes of this Section 4, the number of Common Shares at any time outstanding shall not include any Common Shares then owned or held by or for the account of the Company or any of its subsidiaries.

(b) If the Company shall take a record of the holders of its Common Shares for the purpose of entitling them to receive a dividend or other distribution, and shall thereafter and before the distribution to stockholders thereof legally abandon its plan to pay or deliver such dividend or distribution, then thereafter no adjustment in the number of Common Shares issuable upon exercise of this Warrant granted by this Section 4 or in the Current Warrant Price then in effect shall be required by reason of the taking of such record.

(c) Anything in this Section 4 to the contrary notwithstanding, the Company shall not be required to give effect to any adjustment in the Current Warrant Price unless and until the net effect of one or more adjustments (each of which shall be carried forward), determined as above provided, shall have resulted in a change of the Current Warrant Price by at least 1%, and when the cumulative net effect of more than one adjustment so determined shall be to change the Current Warrant Price by at least one cent, such change in Current Warrant Price shall thereupon be given effect.

(d) If any option or warrant expires or is cancelled without having been exercised, then, for the purposes of the adjustments set forth above, such option or warrant shall have been deemed not to have been issued and the Current Warrant Price shall be adjusted accordingly. No holder of Common Shares which were previously issued upon exercise of this Warrant shall have any obligation to redeem or cancel any such Common Shares as a result of the operation of this Section 4.5(d).

4.6. OTHER ACTION AFFECTING COMMON SHARES. In case at any time or from time to time the Company shall take any action in respect of its Common Shares, other than any action described in this Section 4, then, unless such action will not have a materially adverse effect upon the rights of Holders, the number of Common Shares or other stock for which this Warrant is exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

5. NOTICES TO WARRANT HOLDERS

5.1. NOTICE OF CERTAIN EVENTS. In case at any time or from time to time the Company shall pay any stock dividend or make any other non-cash distribution to the holders of its Common Shares, or shall offer for subscription pro rata to the holders of its Common Shares any additional shares of stock of any class or any other right, or there shall be any capital reorganization or reclassification of the Common Shares of the Company or consolidation or merger of the Company with or into another corporation, or any sale or conveyance to another corporation of the property of the Company as an entirety or substantially as an entirety, or there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company, then, in any one or more of said cases, the Company shall give at least 20 days' prior written notice to Holder at the address of each as shown on the books of the Company as of the date on which (i) the books of the Company shall close or a record shall be taken for such stock dividend, distribution or subscription rights or (ii) such non-bankruptcy reorganization, reclassification, consolidation, merger, sale or conveyance, dissolution, liquidation or winding up shall take place, as the case may be, provided that in the case of any Organic Change to which Section 4.4 applies the Company shall give at least 20 days' prior written notice as aforesaid. Such notice shall also specify the date as of which the holders of the Common Shares of record shall participate in such dividend, distribution or subscription rights or shall be entitled to exchange their Common Shares for securities or other property deliverable upon such non-bankruptcy reorganization, reclassification, consolidation, merger, sale or conveyance or participate in such dissolution, liquidation or winding up, as the case may be. Failure to give such notice shall not invalidate any action so taken.

5.2. NOTICE OF ADJUSTMENTS. Upon any adjustment of the Current Warrant Price then in effect and any increase or decrease in the number of Common Shares subject to purchase upon exercise of this Warrant, then, and in each such case, the Company shall promptly deliver to Holder, a certificate signed by the President or a Vice President and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary of the Company setting forth in reasonable detail the event requiring the adjustment and the method by which such adjustment was calculated and specifying the Current Warrant Price then in effect following such adjustment and the increased or decreased number of shares subject to purchase upon exercise of this Warrant granted by Section 4, and shall set forth in reasonable detail the method of calculation of each and a brief statement of the facts requiring such adjustment.

6. NO IMPAIRMENT

The Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder against impairment. Without limiting the generality of the foregoing, the Company will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Common Shares upon the exercise of this Warrant, including taking such action as is necessary for the Current Warrant Price to be not less than the par value of the Common Shares issuable

upon exercise of this Warrant, and (b) use its best efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

Upon the request of Holder, the Company will at any time during the period this Warrant is outstanding acknowledge in writing, in form satisfactory to Holder, the continuing validity of this Warrant and the obligations of the Company hereunder.

7. RESERVATION AND AUTHORIZATION OF COMMON SHARES; REGISTRATION WITH OR APPROVAL OF ANY GOVERNMENTAL AUTHORITY

From and after the date hereof, the Company shall at all times reserve and keep available for issue upon the exercise of Warrants such number of its authorized but unissued Common Shares as will be sufficient to permit the exercise in full of all outstanding Warrants. All Common Shares that shall be so issuable, when issued upon exercise of any Warrant and payment therefor in accordance with the terms of such Warrant, shall be duly and validly issued and fully paid and nonassessable, and not subject to preemptive rights.

Before taking any action that would result in an adjustment in the number of Common Shares for which this Warrant is exercisable or in the Current Warrant Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

If any Common Shares required to be reserved for issuance upon exercise of Warrants require registration or qualification with any governmental authority or other governmental approval or filing under any federal or state law (otherwise than as provided in Section 9) before such shares may be so issued, the Company will in good faith and as expeditiously as possible and at its expense endeavor to cause such shares to be duly registered or such approval to be obtained or filing made.

8. TAXING OF RECORD; STOCK AND WARRANT TRANSFER BOOKS

In the case of all dividends or other distributions by the Company to the holders of its Common Shares with respect to which any provision of Section 4 refers to the taking of a record of such holders, the Company will in each such case take such record as of the close of business on a Business Day. The Company will not at any time, except upon dissolution, liquidation or winding up of the Company, close its stock transfer books or Warrant transfer books so as to result in preventing or delaying the exercise or transfer of any Warrant.

9. RESTRICTIONS ON TRANSFERABILITY

The Warrants and the Warrant Shares shall not be transferred, hypothecated or assigned before satisfaction of the conditions specified in this Section 9, which conditions are intended to ensure compliance with the provisions of the Securities Act with respect to the Transfer of any Warrant or any Warrant Share. Holder, by acceptance of this Warrant, agrees to be bound by the provisions of this Section 9.

9.1. RESTRICTIVE LEGEND. (a) Except as otherwise provided in this Section 9, each certificate for Warrant Shares initially issued upon the exercise of this Warrant, and each certificate for Warrant Shares issued to any subsequent transferee of any such certificate, shall be stamped or otherwise imprinted with a legend in substantially the following form:

"The shares represented by this certificate have not been registered under the Securities Act of 1933, as amended, or pursuant to any State securities laws and regulations and may not be transferred in violation of such Act or the rules and regulations thereunder."

(b) Except as otherwise provided in this Section 9, each Warrant shall be stamped or otherwise imprinted with a legend in substantially the following form:

"This warrant and the securities represented hereby have not been registered under the Securities Act of 1933, as amended, or pursuant to any State securities laws and regulations and may not be transferred in violation of such Act, the rules and regulations thereunder or the provisions of this Warrant."

9.2. NOTICE OF PROPOSED TRANSFERS; REQUESTS FOR REGISTRATION.

Prior to any Transfer of any Warrant or any Restricted Common Share, the holder of such Warrant or Restricted Common Share shall give written notice (a "Transfer Notice") to the Company of such Transfer. Any such Transfer must comply with applicable securities laws and, at the request of the Company, Holder shall deliver to company an opinion of counsel to Holder that is reasonably acceptable to the Company as to such compliance. Each certificate, if any, evidencing such Restricted Common Share issued upon such Transfer shall bear the restrictive legend set forth in Section 9.1(a), and each Warrant issued upon such Transfer shall bear the restrictive legend set forth in Section 9.1(b), unless in the opinion of counsel to such holder that is reasonably acceptable to the Company such legend is not required in order to ensure compliance with the Securities Act.

The holders of Warrants and Warrant Shares shall have the right to request registration of such Warrant Shares pursuant to Sections 9.3 and 9.4.

9.3. REQUIRED REGISTRATION. After receipt of a written request from the holders of Warrants and/or Warrant Shares representing at least either (x) an aggregate of 50% of the total of (i) all Warrant Shares then subject to purchase upon exercise of all Warrants and (ii) all Warrant Shares then outstanding and that are Restricted Common Shares, or (y) such Warrant Shares having a minimum anticipated aggregate offering price of at least \$5,000,000, requesting that the Company effect the registration of Warrant Shares issuable upon the exercise of such holder's Warrants or of any of such holder's Warrant Shares under the Securities Act and specifying the intended method or methods of disposition thereof, the Company shall promptly notify all holders of Warrants and Warrant Shares in writing of the receipt of such request and each such holder, in lieu of exercising its rights under Section 9.4, may elect (by written notice

sent to the Company within 10 Business Days from the date of such holder's receipt of the aforementioned the Company's notice) to have its Warrant Shares included in such registration thereof pursuant to this Section 9.3. Thereupon the Company shall, as expeditiously as is possible, use its reasonable best efforts to effect the registration under the Securities Act of all Warrant Shares that the Company has been so requested to register by such holders for sale, all to the extent required to permit the disposition (in accordance with the intended method or methods thereof, as aforesaid) of the Warrant Shares so registered; PROVIDED, HOWEVER, that the Company shall not be required to effect more than one registration of any Warrant Shares pursuant to this Section 9.3 which registration shall not be underwritten; and provided further, however, that the right of the holders of the Warrant Shares to request that the Company effect a registration of any Warrant Shares pursuant to this Section 9.3 shall terminate when the Warrant Shares may be sold pursuant to Rule 144 under the Securities Act during any six-month period. A holder may only request a registration of Warrant Shares that it has a present intention to sell and it shall so state in its request for registration.

9.4. INCIDENTAL REGISTRATION. If the Company at any time commencing one year after the date hereof proposes to file on its behalf and/or on behalf of any of its security holders (the "demanding security holders") a registration statement under the Securities Act (a "Registration Statement") on any form (other than a Registration Statement on Form S-4 or S-8 or any successor form for securities to be offered in a transaction of the type referred to in Rule 145 under the Securities Act or to employees of the Company pursuant to any employee benefit plan, respectively) for the general registration of securities to be sold for cash with respect to its Common Shares or any other class of equity security (as defined in Section 3(a)(11) of the Exchange Act) of the Company, it will give written notice to all holders of Warrants or Warrant Shares that are Restricted Common Shares at least 15 days before the initial filing with the Commission of such Registration Statement, which notice shall set forth the intended method of disposition of the securities proposed to be registered by the Company. The notice shall offer to include in such filing the aggregate number of Warrant Shares, and the number of Common Shares for which this Warrant is exercisable, as such holders may request. Holders shall be entitled to an unlimited number of registrations pursuant to this Section 9.4.

Each holder of any such Warrants or any such Warrant Shares desiring to have Warrant Shares that are Restricted Common Shares registered under this Section 9.4 shall advise the Company in writing within 10 days after the date of receipt of such offer from the Company, setting forth the number of such Warrant Shares for which registration is requested. The Company shall thereupon include in such filing the number of Warrant Shares for which registration is so requested, subject to the next sentence, and shall use its reasonable best efforts to effect registration under the Securities Act of such shares if such offering proceeds. If the managing underwriter of a proposed public offering shall advise the Company in writing that, in its opinion, the distribution of the Warrant Shares requested to be included in the registration concurrently with the securities being registered by the Company or such demanding security holder would materially and adversely affect the distribution of such securities by the Company or such demanding security holder, then all selling security holders, other than the Company (including any demanding security holder who initially requested such registration), shall reduce the amount of securities each intended to distribute through such offering on a pro rata basis.

Except as otherwise provided in Section 9.6, all expenses of such registration shall be borne by the Company.

9.5. REGISTRATION PROCEDURES. If the Company is required by the provisions of this Section 9 to use its reasonable best efforts to effect the registration of any of its securities under the Securities Act, the Company will, as expeditiously as possible:

(a) prepare and file with the Commission a Registration Statement with respect to such securities and use its reasonable best efforts to cause such Registration Statement to become and remain effective for a period of time required for the disposition of such securities by the holders thereof, but not to exceed 120 days;

(b) prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Registration Statement effective and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all securities covered by such Registration Statement until the earlier of such time as all of such securities have been disposed of in a public offering or the expiration of 120 days;

(c) upon request, furnish to each selling security holder such number of copies of such Registration Statement, each amendment and supplement thereto, the prospectus included in such Registration Statement (including each preliminary prospectus and each prospectus filed under Rule 424 of the Securities Act) and such other documents as each such selling security holder may reasonably request;

(d) use its best efforts to register or qualify the securities covered by such Registration Statement under such other securities or blue sky laws of such jurisdictions within the United States as each holder of such securities shall request (PROVIDED, HOWEVER, that the Company shall not be obligated to qualify as a foreign corporation to do business under the laws of any jurisdiction in which it is not then qualified or to file any general consent to service or process), and do such other reasonable acts and things as may be required of it to enable such holder to consummate the disposition in such jurisdiction of the securities covered by such Registration Statement;

(e) furnish, at the request of any holder requesting registration of Warrant Shares pursuant to Section 9.3, on the date that such Warrant Shares are delivered to the underwriters for sale pursuant to such registration or, if such Warrant Shares are not being sold through underwriters, on the date that the Registration Statement with respect to such Warrant Shares becomes effective, (1) an opinion, dated such date, of the independent counsel representing the Company for the purposes of such registration, addressed to the underwriters, if any, in customary form and covering matters of the type customarily covered in such legal opinions; and (2) a comfort letter dated such date, from the independent certified public accountants of the Company, addressed to the underwriters, if any, and, if such accountants refuse to deliver such letter to such holder, then to the Company in a customary form and covering matters of the type customarily

covered by such comfort letters as the underwriters or such holders shall reasonably request;

(f) enter into customary agreements (including an underwriting agreement in customary form) and take such other actions as are reasonably required in order to expedite or facilitate the disposition of such securities); and

(g) otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the Commission, and make available to its security holders, as soon as reasonably practicable, but not later than 18 months after the effective date of the Registration Statement, an earnings statement covering a period of at least 12 months beginning after the effective date of such Registration Statement, which earnings statements shall satisfy the provisions of Section 11(a) of the Securities Act.

It shall be a condition precedent to the obligation of the Company to take any action pursuant to this Section 9 in respect of the securities that are to be registered at the request of any holder of Warrants or Warrant Shares that such holder shall furnish to the Company such information regarding the securities held by such holder and the intended method of disposition thereof as the Company shall reasonably request and as shall be required in connection with the action taken by the Company. Such Holder shall also enter into reasonably acceptable customary custody and other agreements in connection with any registration statements if requested by the Company.

9.6. EXPENSES. All expenses incurred in complying with Section 9, including, without limitation, all registration and filing fees (including all expenses incident to filing with the NASD), printing expenses, fees and disbursements of counsel for the Company, the reasonable fees and expenses of one counsel for the selling security holders (selected by those holding a majority of the shares being registered), expenses of any special audits incident to or required by any such registration and expenses of complying with the securities or blue sky laws of any jurisdictions pursuant to Section 9.5(d), shall be paid by the Company, except that

(a) all such expenses in connection with any amendment or supplement to the Registration Statement or prospectus filed more than 180 days after the effective date of such Registration Statement because any holder of Warrant Shares has not effected the disposition of the securities requested to be registered shall be paid by such holder; and

(b) the Company shall not be liable for any fees, discounts or commissions to any underwriter or any fees or disbursements of counsel for any underwriter in respect of the securities sold by such holder of Warrant Shares.

9.7. INDEMNIFICATION AND CONTRIBUTION. (a) In the event of any registration of any Warrant Share under the Securities Act pursuant to this Section 9, the Company shall indemnify and hold harmless the holder of such Warrant Share, such holder's directors and officers, and each other Person (including each underwriter) who participated in the offering of such Warrant Share and each other person, if any, who controls such holder or such participating Person within the meaning of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which such holder or any such director or officer or participating Person or controlling Person may become subject under the Securities Act or any other statute or at common law, insofar as such losses, claims, damages or

liabilities (or actions in respect thereof) arise out of or are based upon (i) any alleged untrue statement of any material fact contained, on the effective date thereof, in any Registration Statement under which such securities were registered under the Securities Act, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto, or (ii) any alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and shall reimburse such holder or such director, officer or participating Person or controlling Person for any legal or any other expenses reasonably incurred by such holder or such director, officer or participating Person or controlling Person in connection with investigating or defending any such loss, claim, damage, liability or action; PROVIDED, HOWEVER, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any alleged untrue statement or alleged omission made in such Registration Statement, preliminary prospectus, prospectus or amendment or supplement in reliance upon and in conformity with written information furnished to the Company by or on behalf of such holder specifically for use therein or (in the case of any registration pursuant to Section 9.3) so furnished for such purposes by or on behalf of any underwriter. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such holder or such director, officer or participating Person or controlling Person, and shall survive the transfer of such securities by such holder.

(b) Each holder of any Warrant Share, by acceptance thereof, agrees to indemnify and hold harmless the Company, its directors and officers and each other Person, if any, who controls the Company within the meaning of the Securities Act against any losses, claims, damages or liabilities, joint or several, to which the Company or any such director or officer or any such Person may become subject under the Securities Act or any other statute or at common law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon information in writing provided to the Company by or on behalf of such holder of such Warrant Share specifically for use in the following documents and contained, on the effective date thereof, in any Registration Statement under which securities were registered under the Securities Act at the request of such holder, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto, but in an amount not to exceed the net proceeds received by such holder in the offering.

(c) Promptly after receipt by an indemnified party under Sections 9(a) or (b) above of notice of the assertion of any claim, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify each party against whom indemnification is to be sought in writing of the commencement thereof (but the failure so to notify an indemnifying party shall not relieve it from any liability that it may have under this Section 9 except to the extent that it has been prejudiced in any material respect by such failure or from any liability that it may have otherwise). In case any such action is brought against any indemnified party, and it notifies an indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein, and to the extent it may elect by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with counsel reasonably

satisfactory to such indemnified party. Notwithstanding the foregoing, the indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless (i) the employment of such counsel shall have been authorized in writing by one of the indemnifying parties in connection with the defense of such action, (ii) the indemnifying parties shall not have employed counsel to take charge of the defense of such action within a reasonable time after notice of commencement of the action, or (iii) such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them that are different from or additional to those available to one or all of the indemnifying parties (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party or parties with respect to such different defenses), in any of which events such fees and expenses shall be borne by the indemnifying parties. The indemnifying party under Sections 9(a) or (b) above shall only be liable for the legal expenses of one counsel for all indemnified parties in each jurisdiction in which any claim or action is brought; PROVIDED, HOWEVER, that the indemnifying party shall be liable for separate counsel for any indemnified party in a jurisdiction, if counsel to the indemnified parties shall have reasonably concluded that there may be defenses available to such indemnified party that are different from or additional to those available to one or more of the other indemnified parties and that separate counsel for such indemnified party is prudent under the circumstances. Anything in this subsection to the contrary notwithstanding, an indemnifying party shall not be liable for any settlement of any claim or action effected without its written consent; PROVIDED, HOWEVER, that such written consent was not unreasonably withheld.

(d) If the indemnification provided for in this Section 9 from the indemnifying party is unavailable to an indemnified party hereunder in respect of any losses, claims, damages, liabilities or expenses referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages, liabilities or expenses in such proportion as is appropriate to reflect the relative fault of the indemnifying party and indemnified parties in connection with the actions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative fault of such indemnifying party and indemnified parties shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or relates to information supplied by, such indemnifying party or indemnified parties, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with any investigation or proceeding. The liability of any holder of Warrant Shares hereunder shall not exceed the net proceeds received by it in the offering.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 9.7(d) were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the

meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

9.8. TERMINATION OF RESTRICTIONS. Notwithstanding the foregoing provisions of Section 9, the restrictions imposed by this Section upon the transferability of the Warrants, the Warrant Shares and the Restricted Common Shares and the legend requirements of Section 9.1 shall terminate as to any particular Warrant or Warrant Share or Restricted Common Share (i) when and so long as such security shall have been effectively registered under the Securities Act and disposed of pursuant thereto or (ii) when the Company shall have received an opinion of counsel reasonably satisfactory to it that such securities may be transferred without registration thereof under the Securities Act. Whenever the restrictions imposed by Section 9 shall terminate as to this Warrant, as hereinabove provided, Holder hereof shall be entitled to receive from the Company, at the expense of the Company, a new Warrant without the restrictive legend set forth in Section 9.1(b). Whenever the restrictions imposed by this Section shall terminate as to any Restricted Common Share, as hereinabove provided, the holder thereof shall be entitled to receive from the Company, at the Company's expense, a new certificate representing such Common Share not bearing the restrictive legend set forth in Section 9.1(a).

9.9. LISTING ON SECURITIES EXCHANGE. If the Company shall list any Common Shares on any securities exchange, it will, at its expense, list thereon, maintain and, when necessary, increase such listing of, all Common Shares issued or, to the extent permissible under the applicable securities exchange rules, issuable upon the exercise of this Warrant so long as any Common Shares shall be so listed during any such Exercise Period.

9.10. CERTAIN LIMITATIONS ON REGISTRATION RIGHTS. Notwithstanding the other provisions of Section 9:

- (i) the Company shall not be obligated to register the Warrant Shares of any holder if, in the opinion of counsel to the Company reasonably satisfactory to the holder and its counsel (or, if the holder has engaged an investment banking firm, to such investment banking firm and its counsel), the sale or other disposition of such holder's Warrant Shares, in the manner proposed by such holder (or by such investment banking firm), may be effected without registering such Warrant Shares under the Securities Act; and
- (ii) the Company shall not be obligated to register the Warrant Shares of any holder pursuant to Section 9.3, if the Company has had a registration statement, under which such holder had a right to have its Warrant Shares included pursuant to Sections 9.3 or 9.4, declared effective within one year prior to the date of the request pursuant to Section 9.3; PROVIDED, HOWEVER, that if any holder elected to have shares of its Warrant Shares included under such registration statement but some or all of such shares were excluded pursuant to the penultimate sentence of Section 9.4, then such one-year period shall be reduced to the greater of six months or any lock-up period agreed to by such holder with an underwriter.

- (iii) The Company shall have the right to delay the filing or effectiveness of a registration statement required pursuant to Section 9.3 hereof during one or more periods aggregating not more than 90 days in any 12 month period in the event that (i) the Company would, in accordance with the advice of its counsel, be required to disclose in the prospectus information not otherwise then required by law to be publicly disclosed and (ii) in the judgment of the Company's Board of Directors, there is a reasonable likelihood that such disclosure, or any other action to be taken in connection with the prospectus, would materially and adversely affect any existing or prospective material business situation, transaction or negotiation or otherwise materially and adversely affect the Company.

9.11. MARKET STAND-OFF AGREEMENT. Each Holder hereby agrees that, during the period of duration specified by the Company and an underwriter of common stock or other securities of the Company, following the effective date of a registration statement of the Company filed under the Act, it shall not, to the extent requested by the Company and such underwriter, directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any securities of the Company held by it at any time during such period except common stock included in such registration; provided, however, that such market stand-off time period shall not exceed 180 days and all officers and directors of the Company enter into similar agreements.

In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the Warrants and Warrant Shares of each Holder (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period.

10. SUPPLYING INFORMATION

The Company shall cooperate with each Holder of a Warrant and each holder of Restricted Common Shares in supplying such information as may be reasonably necessary for such holder to complete and file any information reporting forms presently or hereafter required by the Commission as a condition to the availability of an exemption from the Securities Act for the sale of any Warrant or Restricted Common Shares.

11. LOSS OR MUTILATION

Upon receipt by the Company from any Holder of evidence reasonably satisfactory to it of the ownership of and the loss, theft, destruction or mutilation of this Warrant and indemnity reasonably satisfactory to it (it being understood that the written agreement of GE shall be sufficient indemnity), and in case of mutilation upon surrender and cancellation hereof, the Company will execute and deliver in lieu hereof a new Warrant of like tenor to such Holder; PROVIDED, in the case of mutilation, no indemnity shall be required if this Warrant in identifiable form is surrendered to the Company for cancellation.

12. OFFICE OF THE COMPANY

As long as any of the Warrants remain outstanding, the Company shall maintain an office or agency (which may be the principal executive offices of the Company) where the Warrants may be presented for exercise, registration of transfer, division or combination as provided in this Warrant.

13. [INTENTIONALLY OMITTED]

14. LIMITATION OF LIABILITY

No provision hereof, in the absence of affirmative action by Holder to purchase Common Shares, and no enumeration herein of the rights or privileges of Holder hereof, shall give rise to any liability of such Holder for the purchase price of any Common Share or as a shareholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

15. MISCELLANEOUS

15.1. NONWAIVER AND EXPENSES. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice Holder's rights, powers or remedies. If the Company fails to make, when due, any payments provided for hereunder, or fails to comply with any other provision of this Warrant, the Company shall pay to Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

15.2. NOTICE GENERALLY. Any notice, demand, request, consent, approval, declaration, delivery or other communication hereunder to be made pursuant to the provisions of this Warrant shall be sufficiently given or made if in writing and either delivered in person with receipt acknowledged or sent by registered or certified mail, return receipt requested, postage prepaid, or by telecopy and confirmed by telecopy answerback, addressed as follows:

(a) If to any Holder or holder of Warrant Shares, at its last known address appearing on the books of the Company maintained for such purpose.

(b) If to the Company at

Emcore Corporation
294 Elizabeth Avenue
Somerset, New Jersey 08873
Attention: President
Telecopy Number: (732) 271-9686

With a Copy to

White & Case LLP
1155 Avenue of the Americas
New York, New York 10036
Attention: Steven M. Betensky, Esq.
Telecopy Number: (212) 354-8113

or at such other address as may be substituted by notice given as herein provided. The giving of any notice required hereunder may be waived in writing by the party entitled to receive such notice. Every notice, demand, request, consent, approval, declaration, delivery or other communication hereunder shall be deemed to have been duly given or served on the date on which personally delivered, with receipt acknowledged, telecopied and confirmed by telecopy answerback, or three Business Days after the same shall have been deposited in the United States mail. Failure or delay in delivering copies of any notice, demand, request, approval, declaration, delivery or other communication to the Person designated above to receive a copy shall in no way adversely affect the effectiveness of such notice, demand, request, approval, declaration, delivery or other communication.

15.3. REMEDIES. Each holder of a Warrant or a Warrant Share, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under Section 9 of this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of Section 9 of this Warrant and hereby agrees to waive the defense in any action for specific performance that a remedy at law would be adequate. In any action or proceeding brought to enforce any provision of this Agreement or where any provision hereof is validly asserted as a defense, the successful party shall be entitled to recover reasonable attorneys' fees in addition to any other available remedy.

15.4. SUCCESSORS AND ASSIGNS. Subject to the provisions of Sections 3.1 and 9, this Warrant and the rights evidenced hereby shall inure to the benefit of and be binding upon the successors of the Company and the successors and assigns of Holder. The provisions of this Warrant are intended to be for the benefit of all Holders from time to time of this Warrant and, with respect to Section 9 hereof, holders of Warrant Shares, and shall be enforceable by any such Holder or holder of Warrant Shares.

15.5. AMENDMENT. This Warrant and all other Warrants may be modified or amended or the provisions hereof waived with the written consent of the Company and the Majority Holders; PROVIDED that no such Warrant may be modified or amended to reduce the number of Common Shares for which such Warrant is exercisable or to increase the price at which such Common Shares may be purchased upon exercise of such Warrant (before giving effect to any adjustment as provided therein) without the prior written consent of Holder thereof.

15.6. SEVERABILITY. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be

ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Warrant.

15.7. HEADINGS. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

15.8. GOVERNING LAW. This Warrant shall be governed by the laws of the State of New York, without regard to the provisions thereof relating to conflict of laws.

[Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this warrant to be duly executed and attested by its Secretary or an Assistant Secretary.

Dated: May 26, 1999

EMCORE CORPORATION

By: _____
Name:
Title:

Attest:

By: _____
Name:
Title:

EXHIBIT A

SUBSCRIPTION FORM

[To be executed only upon exercise of Warrant]

The undersigned registered owner of this Warrant irrevocably exercises this Warrant for the purchase of _____ Common Shares of EMCORE CORPORATION and herewith makes payment therefor, all at the price and on the terms and conditions specified in this Warrant and requests that certificates for the Common Shares hereby purchased (and any securities or other property issuable upon such exercise) be issued in the name of and delivered to _____ whose address is _____

and, if such Common Shares shall not include all of the Common Shares issuable as provided in this Warrant, that a new Warrant of like tenor and date for the balance of the Common Shares issuable hereunder be delivered to the undersigned.

(Name of Registered Owner)

(Signature of Registered Owner)

(Street Address)

(City) (State) (Zip Code)

NOTICE: The signature on this subscription must correspond with the name as written upon the face of the within warrant in every particular, without alteration or enlargement or any change whatsoever.

EXHIBIT B
ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of Common Shares set forth below:

NAME AND ADDRESS OF ASSIGNEE	NO. OF COMMON SHARES
-----	-----

and does hereby irrevocably constitute and appoint _____ attorney-in-fact to register such transfer on the books of EMCORE CORPORATION maintained for the purpose, with full power of substitution in the premises.

Dated: _____	Print Name: _____
	Signature: _____
	Witness: _____

NOTICE: The signature on this assignment must correspond with the name as written upon the face of the within Warrant in every particular, without alteration or enlargement or any change whatsoever.

SCHEDULE 1
[Permitted Issuances]

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Amendment No. 2 to Registration Statement No. 333-71791 of EMCORE Corporation on Form S-3 of our report dated May 14, 1999 (which expresses an unqualified opinion and includes an explanatory paragraph relating to a restatement described in Note 20), included in the Annual Report on Form 10-K/A of EMCORE Corporation for the year ended September 30, 1998, and to the use of our report dated May 14, 1999, appearing in the Prospectus, which is part of this Registration Statement. We also consent to the reference to us under the heading "Experts" in such Prospectus.

DELOITTE & TOUCHE LLP
Parsippany, New Jersey
June 8, 1999

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the inclusion and incorporation in this registration statement on Form S-3 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 for the two years ended September 30, 1997. We also consent to the references to our firm under the caption "Experts".

PricewaterhouseCoopers LLP

Florham Park, New Jersey
June 8, 1999

Consent of Arthur Andersen LLP

As independent public accountants, we hereby consent to the use of our report dated March 21, 1997 on the financial statements of MicroOptical Devices, Inc. for the year ended December 31, 1996 and for the period from inception (August 3, 1995) through December 31, 1995 and 1996, included in or made a part of this registration statement under Amendment No. 2 to Form S-3 for EMCORE Corporation.

ARTHUR ANDERSEN LLP

Albuquerque, New Mexico
June 8, 1999

Consent of Lerner David Littenberg Krumholz & Mentlik

We hereby consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-3 of EMCORE Corporation for the offering of shares of common stock by EMCORE Corporation and certain selling shareholders.

Lerner David Littenberg Krumholz & Mentlik, LLP

June 8, 1999
Westfield, New Jersey