SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Amendment No. 1 to

FORM S-1 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) 3670 (Primary Standard Industrial Classification Code Number) 22-2746503 (I.R.S. Employer Identification No.)

394 Elizabeth Avenue, Somerset, New Jersey 08873 (908) 271-9090 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Thomas G. Werthan
EMCORE Corporation
394 Elizabeth Avenue
Somerset, New Jersey 08873
(908) 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 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.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NASDAQ NATIONAL MARKET, IN THE OVER-THE-COUNTER MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

This Prospectus contains certain statements of a forward-looking nature relating to future events, such as developments of processes and commencement of production, or the future financial performance of the Company. Prospective investors are cautioned that such statements are only projections and that actual events or results may differ materially. In evaluating such statements, prospective investors should specifically consider the various factors identified in this Prospectus, including the matters set forth under the heading "Risk Factors" which could cause actual results to differ materially from those indicated by such forward-looking statements.

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

Prospectus SUBJECT TO COMPLETION, DATED FEBRUARY ___, 1997 _____, 1997

2,500,000 SHARES

[EMCORE LOGO]

EMCORE CORPORATION

COMMON STOCK

All the 2,500,000 shares of Common Stock offered hereby (the "Offering") are being issued and sold by EMCORE Corporation ("EMCORE" or the "Company").

Prior to the Offering, there has been no public market for the Common Stock of the Company. It is currently anticipated that the initial public offering price will be between \$9.00 and \$11.00 per share. See "Underwriting" for a discussion of the factors considered in determining the initial public offering price.

The Company has applied for quotation of the Common Stock on the Nasdaq National Market under the symbol "EMKR."

SEE "RISK FACTORS" BEGINNING ON PAGE 6 FOR INFORMATION THAT SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Price to the Public	Underwriting Discounts and Commissions(1)	Proceeds to the Company(2)
Per Share	 \$	\$	\$
Total (3)	 \$	\$	\$

(1) The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as

amended (the "Securities Act"). See "Underwriting."

(2) Before deducting expenses estimated at \$710,000 which will be paid by the Company.

(3) The Company has granted the several Underwriters an option, exercisable within 30 days of the date hereof, to purchase up to 375,000 additional shares of Common Stock solely to cover over-allotments, if any. If such option is exercised in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to the Company will be, and See "Underwriting."
The shares of Common Stock are being offered by the several Underwriters when, as and if delivered to and accepted by the Underwriters and subject to various prior conditions, including their right to reject orders in whole or in part. It is expected that delivery of the share certificates will be made in New York, New York on or about

DONALDSON, LUFKIN & JENRETTE SECURITIES CORPORATION

NEEDHAM & COMPANY, INC.

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information, including "Risk Factors" and the Financial Statements and Notes thereto, appearing elsewhere in this Prospectus. Except as otherwise indicated, (a) all references to fiscal years of the Company in this Prospectus refer to fiscal years ended on September 30 and (b) all information in this Prospectus assumes no exercise of the Underwriters' over-allotment option and reflects a 3.4:1 reverse stock split of the Common Stock effective February 3, 1997.

THE COMPANY

EMCORE, founded in 1984, designs and develops compound semiconductor materials, such as gallium arsenide, and process technology and is a leading manufacturer of production systems used to fabricate compound semiconductor wafers. The Company provides its customers, both in the U.S. and internationally, with materials science expertise, process technology and compound semiconductor production systems that enable the manufacture of commercial volumes of high-performance electronic and optoelectronic devices. In 1996, in response to the growing need of its customers to cost effectively get to market faster with high volumes of new and improved high-performance products, the Company expanded its product offerings to include the design and production of wafers and package-ready devices. The Company believes that it is the only company that offers such a broad range of products and services to the compound semiconductor industry.

Recent advances in information technologies have created a growing need for power-efficient, high- performance electronic systems that operate at very high frequencies, have increased storage, computational and display capabilities, and can be produced cost-effectively in commercial volumes. In the past, electronic systems manufacturers 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 performance and functions which 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. Compound semiconductor devices operate at much higher speeds than silicon devices with lower power consumption and less noise and distortion. In addition, unlike silicon-based devices, compound semiconductor devices have optoelectronic capabilities that enable them to emit and detect light. As a result, electronics manufacturers are increasingly integrating compound semiconductor devices into their products in order to achieve higher performance in a wide variety of applications, including wireless communica-tions, telecommunications, computers, and consumer and automotive electronics.

Historically, developers of compound semiconductor devices have met capacity needs with in-house systems and technologies. However, the requirements for the production of commercial volumes of high- performance compound semiconductor devices have often exceeded the capabilities of such in-house solutions. The Company believes that wafers fabricated using metal organic chemical vapor deposition ("MOCVD") possess better uniformity, as well as better optical and electronic properties, than wafers fabricated by traditional methods. The Company believes that its proprietary TurboDiscTM MOCVD system provides a low cost of ownership and is the critical enabling process step in the volume manufacture of high-performance electronic and optoelectronic devices.

The Company's objective is to capitalize on its position as a

leading developer of MOCVD process technology and production systems to become a leading supplier of wafers and package-ready devices. In 1995, the Company had a 26% share of the market for sales of MOCVD systems, according to VLSI Research Inc., which regularly publishes research on this market. In addition, the Company seeks to form strategic alliances with customers in order to obtain long-term development and high volume production contracts. The Company currently has a strategic relationship with General Motors Corporation ("General Motors") to develop and manufacture magneto-resistive ("MR") sensor products for use in automotive applications. In addition, the Company has been integrally involved in the development of solar cell technologies for telecommunications satellites and transmitter and display technologies for wireless communications applications.

The Company works closely with its customers in designing and developing materials processes to be used in production systems for its customers' end-use applications. The Company has sold more than 180 systems worldwide to a broad base of leading electronics manufacturers, including: Spectrolab Inc. (a subsidiary of Hughes Electronics Company, "Hughes-Spectrolab"), General Motors, Hewlett Packard Co., Lucent Technologies, Inc., Motorola, Inc., Rockwell International Corp. ("Rockwell"), Samsung Co., Siemens AG, L.M. Ericsson AB, Texas Instruments Incorporated and thirteen of the largest electronics manufacturers in Japan. In fiscal 1996, only one customer, Hughes-Spectrolab, accounted for more than 10% of the Company's revenues; sales to this customer accounted for 23.6% of the Company's revenues. The Company's systems are used by these customers to manufacture epitaxial wafers which are then processed into components used in a variety of end-use products, including: cellular telephones, pagers, personal communication service ("PCS") handsets, direct broadcast satellite ("DBS") systems, CD-ROMs, digital versatile disks ("DVDs"), flat-panel displays and electronic automotive components.

THE OFFERING

2,500,000 Shares

Common Stock offered
by the Company
Common Stock to
be outstanding after
the Offering
Use of Proceeds

5,494,461 Shares(1) To repay outstanding debt, expand manufacturing facilities and for other general corporate purposes. See "Use of Proceeds."

Proposed Nasdaq National Market symbol EMKR

SUMMARY FINANCIAL DATA

	YEAF	RS ENDED SEF	PTEMBER 30,		ONTHS ENDED MBER 31,
	1994 1995 1996 (IN THOUSANDS EXCEPT PER SHARE AMOUNTS)			1995 (UNAI	1996 UDITED)
STATEMENT OF INCOME DATA: Total revenues	\$9,038	\$18,137	\$27,779	\$4,255	\$8,591
Gross profit	3,825 116	8,210 1,906	9,172 (2,753)	1,473 (831)	1,867 (2,585)
Net (loss) income	(170)	1,516	(3,176)	(885)	(3,798)
Pro forma net (loss) income per share(4)					(.55)
net (loss) income per share(4)					6,938

ACTUAL

AS ADJUSTED(2)(3)

(IN THOUSANDS)

BALANCE SHEET DATA:

Working capital Total assets	(\$1,961) 29,283	\$20,579 51,823
Long-term debt, net	9,063	9,063
Shareholders' equity	324	22,863

- (1) Excludes: (i) 647,059 shares of Common Stock reserved for issuance under the Company's 1995 Incentive and Non-Statutory Stock Option Plan, as amended, of which 464,017 shares are subject to outstanding options at exercise prices varying from \$3.03 per share to \$10.20 per share, (ii) warrants to purchase 9,103 shares of Common Stock at an exercise price of \$17.00 per share, exercisable until July 24, 1997, (iii) warrants to purchase 2,330,784 shares of Common Stock at an exercise price of \$4.08 per share, exercisable until May 1, 2001 and (iv) warrants to purchase 1,225,490 shares of Common Stock at an exercise price of \$10.20 per share, exercisable until September 1, 2001. See "Management -- Stock Option Plan," "Description of Capital Stock -- Warrants" and Note 12 of the Notes to Financial Statements.
- (2) In October 1996, the Company established a \$10.0 million demand note facility with First Union National Bank. As of December 31, 1996, the Company had drawn down \$6 million from this facility. The Company intends to use part of the net proceeds of the Offering to pay down the balance outstanding under this facility. See "Use of Proceeds."
- (3) Reflect the sale by the Company of the 2,500,000 shares of Common Stock offered hereby, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company and the application of the estimated net proceeds thereof. See "Use of Proceeds."
- (4) Pro forma adjustment for net (loss) income per share and shares used in computing net (loss) income per share assumes: (i) 2,994,461 shares of Common Stock, which represents the actual weighted average shares of Common Stock outstanding, (ii) 2,500,000 shares of Common Stock to be issued by the Company in the Offering and (iii) 1,443,936 equivalent shares of Common Stock to reflect the Common Stock purchase warrants and stock options issued during the twelve months preceding the filing date of the registration statement relating to the Company's initial public offering, using the treasury stock method.

RISK FACTORS

An investment in the Common Stock offered by this Prospectus involves a high degree of risk. Risks involved in an investment in the Common Stock include, without limitation: risks related to expansion of the Company's business, risks related to continued growth, risks arising from the need to increase manufacturing capacity, the Company's history of operating losses,

fluctuations in the Company's operating results, risks related to customer concentration, risks relating to the lengthy sales and qualification cycles for the Company's products, risks related to the Company's reliance on trade secrets, risks related to the Company's dependence on limited product offerings, manufacturing risks, risks from reliance on international sales, risks arising from rapid technological change, risks regarding the acceptance of new compound semiconductor technology by customers, risks of increased competition, risks from continued existence of a control group, risks related to dependence on key employees, risks related to environmental regulation, risks arising from the absence of a public market, risks of uncertainty of additional funding, and risks of certain anti-takeover provisions, See "Risk Factors."

An investment in the shares of Common Stock offered by this Prospectus involves a high degree of risk. In addition to the other matters described in this Prospectus, prospective investors should carefully consider the following factors before making a decision to purchase the Common Stock offered hereby.

Risks Related to Expansion of Business. The Company has recently experienced a significant increase in the demand for its compound semiconductor production systems. There can be no assurance that the market for compound semiconductor production systems will continue to grow or that the Company will be able to continue to develop compound semiconductor systems for the market or that it will be able to meet market demands or maintain and expand its customer base for such products. A failure to do so would have a material adverse effect on the Company's business, financial condition and results of operations. The Company has also recently expanded its operations to include the production of compound semiconductor wafers and package-ready devices. The Company's expansion into the production of such new products involves substantial capital expenditures and a significant risk that management will be unsuccessful. The Company presently anticipates utilizing a significant portion of the net proceeds of the Offering for such expenditures. The development, production and sale of compound semiconductor wafers and package-ready devices entail yield, process and capacity-related risks that differ from those associated with the development, production and sale of the Company's compound semiconductor production systems. The markets for compound semiconductor wafers and package-ready devices are in a relatively early stage of development. There can be no assurance that these markets will continue to grow or that the Company will be successful in developing or marketing such products. The Company's failure to successfully develop or market such products could have a material adverse effect on the Company's business, financial condition and results of operations. See "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business -- Products.'

Risks Related to Continued Growth. The Company has recently experienced a period of rapid growth, has added new personnel and intends to continue to expand. For example, the number of the Company's employees has increased from 95 as of September 30, 1995 to 185 as of September 30, 1996. Because of the level of scientific and management expertise necessary to support such growth, the Company must recruit and retain highly qualified and well-trained technical and management personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, and it may become increasingly difficult for the Company to hire such personnel over time. The Company's expansion may also significantly strain management, financial, sales and marketing and other personnel and systems. In order to effectively manage its growth, the Company must continue to enhance its systems and controls and successfully expand, train and manage its employee base. There can be no assurance that the Company will be able to manage this expansion effectively or will be able to recruit, train and retain sufficient technical and managerial personnel. Any failure to manage the Company's growth properly could have a material adverse effect on the Company's business, financial condition and results of operations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Risks Arising from the Need to Increase Manufacturing Capacity. The Company currently anticipates increasing its manufacturing capacity to meet the demand for its compound semiconductor production systems and wafers and package-ready devices by expanding its existing production facility for its new product offerings and instituting a third shift at its facility. This

increase will require substantial capital expenditures. The Company presently anticipates utilizing a significant portion of the net proceeds of the Offering for such expenditures. There can be no assurance that the Company will be successful in increasing its manufacturing capacity in time to meet the demand for its production systems or wafers and package-ready devices. In addition, the Company's success is in large part dependent on its ability to manufacture its products, particularly its wafers and package-ready devices, in high volumes and on a timely basis. In addition, commercial production of the Company's wafers and package-ready devices requires the achievement of adequate competitive yield levels. The failure of the Company to increase its manufacturing capacity, or to manufacture its products in high volumes, in a timely manner, or at sufficient yield levels, would have a material adverse effect on the Company's business, financial condition and results of operations. See "Use of Proceeds" and "Business -- Manufacturing."

History of Operating Losses; Uncertainty of Profitability. The Company has been in operation since 1984 and had an accumulated deficit of \$18.1 million at September 30, 1996. In fiscal 1996, and the first quarter of fiscal 1997, the Company incurred consolidated net losses of \$3.2 million and \$3.8 million, respectively, which primarily resulted from significant initial operating expenses related to the Company's expansion to include the production of compound semiconductor wafers and package-ready devices and for the quarter ending December 31, 1996, \$1.0 million of imputed warrant interest, non-cash. The Company has increased its expense levels to support anticipated growth in demand for each of its compound semiconductor production systems, wafer and package-ready device product offerings, including the hiring of additional manufacturing, research, engineering, sales, and administrative personnel and has also increased its investments in inventory and capital equipment. As a result, the Company is dependent upon increasing revenues and profit margins to achieve profitability. If the Company's sales and profit margins do not increase to support the higher levels of operating expenses, the Company's business, financial condition and results of operations would be materially adversely affected. There can be no assurance that the Company will ever again achieve profitability. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and the Notes thereto.

Substantial Losses Incurred in First Fiscal Quarter of 1997. The Company has incurred a loss of \$3.8 million in the quarter ending December 31, 1996. The loss was primarily attributable to continuing start-up expenses associated with the Company's two new product lines, in addition to \$1 million of imputed warrant interest, non-cash. There can be no assurance that the Company will reverse its losses or cease reporting quarterly losses or that the Company's capital expenditures incurred in connection with the initiation of new product offerings will yield net revenues. The failure to report positive results from the two new product offerings could have a material adverse effect on the Company's business, financial condition and results of operation.

Fluctuations in Operating Results. Historically, the Company has derived substantially all of its revenues from the sale of compound semiconductor production systems which typically have list prices ranging from approximately \$350,000 to \$2.5 million per system. At the Company's current revenue level, each shipment of a compound semiconductor production system or failure to make a shipment can have a material effect on the Company's quarterly or annual results of operations. A cancellation, rescheduling or delay in a system shipment near the end of a particular quarter could cause net revenues in that quarter to fall significantly below the Company's expectations and could materially adversely affect the Company's operating results for such quarter. The Company's policy is to maintain positive relationships with its customers by responding promptly

and effectively to warranty claims. Since the occurrence of warranty claims is unpredictable, the Company's prompt action in response to such claims could cause the Company's operating results to fluctuate unexpectedly. The Company maintains reserves against warranty claims; however, an unexpectedly high level of warranty claims in a particular quarter could have a material adverse effect on the Company's business, financial condition and results of operation for that quarter. The Company anticipates that any revenues derived in the future from its recentlyestablished wafer and package-ready device products will be subject to similar risks. Other factors which may lead to fluctuations in the Company's quarterly and annual operating results include: market acceptance of the Company's and its customers' products; the number of compound semiconductor production systems, wafers or package-ready devices being manufactured during any particular period; the mix of sales by product and by distribution channel; the timing of announcement and introduction of new compound semiconductor production systems, wafers or package-ready devices by the Company and its competitors; a downturn in the market for products incorporating compound semiconductors; variations in the configuration of production systems; changes in the design or process conditions for the production of wafers or package-ready devices; product discounts and changes in pricing; delays in deliveries from suppliers; delays in orders due to customers' financial difficulties; and volatility in the compound semiconductor industries and the markets served by the Company's customers. In addition, customers may face competing capital budget considerations, thus making the timing of customer orders uneven and difficult to predict. There can be no assurance that the Company will be able to achieve a rate of growth or level of revenues in any future period commensurate with its level of expenses. It is likely that, in some future quarter or quarters, the Company's operating results may be below the expectations of analysts and investors. In such event, the price of the Company's Common Stock would likely be materially adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Risks Related to Customer Concentration. A small number of customers have historically accounted for a substantial portion of the Company's revenues, and the Company expects a significant portion of its future sales to remain concentrated within a limited number of customers. Sales of the Company's production systems to Hughes-Spectrolab, accounted for approximately 28.9% and 23.6% of the Company's revenues in fiscal 1995 and 1996, respectively. Hughes-Spectrolab is currently the Company's largest purchaser of compound semiconductor production systems. General Motors is currently the Company's sole customer for package-ready devices. Currently, the Company is only deriving revenues from the fabrication of its wafers for use in connection with the package-ready devices being sold to General Motors. There can be no assurance that the Company will succeed in marketing its wafers and package-ready devices to any customer other than General Motors. Failure by the Company to provide wafers and package-ready devices for customers other than General Motors would have a material adverse effect on the Company's business, financial condition and results of operations. In addition, the loss of, or a significant reduction of orders from, Hughes-Spectrolab or General Motors would have a material adverse effect on the Company's business, financial condition and results of operations. There can be no assurance that the Company will be able to retain these or other major customers or that such customers will not cancel, delay or reschedule orders. Any reduction or delay in orders from any of the Company's significant customers, including reductions or delays due to market, economic or competitive conditions in compound semiconductor-related industries, or the loss of any such customers, would have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -- Customers.'

Risks Related to Lengthy Sales and Qualification Cycles. Sales of the

Company's compound semiconductor production systems depend, in significant part, upon the decision of a prospective customer to increase its manufacturing capacity, which typically involves a significant capital commitment by the customer. 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. The Company often experiences delays in obtaining system sales orders while customers evaluate and receive approvals for the purchase of compound semiconductor production systems. Such delays may include the time necessary to plan, design or complete a new or expanded compound semiconductor fabrication facility. Due to these factors, the Company's compound semiconductor systems typically have a lengthy sales cycle during which the Company may expend substantial funds and sales, marketing and management effort. There can be no assurance that any of these expenditures or efforts on the part of the Company will result in sales. Although the Company has a limited operating history for wafer and package-ready device fabrication, the Company anticipates that such products will have similarly lengthy sales cycles and will therefore be subject to risks substantially similar to those inherent in the lengthy sales cycles for compound semiconductor systems. In addition, the sales cycle for wafers and package-ready devices also includes a period of two to six months during which the Company develops the formula of materials necessary to meet the customer's specifications and qualifies the materials which may also require the delivery of samples. There can be no assurance that the Company will successfully develop an appropriate product in accordance with customer specifications. See "Business -- Products," "-- Sales and Marketing" and "-- Competition."

Risks Related to Reliance on Trade Secrets; No Assurance of Continued Intellectual Property Protections. The Company's success and competitive position both for sales of production systems and for wafers and packageready devices depend on whether it can maintain trade secrets, patents and other intellectual property protections. Trade secrets are routinely employed in the Company's manufacturing processes. A "trade secret" includes 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. In order to protect its trade secrets, the Company takes certain measures to ensure their secrecy, such as executing non-disclosure agreements with its employees, customers and suppliers. Reliance on trade secrets is only an effective business practice insofar as (i) trade secrets remain undisclosed and (ii) a proprietary product or process is not reverse engineered or independently The Company's inability to maintain its trade secrets relating developed. to the systems production technology and operation could have a material adverse effect on the ability of the Company to sell its production systems. There can be no assurance that these trade secrets will remain undisclosed, that the Company's non-disclosure agreements will not be breached, that there will be adequate remedies for any such breach, or that the Company's production systems, process and operations will not be reverse engineered or independently developed. There can be no assurance that the steps taken by the Company will prevent misappropriation of its technology. Sales of the Company's wafers and package-ready devices depends heavily on the Company's trade secrets related to its MOCVD technology and processes. Failure to maintain trade secrets in this area would have a material adverse effect on the sales of the Company's wafer and package-ready devices. Although the Company holds six U.S. patents, these patents do not claim any material aspect of the current or planned commercial versions of the Company's systems, wafers or package-ready devices. The Company is actively pursuing patents on its recent inventions, but there can be no assurance that patents will be issued from any pending applications, or that the claims in any existing or future patents issued or licensed to the Company will not be challenged, invalidated or circumvented, or that any of the Company's pending or future patent applications will result in an issued patent with the scope of the

claims sought by the Company, if at all. The Company has not been notified and is not aware of any third parties that are infringing its intellectual property right, or that the Company is infringing intellectual property rights of third parties, but there can be no assurance that the Company will not face such claims or infringements in the future. There can be no assurance that the Company will be successful in any resulting litigation or obtaining a license on commercially reasonable terms, if at all, or will not be prevented from engaging in certain activities. Defense and prosecution of infringement claims can be expensive and time consuming, regardless of outcome, and can result in the diversion of substantial financial, management and other resources of the Company. In addition, the laws of certain other countries may not protect the Company's intellectual property to the same extent as the laws of the United States. See "Business -- Intellectual Property."

Risks Arising from Reversal of Declaratory Judgment in Rockwell Patent Litigation. To permit sales of its MOCVD production systems, the Company was in 1992 granted a non-exclusive license (the "Rockwell License") under U.S. patent number 4,368,098 (the "Rockwell Patent") issued on January 11, 1983 to Rockwell. The Rockwell Patent claimed, among other things, intellectual property rights in the general use of MOCVD in unspecified applications and expires in 2000. In October 1996, the Company initiated discussions with Rockwell to receive additional licenses to permit the Company to utilize MOCVD technology to manufacture and sell certain wafers and package-ready devices. On November 15, 1996, in litigation not involving the Company, the Rockwell Patent was declared invalid by the U.S. Court of Federal Claims. The Company believes that Rockwell will appeal this judgment. In the event the foregoing judgment is reversed by a court of appeal, the Company may be liable to Rockwell for royalty payments, as well as other amounts which the Company may ultimately be deemed to owe Rockwell in connection with the sales of its systems, wafers and packageready devices. Moreover, the Company may require additional licenses from Rockwell under the Rockwell Patent in order to manufacture and sell certain wafers and package-ready devices. There can be no assurance that the foregoing judgment will not be reversed, that the Rockwell License can be maintained or that licenses for wafers and package-ready devices can be obtained or maintained on commercially feasible terms, if at all. The failure to maintain or obtain such licenses could have a material adverse effect on the Company's business, financial condition and results of operations. See "Intellectual Property.'

Risks Related to Dependence on Limited Product Offerings. To date, substantially all of the Company's revenues have resulted from sales of its TurboDiscTM systems. The Company anticipates that a significant portion of its revenues in fiscal 1997 will be derived from the sale of these systems. The Company has recently developed the capacity to produce compound semiconductor wafers and package-ready devices. The Company's future success depends on whether it can develop and introduce in a timely manner new products, including improvements to its existing products, which compete effectively on the basis of price and performance and which adequately address customer requirements. The success of new product introductions is dependent upon several factors, including timely completion of new product designs, achievement of acceptable yields and market acceptance. No assurance can be given that the Company's product and process development efforts will be successful or that its new products will achieve market acceptance. To the extent that such new product introductions do not occur in a timely manner or the Company's or its customers' products do not achieve market acceptance, the Company's business, financial condition and results of operations would be materially adversely affected. See "Business -- Products.'

Manufacturing Risks. The manufacture of systems, wafers and package-ready devices are each subject to significant risks. The manufacture of

systems is a highly complex and precise process. The Company increasingly outsources the fabrication of certain components and sub-assemblies of the systems it manufactures. Any impairment in the supply of these components or sub-assemblies would have a material adverse effect on revenues derived from sales of the Company's systems. In addition, any reduction in the precision of these components will result in sub-standard end products and would cause delays and interruptions in the production cycle. To the extent the Company experiences shipment delays for its systems or wafers or package-ready devices, the Company's operating results would be materially adversely affected. The Company relies exclusively on its own production capabilities for manufacturing wafers and package-ready devices, and such operations are subject to additional manufacturing risks. Minute impurities, difficulties in the production process, defects in the epitaxial growth of the package-ready devices' constituent compounds, wafer breakage or other factors can cause a substantial percentage of wafers and package-ready devices to be rejected or numerous package-ready devices on each wafer to be nonfunctional. Such factors may result in lower than expected production yields, which would delay product shipments and materially adversely affect the Company's operating results. There can be no assurance that the Company will maintain acceptable production yields in the future. Because the majority of the Company's costs of manufacture are relatively fixed, the number of shippable package-ready devices per wafer for a given product is critical to the Company's operating results. Additionally, because the Company manufactures all of its products at its facility in Somerset, New Jersey, and such components, products and systems are not readily available from other sources, any interruption in manufacturing resulting from fire, natural disaster, equipment failures or otherwise would have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -Manufacturing.'

Reliance on International Sales; Reliance on Single Distributor. Sales to customers located outside the United States accounted for approximately 58.6%, 36.0% and 42.5% of the Company's revenues in fiscal 1994, 1995 and 1996, respectively. The Company believes that such international sales will continue to account for a significant percentage of the Company's revenues. In particular, to market and service its systems in seven Asian countries, the Company relies on a single marketing, distribution and service provider, Hakuto & Co., Ltd. ("Hakuto"). A substantial portion of the Company's sales of systems in Asia is to Hakuto. The Company's agreement with Hakuto has an initial term of seven years but allows for earlier termination upon 60 days notice. Furthermore, the agreement is presently under renegotiation. There can be no assurance that Hakuto will continue to adequately and effectively market and service the Company's systems. Termination of the Company's relationship with Hakuto would result in significant delays or interruption in the Company's marketing and service programs in Asia and would have a material adverse effect on the Company's business, financial condition and results of operations. Tl Company competes with its competitors for relationships with reliable international distributors. There can be no assurance that international distributors, including Hakuto, will not market products in competition with the Company's in the future or will not otherwise reduce or discontinue their relationships with or support of the Company and its products, or that the Company will be able to attract and retain qualified international distributors in the future. The inability of the Company to obtain qualified new international distributors could have a material adverse effect on the Company's business, financial condition and results of operations. In general, the Company's international sales are subject to risks different from domestic U.S. sales, including U.S. and international regulatory requirements and policy changes, U.S. and international export controls, political and economic instability, increased installation costs, difficulties in accounts receivable collection, exchange rates affecting end-market purchasers, tariffs and

other barriers, extended payment terms, difficulty in staffing and managing international operations, dependence on and difficulties in managing international distributors or representatives and potentially adverse tax consequences. In particular, exports of the Company's 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. The Company, on certain occasions, has been denied authorization, particularly with respect to the People's Republic of China, and there is no assurance that export licenses will be granted in the future. Failure to receive such authorizations could have a material adverse effect on the Company's business, financial condition and results of operations. Furthermore, although the Company seeks to meet technical standards established by non-U.S. regulatory bodies, there can be no assurance that the Company will be able to comply with such standards in the future. In addition, the laws of certain countries may not protect the Company's trade secrets and intellectual property to the same extent as the laws of the United States. See "Business -- Sales and Marketing."

Dependence on Key Sole Source Suppliers. The Company does not maintain any long-term supply agreements with any of its suppliers, and the majority of the critical components and sub-assemblies included in the Company's production systems, as well as certain raw materials required for the fabrication of the Company's wafers and package-ready devices, are obtained from sole source suppliers or a limited number of suppliers. manufacture of certain components and sub-assemblies and raw materials is very complex and requires long lead times. The Company's systems cannot be produced without certain sole-sourced, critical components. In addition, the production of the Company's wafers and package-ready devices is inherently dependent on an adequate source of raw materials. Alternative suppliers for many of these components and materials may not be readily available. In addition, the Company intends to rely to an increasing degree on outside suppliers because of their specialized expertise. Company's reliance on a limited group of suppliers, and particularly on sole source suppliers, involves several risks, including the potential inability to obtain an adequate supply of components and materials, and reduced control over pricing and delivery time. To date, the Company has experienced occasional delays in obtaining components and materials. can be no assurance that delays or shortages caused by suppliers will not occur in the future. The failure to obtain adequate, timely deliveries of sub-assemblies and components and materials could prevent the Company from meeting scheduled shipment dates, which could damage relationships with current and prospective customers and could materially adversely affect the Company's business, financial condition and results of operations. See "Business -- Manufacturing."

Risks Arising from Rapid Technological Change; Reliance Upon Continued Product Development. The markets in which the Company and its customers compete are characterized by rapid technological change, evolving industry standards and continuous improvements in products and services. Due to continual changes in these markets, the Company's future success will depend upon whether it can improve its production systems and processes, wafers and package-ready devices and to develop new technologies that compete effectively on the basis of price and performance and adequately address customer requirements. There can be no assurance that the Company's research and development staff will develop new products in time or with sufficient performance characteristics to meet the demands of the market. The Company's production systems must remain competitive on the basis of cost of ownership, process performance and capital productivity. Because it is generally not possible to predict the time required and costs involved in reaching certain research, development and engineering objectives, actual development costs could exceed budgeted amounts and estimated product development schedules could require extension. Any delay

or inability to overcome such difficulties would materially adversely affect the Company's business, financial condition and results of operations. Additionally, if new products or enhancements experience reliability or quality problems, the Company could encounter a number of difficulties, including reduced orders, higher manufacturing costs, delays in collection of accounts receivable and additional service and warranty expenses, all of which could materially adversely affect the Company's business, financial condition and results of operations. See "Business -- Compound Semiconductor Process Technology," "-- Products," "-- Research and Development" and "-- Competition."

Risks Regarding the Acceptance of New Compound Semiconductor Technology By Customers. The Company's systems utilize MOCVD technologies. These same technologies are used in the Company's production of wafers and package-ready devices. MOCVD technology differs significantly from the technological approaches used by others for each of these products. Th semiconductor industry is especially resistant to the introduction of changes in process or approach in a manufacturing cycle which is quite long, consists of many separate process events and suffers from limited control measurement points during the overall fabrication process. Accordingly, the Company's customers may resist changing systems or accepting any new technological approach. Additionally, the inclusion of compound semiconductor wafers and package-ready devices increases the cost of electronic end products and, therefore, limits the feasibility of commercial applications of such products. The Company is seeking to persuade certain potential customers to incorporate compound semiconductorbased package-ready devices for many of their high-performance applications. Because a substantial investment is required by semiconductor manufacturers to install and integrate capital equipment into a production line, these manufacturers may tend to choose compound semiconductor equipment suppliers based on past relationships, product compatibility and proven operating performance. The Company's wafer and package-ready device customers may be reluctant to re-tool their equipment and production systems to accept these new technologies, may be reluctant to rely upon a smaller supplier such as the Company for package-ready devices, and may be reluctant to pay higher device costs. There can be no assurance that the Company's MOCVD-based products will achieve broad market acceptance. See "Business -- Compound Semiconductor Process Technology," "Business -- Products" and "Business -- Customers."

Risks of Increased Competition. The Company faces substantial competition from both established competitors and potential new entrants. The Company believes that the primary competitive factors in the markets in which the Company's products compete are yield, throughput, capital and direct costs, system performance, size of installed base, breadth of product line and customer satisfaction, as well as customer commitment to competing technologies. The Company's principal competitors in the market for MOCVD systems include Aixtron GmbH ("Aixtron"), Nippon Sanso K.K. ("Nippon Sanso") and Thomas Swann Ltd. ("Thomas Swann"). The Company's principal competitors for sales of wafers and package-ready devices include Epitaxial Products International, Kopin Corp. and Q.E.D. The Company also faces competition from manufacturers that produce wafers and package-ready devices for their own use. The Company may experience competition from corporations that have been in business longer than the Company and have broader product lines, more experience with high volume manufacturing, broader name recognition, substantially larger installed bases, alternative technologies which may be better established than the Company's and significantly greater financial, technical and marketing resources than the Company. There can be no assurance that the Company will successfully compete with these competitors in the future or that the Company's competitors will not develop enhancements to or future generations of competitive products that will offer price and performance features that are superior to those of the Company. The Company 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. In marketing its products, the Company may face competition from suppliers employing new technologies in order to extend the capabilities of competitive products beyond their current limits or increase their productivity. In addition, increased competitive pressure could lead to intensified price-based competition, resulting in lower prices and margins, which would materially adversely affect the Company's business, financial condition and results of operations. See "Business -- Competition."

Risks from Continued Existence of Control Group. Prior to consummation of the Offering, Jesup & Lamont Merchant Partners, L.L.C. ("JLMP"), the Company's majority shareholder, beneficially owned approximately 72.9% of the equivalent Common Stock outstanding, not including warrants to purchase 980,392 which become exercisable on May 6, 1997. After the Offering, JLMP, together with the Company's directors and officers, will beneficially own approximately 52.9% of the equivalent Common Stock outstanding, not including warrants to purchase 980,392 which become exercisable on May 6, 1997. Accordingly, the Company's majority shareholder and management will continue to hold sufficient voting power to control the business and affairs of the Company for the foreseeable future. Such concentration of ownership may also have the effect of delaying, deferring or preventing a change in control of the Company. Reuben F. Richards, Jr., the Company's President, Chief Executive Officer and a director, Howard R. Curd and Howard F. Curd, each a director of the Company, are three of the five members of JLMP. To guarantee the Company's demand note facility, Thomas J. Russell, the Chairman of the Company's Board of Directors, has granted the Company's lender a security interest over certain assets he controls. The Company intends to use up to \$10.0 million of the net proceeds from the Offering to repay the borrowings under the demand note facility. Additionally, Mr. Russell is one of three trustees of a trust which is a member of JLMP. See "Use of Proceeds," "Principal Shareholders" and "Certain Transactions."

Risks Related to Dependence on Key Employees. The future success of the Company is dependent, in part, on whether the Company can attract and retain certain key personnel, including materials scientists and operations and finance personnel. The Company anticipates that it will need to hire additional skilled personnel to expand all areas of its business to continue to grow. The competition for such employees is extremely intense. There can be no assurance that the Company will be able to retain its existing personnel or attract additional qualified employees in the future, failure of which would have a material adverse effect on the Company's business, financial condition and results of operations.

Risks Related to Environmental Regulation. The Company 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 Company has retained an environmental consultant to advise it in complying with applicable environmental and health and safety laws and regulations. There can be no assurance, however, that future changes in such laws and regulations will not result in expenditures or liabilities, or in restrictions on the Company's operation, that could have such an effect. The production of wafers and package-ready devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsenic. The Company's expansion to offer wafers and package-ready devices will require the increased usage and maintenance of these materials on the Company's premises. There can be no assurance that the Company's control systems will be successful in preventing a release of these materials or

other adverse environmental conditions, which could cause a substantial interruption in the Company's operations. Such an interruption could have a material adverse effect on the Company's business, financial condition and results of operation. See "Business -- Environmental Regulations."

Risks Arising from Absence of Public Market; Possible Volatility of Stock Price. There has been no prior public market for the Company's Common Stock. Consequently, the initial public offering price has been determined by negotiations between the Company and Donaldson, Lufkin &Jenrette Securities Corporation and Needham & Company, Inc., as representatives of the underwriters. There can be no assurance that an active public market for the Common Stock will develop or be sustained after the Offering or that the market price of the Common Stock will not decline below the initial public offering price. The Company believes that a variety of factors could cause the price of the Company's Common Stock to fluctuate, perhaps substantially, including: announcements of developments related to the Company's business; quarterly fluctuations in the Company's actual or anticipated operating results and order levels; general conditions in the compound semiconductor and related industries or the worldwide economy; announcements of technological innovations; new products or product enhancements by the Company or its competitors; developments in patents or other intellectual property rights and litigation; and developments in the Company's relationships with its customers, distributors and suppliers. In addition, in recent years the stock market in general, and the market for shares of small capitalization and semiconductor industryrelated stocks in particular, have experienced extreme price fluctuations which have often been unrelated to the operating performance of affected companies. Any such fluctuations in the future could adversely affect the market price of the Company's Common Stock. See "Underwriting."

Risks of Uncertainty of Additional Funding. The Company may require substantial additional capital to fund the Company's operations through fiscal 1997 and may need to raise additional funds through public or private financings. No assurance can be given that additional financing will be available or that, if available, it will be available on terms favorable to the Company or its shareholders. If additional funds are raised through the issuance of equity securities, the percentage ownership of then current shareholders of the Company will be reduced and such equity securities may have rights, preferences or privileges senior to those of the holders of the Company's Common Stock. If adequate funds are not available to satisfy either short or long-term capital requirements, the Company may be required to limit its operations significantly. The Company's capital requirements will depend on many factors, including, but not limited to, the rate at which the Company develops and introduces its products, the market acceptance and competitive position of such products, the levels of promotion and advertising required to launch and market such products and attain a competitive position in the marketplace, and the response of competitors to the products based on the Company's tech-nologies. See "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources.'

Effect of Certain Anti-Takeover Provisions. The Company's Restated Certificate of Incorporation (the "Certificate of Incorporation") and the New Jersey Business Corporation Act contain certain provisions that could delay or impede the removal of incumbent directors and would make more difficult a merger, tender offer or proxy contest involving the Company, even if such a transaction were beneficial to the interests of the shareholders, or could discourage a third party from attempting to acquire control of the Company. The Company has authorized 5,882,353 shares of Preferred Stock, which the Company could issue without further shareholder approval and upon such terms and conditions, and having such rights, privileges and preferences, as the Board of Directors may determine. The

Company has no current plans to issue any Preferred Stock. The Company is also subject to the New Jersey Shareholders Protection Act (the "Protection '), which prohibits certain New Jersey corporations from engaging in business combinations (including mergers, consolidations, significant asset dispositions and certain stock issuances) with any Interested Shareholder (defined to include, among others, any person that becomes a beneficial owner of 10% or more off the affected corporation's voting power) for five years after such person becomes an Interested Shareholder, unless the business combination is approved by the Board of Directors prior to the date the shareholder became an Interested Shareholder. In addition, the Protection Act prohibits any business combination at any time with an Interested Shareholder other than a transaction that (i) is approved by the Board of Directors prior to the date the Interested Shareholder became an $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$ Interested Shareholder, or (ii) is approved by the affirmative vote of the holders of two-thirds of the voting stock not beneficially owned by the Interested Shareholder, or (iii) satisfies certain "fair price" and related criteria. These provisions could have the effect of delaying, deferring or preventing a change in control of the Company and adversely affect the voting and other rights of holders of Common Stock. Further, the Company's Certificate of Incorporation and Amended and Restated By-Laws include provisions to reduce the personal liability of the Company's directors for monetary damages resulting from breaches of their fiduciary duty and to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. See "Description of Capital Stock.'

Risks of Issuance of Blank Check Preferred Stock. The Company's Board of Directors is authorized by the Company's Certificate of Incorporation and By-laws to issue, without shareholder approval, up to 5,882,353 shares of Preferred Stock in one or more classes or series. The Board of Directors, without further approval of the shareholders, is authorized to designate in any such class or series resolution, such par value and such priorities, power, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine. Such characteristics may be superior to those of the Common Stock and could adversely affect the voting power or other rights of the holders of Common Stock. The issuance of Preferred Stock or of rights to purchase Preferred Stock could be used to discourage an unsolicited effort to acquire control of the Company. The potential for issuance of this "blank check preferred stock" may have an adverse impact on the market price of the Common Stock outstanding after the Offering. See "Description of Capital Stock."

Risks Arising from Substantial Dilutive Effect of the Offering. Purchasers of the Common Stock will experience immediate and substantial dilution in net tangible book value per share of Common Stock from the initial public offering price per share of Common Stock. Assuming an initial public offering price at the midpoint of the range of the estimated offering prices on the front cover hereof, new investors would suffer an immediate dilution of \$6.44 calculated by taking the difference in pro forma net tangible book value per share after the Offering (\$3.56) and deducting this amount from the initial public offering price. See "Dilution."

Risks of Sales of Common Stock Issuable Upon Exercise of Options and Warrants. The Company currently has outstanding stock options to purchase 464,017 shares of Common Stock and warrants to purchase 3,565,377 shares of Common Stock. Subsequent to the exercise of such options or warrants, and to the issuance of shares of Common Stock, such shares may be offered and sold by the holders thereof subject to the provisions of Rule 144 under the Securities Act, or pursuant to an effective registration statement filed by the Company. Upon expiration of certain contractual obligations between certain holders and the Underwriters, 777,657 shares of Common Stock will become eligible for sale without restrictions under Rule 144(k), and an

additional 2,216,804 shares will become eligible for sale subject to the restrictions of Rule 144. Sales of substantial amounts of such shares could adversely affect the market price for the Company's Common Stock. See "Shares Eligible for Future Sale."

Risk of No Dividends. The Company has never declared or paid dividends on its Common Stock since its formation. The Company currently does not intend to pay dividends in the foreseeable future. The payment of dividends, if any, in the future will be at the discretion of the Board of Directors.

USE OF PROCEEDS

The net proceeds to the Company from the sale of the 2,500,000 shares of Common Stock being offered hereby are estimated to be \$22,540,000 (\$26,027,500 if the underwriters' over-allotment option is exercised in full), after deducting the underwriting discounts and commissions and estimated offering expenses.

Of the net proceeds, \$10,000,000 will be used to repay debt; the entire principal amount outstanding under the Company's demand note facility with First Union National Bank, which has been used for capital expenditures in connection with the build-out of the Company's manufacturing facility will be paid in full. This demand note facility bears interest at a rate equal to the six month LIBOR plus 75 basis points, currently 6.2968%. The remaining net proceeds allocated to debt repayment, if any, will be used to repay a portion of the Company's outstanding long-term indebtedness consisting of subordinated notes. These subordinated notes bear interest at a rate of 6%. Approximately \$8,000,000 of the net proceeds are expected to be used for capital expenditures to expand the Company's manufacturing facility and the balance of the net proceeds are expected to be used for general corporate purposes including working capital. The Company may also use a portion of the net proceeds to fund acquisitions of complementary businesses, products or technologies in the semiconductor sector. Although the Company periodically reviews potential acquisition opportunities, there are no current agreements with respect to any such transactions. Pending such uses, the net proceeds of the Offering will be invested in short-term, investment-grade, income producing investments.

The Company believes that the remaining net proceeds from the Offering and the funds available under its demand note facility, which after being repaid will be available in its entirety, will be sufficient to fund the Company's anticipated facility expansion, and to provide the Company with adequate working capital at least through fiscal 1997. However, there can be no assurance that events in the future will not require the Company to seek additional capital sooner or, if so required, that adequate capital will be available on terms acceptable to the Company.

DIVIDEND POLICY

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

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The following table sets forth the capitalization of the Company as of December 31, 1996, and the capitalization of the Company as adjusted to give effect to the sale by the Company of 2,500,000 shares of Common Stock being offered hereby (at the assumed initial public offering price of \$10.00 per share) and the application of the estimated net proceeds therefrom. This table should be read in conjunction with the Company's Financial Statements and Notes thereto and "Selected Financial Data" included elsewhere in this Prospectus.

AS OF DECEMBER 31, 1996 ACTUAL AS ADJUSTED (IN THOUSANDS, EXCEPT FOR SHARE AMOUNTS)

\$6,000	\$ 0
\$9,063	\$5,063
22,577	45,117
(298)	(298)
(21,956)	(21,956)
324	22,863
\$9,387	\$27,927
	\$9,063 22,577 (298) (21,956) 324

In October 1996, the Company established a \$10.0 million demand note facility with First Union National Bank. As of December 31, 1996, the Company had drawn down \$6 million from this facility. The Company intends to use \$10 million of the net proceeds of the Offering to pay down the balance outstanding under this facility. The remaining net proceeds allocated to debt repayment, if any, will be used to repay a portion of the Company's outstanding long-term indebtedness consisting of subordinated notes. See "Use of Proceeds."

Excludes: (i) 647,059 shares of Common Stock reserved for issuance under the Company's 1995 Incentive and Non-Statutory Stock Option Plan, as amended, of which 339,412 shares were subject to outstanding options at exercise prices varying from \$3.03 per share to \$10.20 per share, (ii) warrants to purchase 9,103 shares of Common Stock at an exercise price of \$17.00 per share exercisable until July 24, 1997, (iii) warrants to purchase 2,330,784 shares of Common Stock at an exercise price of \$4.08 per share, exercisable until May 1, 2001 and (iv) warrants to purchase 1,225,490 shares of Common Stock at an

exercise price of \$10.20 per share, exercisable until September 1, 2001.

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The net tangible book value (deficiency) of the Company as of December 31, 1996 was \$(2,973,796) or approximately \$0.99 per share. Net tangible book value (deficiency) per share represents the amount of the Company's shareholders' equity (net capital deficiency), less intangible assets (\$3,297,313 at December 31, 1996 comprised of \$3,228,572 of deferred financing and offering costs and \$68,741 of deferred patent costs), divided by 2,994,461 shares of Common Stock outstanding. Net tangible book value dilution per share represents the difference between the amount per share paid by purchasers of shares of Common Stock in the Offering made hereby and the pro forma net tangible book value per share of Common Stock immediately after completion of the Offering. After giving effect to the sale by the Company of 2,500,000 shares of Common Stock offered hereby (assuming an initial public offering price of \$10.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company) and the application of the estimated net proceeds therefrom, the pro forma net tangible book value of the Company as of December 31, 1996 would have been \$19,566,204 or approximately \$3.56 per share. This represents an immediate increase in net tangible book value of \$4.55 per share to existing shareholders and an immediate dilution in net tangible book value of \$6.44 per share to the purchasers of Common Stock in the Offering, as illustrated in the following table:

Assumed initial public offering price per share			\$10.00
Net tangible book value per share as of December 31, 1996		. (\$0.99)	
Increase in net tangible book value per share			
attributable to new investors	 	. 4.55	
Net tangible book value per share after the Offering	 		3.56
Dilution per share to new investors	 		\$ 6.44

The foregoing table assumes no exercise of any outstanding stock options or warrants.

The following table sets forth, on a pro forma basis as of December 31, 1996, the difference between the existing shareholders and the purchasers of shares in the Offering with respect to the number of shares purchased from the Company, the total consideration paid and the average price per share paid assuming an initial public offering price of \$10 per share:

	SHARES I NUMBER	PURCHASED PERCENT	TOTAL CON AMOUNT	SIDERATION PERCENT	AVERAGE PRICE PER SHARE
Existing shareholders	2,944,461	54.4%	\$13,070,111	34.3%	\$ 4.44
New investors	2,500,000 5,494,461	45.6 100.0%	25,000,000 \$38,070,111	65.7 100.0%	10.00

At December 31, 1996, there were outstanding: stock options to purchase 437,546 shares of Common Stock at a weighted average exercise price of \$5.47 per share, warrants to purchase 9,103 shares of Common Stock at \$17.00 per share, warrants to purchase 2,330,784 shares of Common Stock

at \$4.08 per share and warrants to purchase 1,225,490 shares of Common Stock at \$10.20 per share. To the extent that these options or warrants are exercised, there will be further dilution in the aggregate to new investors.

SELECTED ETNANCIAL DATA

The following selected financial data of the Company 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 $\hbox{Prospectus.} \quad \hbox{The financial data included in this table have been selected} \\$ by the Company and have been derived from the Company's financial statements. The Statement of Income Data set forth below with respect to fiscal 1996, 1995 and 1994 and the Balance Sheet Data as of September 30, 1996 and 1995, are derived from the audited financial statements included $\,$ elsewhere in this Prospectus which financial statements have been audited by Coopers & Lybrand L.L.P., whose report with respect thereto appears $\ \ \,$ elsewhere in this Prospectus. The Statement of Income Data for fiscal 1993 and 1992 and the Balance Sheet Data as of September 30, 1994, 1993 and 1992 are derived from audited financial statements not included herein. financial data as of December 31, 1996, and for the three-month periods ended December 31, 1995 and 1996 are derived from unaudited consolidated financial statements that, in the opinion of the management of the Company, reflect all adjustments (consisting only of normal recurring accruals) necessary for a fair presentation of the financial position and results of operations for these periods. Operating results for the three months ended December 31, 1996 are not necessarily indicative of the results that may be expected for the entire fiscal year ending September 30, 1997.

	1992	1993	ARS ENDED SE 1994 nds, except	1995	1996 ata)
STATEMENT OF INCOME DATA:					
Revenues	\$10,022 7,043	\$8,180 4,772	\$9,038 5,213	\$18,137 9,927	\$27,779 18,607
Gross profit	2,979	3,408	3,825	8,210	9,172
Selling, general and administrative . Research and development Total operating expenses	2,977 909 3,886	2,849 1,024 3,873	2,645 1,064 3,709	4,452 1,852 6,304	6,524 5,401 11,925
Operating (loss) income Stated interest expenses, net Imputed warrant interest, non-cash	(907) 283	(465) 242	116 286	1,906 255	(2,753) 297 126
Other expense (income)	(226)	(100)		10	
taxes	(964) (6)	(607) 	(170) 	1,641 125	(3,176)
Net (loss) income	(\$958) (.37) 1,647	(\$607) (.26) 3,731	(\$170) (.04) 4,403	\$1,516 .33 4,649	(\$3,176) (.72) 4,438

FOR THE THREE MONTHS ENDED DECEMBER 31, 1995 1996 (UNAUDITED

STATEMENT OF INCOME DATA:

Revenues	\$4,255	\$8,591	
Cost of sales	2,782	6,754	
Gross profit	1,473	1,867	
Operating expenses:			
Selling, general and administrative .	1,511	2,202	
Research and development	793	2,250	
Total operating expenses	2,304	4,452	
Operating (loss) income	(831)	(2,585)	
Stated interest expenses, net	39	197	
Imputed warrant interest, non-cash		1,016	
Other expense (income)			
(Loss) income before income			
taxes	(870)	(3,798)	
Provision for income taxes	15		
Net (loss) income	(\$885)	(\$3,798)	
Net (loss) income per share	(.20)	(.86)	
Shares used in computing net (loss)			
income per share	4,438	4,438	

BALANCE SHEET DATA:	1992	1993	1994	OF SEPTEMBE 1995 usands)	R 30, 1996	AS OF DECEMBER 31, 1996 (Unaudited)
Working capital	\$492	\$840	\$1,041	\$2,208	\$1,151	(\$1,961)
Total assets	4,233	3,171	5,415	10,143	20,434	29, 283
Long-term debt	1,944	2,000	3,000	3,000	8,795	9,063
Redeemable preferred stock	13,014	14,825	16,274	-	-	· -
Shareholders' (deficit) equity .	(56)	12	(96)	1,509	673	324

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

OVERVIEW

EMCORE designs and develops compound semiconductor materials and process technology and is a leading 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. EMCORE believes that its proprietary TurboDiscTM deposition technology is the critical enabling process step in the cost effective, high volume manufacture of high-performance electronic and optoelectronic devices. The Company was founded in 1984 to engage in advanced materials science research and development and to develop and manufacture a viable production platform for the processing of compound semiconductor materials. In 1986, the Company shipped its first TurboDiscTM system and by 1990, had sold systems in the United States, Asia and Europe.

To date, the Company has sold over 180 systems worldwide. From fiscal 1986 through fiscal 1993, the Company's systems revenues consisted principally of sales of research and development systems and small pilot production systems. Beginning in fiscal 1994, due to the increased market demand for compound semiconductor devices, the Company's systems revenues have principally consisted of the sale of larger production platforms. Historically, the Company's revenues have consisted primarily of the sales of MOCVD systems and components, government-sponsored research contracts and service contracts. The Company's systems sales contracts typically require partial advance payments during the design and production phases of the systems manufacturing process. Such advance payments have historically represented a significant funding source to the Company.

Prior to fiscal 1996, the Company was profitable for six consecutive quarters. In fiscal 1996, the Company expanded its product offerings to include wafers and package-ready devices and incurred a consolidated net loss of \$3.2 million, which primarily resulted from significant initial operating expenses related to the Company's expansion. The Company has increased its expense levels to support anticipated growth in demand for each of its compound semiconductor production systems, wafer and packageready device product offerings, including the hiring of additional manufacturing, research, engineering, sales and administrative personnel and has also increased its investments in inventory and capital equipment. As a result, the Company is dependent upon increasing revenues and profit margins to achieve profitability. If the Company's sales and profit margins do not increase to support the higher levels of operating expenses, the Company's business, financial condition and results of operations would be materially adversely affected. The Company currently anticipates continuing to expand its manufacturing capacity for the production of wafers and package-ready devices, which entails substantial additional capital expenditures. The Company currently anticipates expending a significant portion of the net proceeds of the Offering for this purpose. The Company incurred a substantial loss in the quarter ended December 31, 1996. The loss was primarily attributable to continuing start-up operating expenses associated with the Company's two new product lines. In the future, the Company expects to derive significant revenues from sales of wafers and package-ready devices. However, the Company's ability to derive any such revenues is subject to certain risks and uncertainties, including yield, process and capacity related risks and risks associated with the market acceptance of such products. There can be no assurance that the Company will be successful in developing or marketing such wafers and package-ready devices. The Company's failure to develop or market such products would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company sells its production systems worldwide and has generated a significant portion of its sales to customers outside the United States. In fiscal 1994, 1995 and 1996 and the first fiscal quarter of 1997, international sales constituted 58.6%, 36.0%, 42.5% and 64.0%, respectively, of revenues. The Company has made international sales in Belgium, France, Germany, Italy, Japan, Korea, the People's Republic of China, Sweden, Taiwan and the United Kingdom. In fiscal 1996, approximately two-thirds of the Company's international sales were made to customers in Asia, particularly in Japan. The Company anticipates that international sales will continue to account for a significant portion of revenues. However, the Company's international sales are subject to certain risks and uncertainties, including international regulatory requirements and policy changes, export controls, tariffs and other barriers, and dependence on and difficulties in managing international distributors. There can be no assurance that the Company will continue to derive significant revenues from international sales.

As of December 31, 1996, the Company had an order backlog of approximately \$23.8 million, consisting of \$20.7 million of production systems, \$1.0 million of research contracts and \$2.1 million of package-ready devices, compared to a backlog of \$19.0 million as of December 31, 1995, consisting of \$17.2 million of production systems and \$1.8 million of research contracts. This increase in backlog was a result of the increased market acceptance of the Company's production systems and multiple unit orders for such systems and the introduction of the Company's package-ready device products. The Company includes in backlog only customer purchase orders that have been accepted by the Company and for which shipment dates have been assigned within the twelve months to follow and research contracts that are in process or awarded. The Company receives partial advance payments or irrevocable letters of credit on most production system orders and has never experienced a purchase order cancellation.

The Company recognizes systems and components, wafers and package-ready device revenue upon shipment. The Company incurs certain installation and warranty costs subsequent to system shipment which are estimated and accrued at the time the sale is recognized. The Company 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, the Company recognizes revenue to the extent of costs incurred plus a pro rata portion of estimated gross profit as stipulated in such contracts, based on contract performance. The Company's research contracts require the development or the evaluation of new material applications and have a duration of six to thirty-six 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.

RESULTS OF OPERATIONS

The following table sets forth the Statement of Operations data of the Company expressed as a percentage of total revenues for the periods indicated.

	YEARS ENDED SEPTEMBER 30,			FOR THE PERIOD ENDED DECEMBER 31, (UNAUDITED)	
	1994	1995	1996	1995	1996
Revenues	100.0% 57.7	100.0% 54.7	100.0% 67.0	100.0% 65.4	100.0% 78.3
Gross profit	42.3	45.3	33.0	34.6	21.7
Selling, general and administrative	29.2	24.5	23.5	35.5	25.6
Research and development Operating income (loss)	11.8 1.3	10.2 10.5	19.4 (9.9)	18.6 (19.5)	26.2 (30.1)
Stated interest expense, net Imputed warrant interest, non-cash .	3.2	1.4	1.1 0.4	0.9	2.3 11.8
Other expense (income)	-	0.1	0.4	-	-
<pre>Income (loss) before income taxes</pre>	(1.9)	9.0	(11.4)	(20.4)	(44.2)
Provision for income taxes	-	0.6	-	0.4	-
Net income (loss)	(1.9)%	8.4%	(11.4)%	(20.8)%	(44.2)%

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1995 AND 1996

Revenues. Revenues increased 53.6% from \$18.1 million in fiscal 1995 to \$27.8 million in fiscal 1996. This increase was primarily due to greater sales of the Company's compound semiconductor production systems resulting from broader acceptance of these products, coupled with an increased market demand for compound semiconductor devices, and to a lesser extent, increased service revenues, which include parts and service contracts, resulting from the Company's growing installed base. In addition, in fiscal 1996, the Company's research contract revenues increased as a result of an arrangement with General Motors to develop and enhance certain magnetoresistive package-ready devices which generated approximately \$1.6 million in revenue. Revenues derived from international sales increased 81.5% from \$6.5 million in fiscal 1995 to \$11.8 million in fiscal 1996. This increase was primarily due to an increased demand for the Company's production systems.

Cost of Sales/Gross Profit. The Company's cost of sales includes direct material and labor costs, manufacturing and service overhead, and installation and warranty costs. Cost of sales increased 87.9% from \$9.9 million in fiscal 1995 to \$18.6 million in fiscal 1996. Gross profit decreased from 45.3% of revenues in fiscal 1995 to 33.0% of revenues in fiscal 1996. This decrease was principally attributable to: (i) the sale of three systems at a loss for strategic reasons, (ii) competitive pricing conditions prevailing generally in the market and a resulting decrease in the average selling price of the Company's production systems, (iii) costs associated with system enhancements and (iv) an increase in the Company's cost of obtaining certain components. The sales for strategic reasons were

made to several leading universities in key geographic areas in order to increase the Company's visibility and to enhance its reputation in the technology and research community. The Company believes that the three sales made for strategic reasons resulted in an approximately 4% decline in gross profit in fiscal 1996.

Selling, General and Administrative. Selling, general and administrative expenses increased 44.4% from \$4.5 million in fiscal 1995 to \$6.5 million in fiscal 1996. This increase was primarily due to increased marketing expenses associated with the Company's higher level of production systems sales and the hiring of additional personnel to support the Company's expanded activities. As a percentage of revenues, selling, general and administrative expenses decreased from 24.5% in fiscal 1995 to 23.5% in fiscal 1996.

Research and Development. Research and development expenses include the costs of internally-funded research and development projects, as well as materials prototype product support expenses, which primarily include employee and material costs, depreciation of capital equipment and other engineering-related costs. Research and development expenses increased 184.2% from \$1.9 million in fiscal 1995 to \$5.4 million in fiscal 1996. This increase was primarily due to the Company's increased research and development activities relating to the initiation of its wafer and package-ready device product lines. As a percentage of revenues, research and development expenses increased from 10.2% in fiscal 1995 to 19.4% in fiscal 1996.

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1994 AND 1995

Revenues. Revenues increased 101.1% from \$9.0 million in fiscal 1994 to \$18.1 million in fiscal 1995. This increase was primarily due to increased sales of the Company's production systems, and to a lesser extent an increase in service revenues. Revenues derived from international sales increased 22.6% from \$5.3 million in fiscal 1994 to \$6.5 million in fiscal 1995. This increase was primarily due to broader acceptance of the Company's production systems.

Cost of Sales/Gross Profit. Cost of sales increased 90.4% from \$5.2 million in fiscal 1994 to \$9.9 million in fiscal 1995. Gross profit increased from 42.3% of revenues in fiscal 1994 to 45.3% of revenues in fiscal 1995. This increase was due to favorable product mix consisting of a higher proportion of larger production systems with higher gross profit.

Selling, General and Administrative. Selling, general and administrative expenses increased 73.1% from \$2.6 million in fiscal 1994 to \$4.5 million in fiscal 1995. The increase was primarily due to increased marketing expenses, including customer samples, associated with the Company's higher level of systems sales and the hiring of additional personnel to support the Company's expanded activities. As a percentage of revenues, selling, general and administrative expenses decreased from 29.2% in fiscal 1994 to 24.5% in fiscal 1995 due to the growth in the Company's revenues.

Research and Development. Research and development expenses increased 72.7% from \$1.1 million in fiscal 1994 to \$1.9 million in fiscal 1995. This increase was primarily due to increased research and development activities relating to the development of new production systems for the processing of gallium nitride used in the manufacture of blue high brightness light emitting diodes ("HB LEDs"). As a percentage of revenues, research and development expenses decreased from 11.8% in fiscal 1994 to 10.2% in fiscal 1995.

COMPARISON OF QUARTERS ENDED DECEMBER 31, 1995 AND 1996.

Revenues. Revenue increased 102% from \$4.3 million in the quarter ended December 31, 1995 to \$8.6 million in the quarter ended December 31, 1996. This increase was primarily due to greater sales of the Company's compound semiconductor production systems resulting from broader acceptance of those products, coupled with an increased market demand for compound semiconductor devices. Revenues from international sales increased 352% from \$1.6 million in the quarter ended December 31, 1995 to \$5.5 million in the quarter ended December 31, 1996. This increase was primarily due to broader acceptance of the Company's production systems.

Cost of Sales/Gross Profit. Cost of sales increased 142% from \$2.8 million for the quarter ended December 31, 1995 to \$6.7 million for the quarter ending December 31, 1996. Gross profit decreased from 34.6% of revenues in the quarter ended December 31, 1995 to 21.7% of revenues in the quarter ended December 31, 1996. The decrease was primarily attributable to higher than anticipated installation expenses and the continued start-up costs associated with the Company's new product lines.

Selling, General and Administrative. Selling, general and administrative expenses increased 45.7% from \$1.5 million for the quarter ended December 31, 1995 to \$2.2 million for the quarter ended December 31, 1996. The increase was primarily due to increased marketing and administrative costs associated with the Company's higher level of revenues, including additional personnel to support the Company's expanded activities. As a percentage of revenues, selling, general and administrative expenses decreased from 35.5% for the quarter ended December 31, 1995 to 25.6% for the quarter ended December 31, 1996 due to the growth in the Company's revenues.

Research and Development. Research and development expenses increased 184% from \$0.8 million in the quarter ended December 31, 1995 to \$2.3 million in the quarter ended December 31, 1996. This increase was primarily due to increased research and development activities relating to the process development of HB LEDs and the expenses associated with the production process controls on indium antimonide, a magneto-resistor configuration. As a percentage of total revenues, research and development expenses increased from 18.5% in the quarter ended December 31, 1995 to 26.2% for the quarter ended December 31, 1996.

QUARTERLY RESULTS OF OPERATIONS

The following tables present the Company's unaudited results of operations expressed in dollars and as a percentage of revenues for the eight most recently ended fiscal quarters. The Company 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 Financial Statements and Notes thereto, included herein. The Company'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.

QUARTERS ENDED FISCAL 1995

		. 200, .		
	DEC. 31	MAR. 31	JUNE 30 (IN THOUSANDS)	SEPT. 30
Revenues	\$3,394	\$3,836	\$4,875	\$6,032
Cost of sales	1,901	2,154	2,599	3,273
Gross profit	1,493	1,682	2,276	2,759
Operating expenses: Selling, general and				
administrative	864	967	1,303	1,318
Research and	332	349	375	796
development				
	1,196	1,316	1,678	2,114
Operating income (loss)				
,	297	366	598	645
Stated interest expense,	63	77	62	63
net				
Imputed warrant interest,				
non-cash	0	0	0	0
Income before income	234	289	536	582
taxes Provision for income				
	32	31	31	31
taxes	\$202	\$258	\$505	\$551

		AS A PERCENTAGE OF REV	/ENUES	
Revenues	100.0%	100.0%	100.0%	100.0%
Cost of sales	56.0	56.2	53.3	54.3
Gross profit	44.0	43.8	46.7	45.7
Operating expenses:				
Selling, general and				
administrative	25.4	25.2	26.7	21.9
Research and development	9.8	9.1	7.7	13.2
Total operating expenses				
	35.2	34.3	34.4	35.1
Operating income (loss)				
	8.8	9.5	12.3	10.7
Stated interest expense,				
	1.9	2.0	1.3	1.0
net				
Imputed warrant interest,				
non cash Income before income	-	-	-	-
	6.9	7.5	11.0	9.6
taxes Provision for income				
tavas	0.9	0.8	0.6	0.5
taxes	6.0%	6.7%	10.4%	9.1%

(\$883) (\$823) (\$1,482) \$12

QUARTERS ENDED FISCAL 1996

FISCAL 1997

(\$3,798)

	DEC. 31	MAR. 31	JUNE 30	SEPT. 30	DEC. 31
Revenues	\$4,255 2,782	\$6,014 4,041	\$7,727 5,495	\$9,783 6,289	8,591 6,724
Gross profit	1,473	1,973	2,232	3,494	1,867
Operating expenses: Selling, general and administrative	1,511	1,545	1,900	1,568	2,202
Research and	790	1,196	1,710	1,705	2,250
development	2,301	2,741	3,610	3,273	4,452
Operating income (loss) Stated interest expense, net	(828) 55	(768) 55	(1,378) 60	221 127	(2,585) 197
Imputed warrant interest, non-cash	0	0	44	82	1,016
Income before income taxes Provision for income taxes	(883) -	(823) -	(1,482) -	12	(3,798)

Net income (loss)

100.0%	100.0%	100.0%	100.0%	100.0%
65.4	67.2	71.1	64.3	78.3
34.6	32.8	28.9	35.7	21.7
35.5	25.7	24.6	16.0	25.6
18.6	19.9	22.1	17.4	26.2
54.1	45.6	46.7	33.4	51.8
(19.5)	(12.8)	(17.8)	2.2	(30.1)
1.3	0.9	0.7 0.6	1.3 0.8	2.1 11.8
(20.8)	(13.7)	(19.2)	0.1	(44.2)
-	-	-	-	-
(20.8)%	(13.7)%	(19.2)%	0.1%	(44.2)%
	65.4 34.6 35.5 18.6 54.1 (19.5) 1.3 -	65.4 67.2 34.6 32.8 35.5 25.7 18.6 19.9 54.1 45.6 (19.5) (12.8) 1.3 0.9 - (20.8) (13.7) -	65.4 67.2 71.1 34.6 32.8 28.9 35.5 25.7 24.6 18.6 19.9 22.1 54.1 45.6 46.7 (19.5) (12.8) (17.8) 1.3 0.9 0.7 0.6 (20.8) (13.7) (19.2)	65.4 67.2 71.1 64.3 34.6 32.8 28.9 35.7 35.5 25.7 24.6 16.0 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17.4

The Company has experienced a significant increase in demand for its products as a result of greater demand for compound semiconductor systems, materials and devices. Accordingly, during the nine quarters ended December 31, 1996, the Company's quarterly revenues increased on average by 61.0% when comparing the corresponding quarterly revenues for the immediately preceding fiscal year.

Historically, the Company has experienced less demand for its products during the spring and summer, resulting in lower revenues during the Company's first fiscal quarter. However, the Company's backlog has continually increased throughout the nine quarters ended December 31, 1996.

The cost of sales remained relatively constant as a percentage of revenues during fiscal 1995. Gross profit ranged from a high of 46.7% to a low of 43.8%. The Company experienced a decline in gross profit beginning in fiscal 1996. Gross profit ranged from a high of 35.7% to a low of 21.7% and in the first quarter of fiscal 1997 was 21.7%. This decline was principally attributable to (i) the sale of three systems at a loss for strategic reasons, (ii) competitive pricing conditions prevailing generally in the market and a resulting decrease in the average selling price of the Company's production systems, (iii) costs associated with system enhancements and (iv) an increase in the Company's cost of obtaining certain components.

Operating expenses have generally increased in absolute dollars over the quarters shown as the Company has increased staffing in research and development, sales and marketing and general and administrative functions. This increase was due to activities relating to the development of new systems for the processing of gallium nitride used in the manufacture of blue HB LEDs, the development of the Company's volume production systems and the initiation of the Company's wafer and package-ready device products. Selling, general and administrative expenses have increased as a result of increased marketing and sales related activities, including the hiring of additional personnel, commissions and customer samples, with the exception of the quarter ended September 30, 1996, during which selling, general and administrative expenses decreased as a result of a reduction in the production of sales samples. As a percentage of total revenues, operating expenses in fiscal 1995 have generally increased ranging from a low of 34.3% to a high of 35.2%. In fiscal 1996, operating expenses as a percentage of total revenues fluctuated from a low of 33.4% to a high of 54.1%. This general trend has continued, and for the first quarter of fiscal 1997, operating expenses were 51.8% of total revenues.

The Company has experienced and expects to continue to experience significant fluctuations in its quarterly results. Factors which have had an influence on and may continue to influence the Company's operating results in a particular quarter include the timing of receipt of orders, cancellation, rescheduling or delay in product shipment or supply deliveries, product mix, competitive pricing pressures, the Company's ability to design, manufacture and ship products on a cost effective and timely basis, including the ability of the Company to achieve and maintain acceptable production yields for its wafers and package-ready devices, and the announcement and introduction of new products by the Company and by its competitors. The timing of sales of the Company's larger, volume production systems may cause substantial fluctuations in quarterly operating results due to the substantially higher per unit price of these products relative to the Company's other products. There can be no assurance that the compound semiconductor industry will not experience downturns or slowdowns, which may materially and adversely affect the Company's business, financial condition and results of operations.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has funded its operations through the private sale of equity securities, issuance of subordinated debt, capital equipment leases, bank and other third party borrowings, as well as advance payments by customers, and in fiscal 1994 and fiscal 1995, cash flow generated from operations. As of December 31, 1996, the Company had \$1.9 million in cash, a working capital deficit of \$2.0 million and subordinated debt with a carrying value of \$9.1 million.

Net cash provided from operations was \$573,000 and \$3.1 million during fiscal 1994 and fiscal 1995, respectively. The cash provided in fiscal 1994 and 1995 was the result of improved operating performance, as evidenced by profitable operations in fiscal 1995. Net cash used in operating activities was \$1.9 million in fiscal 1996 and \$4.3 million in the first fiscal quarter of 1997 and was primarily attributable to the loss from operations, an increase in inventories and receivables offset, in part by increases in current liabilities particularly advance billings and accounts payable.

Net cash used for investing activities was \$1.2 million, \$1.3 million, \$7.1 million and \$1.1 million in fiscal 1994, 1995, 1996 and the first fiscal quarter of 1997, respectively. These expenditures included the manufacture or purchase of capital equipment, including TurboDiscTM production systems, and the purchases of characterization and test equipment, computer equipment, research and development tools, and, particularly during fiscal 1996, tenant improvements in the Company's facility, including construction and refurbishment of two clean rooms. The Company anticipates making additional capital expenditures primarily for manufacturing expansion and improvements including additional cleanroom space, TurboDiscTM production systems, research and development tools and office equipment, including computers, furniture and fixtures. The Company estimates its capital needs will be approximately \$13 million in fiscal 1997.

The Company's financing activities provided net cash of approximately \$967,000, \$90,000, \$8.0 million and \$6.0 million in fiscal 1994, 1995, 1996 and the first fiscal quarter of 1997, respectively. In fiscal 1994, financing cash proceeds were primarily derived from the issuance of \$1.0 million of 7.5% Notes to Hakuto. In fiscal 1995, cash proceeds were generated from the sale of equity securities to senior management. During fiscal 1996, the Company raised \$11.0 million from the issuance of 6% Subordinated Notes due 2001. Of this amount, \$3.0 million was used to repay the outstanding 7.5% Notes held by Hakuto.

On October 25, 1996, the Company entered into a \$10.0 million demand note facility with First Union National Bank. The facility bears interest at the rate of the six-month LIBOR plus 75 basis points (6.2968% at December 31, 1996) and is due and payable on demand. The facility has been guaranteed by JLMP, the Company's majority shareholder. Collateral for the facility, in the form of a custodial account containing marketable equity securities, has been provided by Thomas J. Russell, the Chairman of the Company's Board of Directors and Chairman of JLMP. The Company anticipates using the borrowing under the demand note facility to finance a portion of its capital expenditure requirements in fiscal 1997. As of December 31, 1996, the Company had borrowed \$6.0 million under the demand note facility.

The Company believes that its cash on hand, the receipt of customer deposits and the net proceeds from the Offering will be sufficient to repay the borrowings under the demand note facility and to provide the Company with adequate working capital at least through fiscal 1997. However, there can be no assurance that events in the future will not require the Company to seek additional capital sooner or, if so required, that adequate capital will be available on terms acceptable to the Company. The Company is

presently in discussions with certain lenders to put in place a revolving credit facility in place of the demand note facility.

The Company's net operating loss tax carryforwards and research credits are subject to annual limitations under Sections 382 and 383 of the Internal Revenue Code due to a change in ownership. A change in control as defined by Section 381 of the Internal Revenue Code occurred in May 1995. As of that date, the approximate net operating loss tax carryforward of \$7,200,000 will be limited to annual usage of approximately \$680,000 per year. The net operating loss tax carryforward of approximately \$2,400,000 generated after the change in ownership will have no limits on annual usage.

RECENT ACCOUNTING PRONOUNCEMENTS

In March 1995, the Financial Accounting Standards Board (the "FASB") issued Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS 121"). This pronouncement establishes accounting standards for when impairment losses relating to long-lived assets, identifiable intangibles and goodwill related to those assets should be recognized and how the losses should be measured. The Company plans to implement SFAS 121 in fiscal 1997. The adoption of SFAS 121 is not expected to have an impact on the Company's financial position or results of operations, since the Company's current policy is to monitor assets for impairment and record any necessary write-downs.

In October 1995, the FASB issued Statement of Financial Accounting Standards No. 123 "Accounting for Stock Based Compensation" ("SFAS 123"). The provisions of SFAS 123 set forth the method of accounting for stock based compensation based on the fair value of stock options and similar instruments, but do not require the adoption of this preferred method. SFAS 123 also requires the disclosure of additional information about stock compensation plans, even if the preferred method of accounting is not adopted. The Company plans to implement SFAS 123 in fiscal 1997. The Company does not intend to change its method of accounting for stock based compensation to the method under SFAS 123, but instead will continue to apply the provisions of Statement of Financial Accounting Standards No. 25 "Accounting for Stock Issued to Employees." However, the Company will disclose the pro forma effect of SFAS 123 on its net income and earnings per share.

COMPANY OVERVIEW

EMCORE designs and develops compound semiconductor materials and process technology and is a leading 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. EMCORE believes that its proprietary TurboDiscTM deposition technology is the critical enabling process step in the cost-effective, volume manufacture of high-performance electronic and optoelectronic devices. The Company has recently capitalized on its technology base by expanding into the design and production of compound semiconductor wafers and packageready devices. The Company offers its customers a complete, verticallyintegrated solution for the design, development and production of compound semiconductor wafers and devices. EMCORE's production systems and process technology have been purchased by, among others: General Motors, Hewlett Packard Co., Hughes-Spectrolab, L.M. Ericsson AB, Lucent Technologies, Inc., Motorola, Inc., Rockwell, Samsung Co., Siemens AG, Texas Instruments Incorporated, Thomson CSF and thirteen of the largest electronics manufacturers in Japan. In fiscal 1996, only one customer, Hughes-Spectrolab, accounted for more than 10% of the Company's revenues; sales to this customer accounted for 23.6% of the Company's revenues.

INDUSTRY OVERVIEW

Recent advances in information technologies have created a growing need for power 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 which are generally not achievable using silicon-based components. To address these market demands, electronic system manufacturers are increasingly incorporating new electronic and optoelectronic devices into their products in order to improve performance or enable new applications.

Compound semiconductors have emerged as an enabling technology to meet the complex requirements of today's advanced information systems. Compound semiconductor devices can be used to perform individual functions as discrete devices, such as HB LEDs, lasers and solar cells, or can be combined into integrated circuits, such as transmitters, receivers and alpha-numeric displays. Many compound semiconductor materials have unique physical properties that allow electrons to move at least four times faster than through silicon-based devices. This higher electron mobility enables a compound semiconductor device to operate at much higher speeds than silicon devices with lower power consumption and less noise and distortion. In addition, unlike silicon-based devices, compound semiconductor devices have optoelectronic capabilities that enable them to emit and detect light. As a result, electronics manufacturers are increasingly integrating compound semiconductor devices into their products in order to achieve higher performance in a wide variety of applications, including wireless communications, telecommunications, computers, and consumer and automotive electronics.

Wireless Communications. Compound semiconductor devices have multiple applications in wireless communication products, including cellular telephones, pagers, PCS handsets, DBS systems and global positioning systems ("GPS"). Compound semiconductor devices are used in high frequency transmitters, receivers and power amplifiers to increase capacity, improve

signal to noise performance and lower power consumption, which in turn reduces network congestion, increases roaming range and extends battery life. In addition, HB LEDs are used in electronic displays on these products in order to reduce size, weight and power consumption and to improve display visibility. In satellite communications, compound semiconductor devices are used in ultra-high frequency satellite upconverters and down-converters to cost-effectively deliver information to fixed and mobile users over wide geographic areas. In addition, compound semiconductor solar cells are used to power these satellites because they are more tolerant to radiation levels in space and have higher power-to-weight ratios than silicon-based solar cells, thereby increasing satellite life and payload capacity.

Telecommunications. To accommodate the exponential growth in voice, data and video traffic and the increased demand for higher transmission rates, telecommunications companies and Internet service providers are relying on fiber optic networks utilizing high speed switching technologies. Compound semiconductor components such as lasers and LEDs, coupled with optical detectors, are used within these networks to enable high speed data transmission, increase overall network capacity and reduce equipment costs.

Computers. Computer manufacturers are increasingly seeking to achieve higher clock speeds than the architecture prevalent in today's advanced multimedia computer systems. Higher processing speeds necessitate the use of larger cache memory to enable higher transmission rates. Computer manufacturers are increasingly utilizing compound semiconductor devices to achieve these results. In addition, today's advanced multimedia applications require increased data storage capacity, which is commonly addressed by the use of CD ROMs. To achieve these higher storage capabilities, computer manufacturers are increasingly utilizing compound semiconductor lasers and optical detectors. As a result of the migration of multimedia applications into consumer products, computer manufacturers are also incorporating compound semiconductor infrared emitters into their products to replace bulky wires and cables.

Consumer Electronics. Consumer electronics manufacturers are using compound semiconductor devices to improve the performance of many existing products and to develop new applications. For example, next generation compact disc players are utilizing shorter wavelength compound semiconductor lasers to read and record information on high density DVDs which store at least four times more information than a conventional compact disc. In addition, compound semiconductor devices are increasingly being used in advanced display technologies. Ultra-thin LED flat panel displays are being used in a variety of applications, including point-of-purchase displays and outdoor advertising with live-action billboards, and are being developed for use in laptop computers and flat panel television screens.

Automotive Electronics. Compound semiconductor devices are increasingly being used by automotive manufacturers to improve vehicle performance while reducing weight and costs through lower power consumption. These devices are utilized in a wide variety of applications, including dashboard displays, indicator lights, engine sensors, anti-lock braking systems and other electronic systems. In addition, the Company believes that the use of electronic components within automobiles is likely to increase as manufacturers design vehicles to comply with state and federal environmental and safety regulations. Automotive production cycles generally last three to five years, providing a relatively predictable source of demand for compound semiconductor devices once an electronic component is designed into a specific vehicle model.

The high-performance characteristics of compound semiconductors,

combined with the requirements of advanced information systems, have led to the widespread deployment of compound semiconductor devices within a broad range of electronic systems. The Company believes that the following factors have resulted in an increased demand for compound semiconductor production systems, wafers and devices which enable electronic systems manufacturers to reach the market faster with high volumes of high-parformance products and applications: performance products and applications:

- Launch of new wireless services such as PCS and wireless high speed data systems; Rapid build-out of satellite communications systems;
- widespread deployment of fiber optic networks and the increasing use of optical systems within these networks;
- Increasing use of infrared emitters and optical detectors in computer systems to replace bulky interconnect wires and cables; Emergence of advanced consumer electronics applications, such as
- DVDs and flat panel displays; and
- Increasing use of high-performance electronic devices in automobiles.

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 uniquely dependent on the composition of these compounds. For example, the electrical and optical properties of gallium arsenide are substantially changed by adding aluminum as a third element. Many of the unique properties of compound semiconductor devices are achieved by the layering of different compound semiconductor materials in the same device. For example, infrared compound semiconductor lasers and LEDs are fabricated by depositing ultrathin layers of gallium arsenide between layers of gallium aluminum arsenide. 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 uniquely enables compound semiconductor devices to be used in a broad range of advanced information systems.

Compound semiconductor device manufacturers have predominantly used three methods to deposit compound materials: molecular beam epitaxy ("MBE"), vapor phase epitaxy and liquid phase epitaxy. The Company believes that these traditional methods are subject to a number of inherent chemical process or volume production limitations. While these methods are successfully used for a variety of applications, they are not easily scaled up to high volume commercial production of complex materials, such as those used for optoelectronic devices.

A fourth method, metal organic chemical vapor deposition overcomes these limitations. Using MOCVD, a number of elements can be easily combined into a broad range of compounds. Currently, MOCVD technology is being used to manufacture a number of devices, including high efficiency solar cells, HB LEDs, heterojunction bipolar transistors ("HBTs"), vertical cavity surface emitting lasers ("VCSELs") and MR sensors. The Company believes that compound semiconductor wafers fabricated using MOCVD generally possess better uniformity, as well as better optical and electronic properties, than wafers manufactured by more traditional methods. The Company believes that MOCVD has gained broad acceptance as the preferred methodology for the production of complex device structures in commercial volumes.

Historically, developers of compound semiconductor devices have met research, pilot production and capacity needs with in-house systems and technologies. However, the requirements for the production of commercial volumes of high-performance compound semiconductor devices have often exceeded the capabilities of such in-house solutions. Simultaneously, the growth of new applications for discrete compound semiconductor devices has challenged manufacturers to develop processes for new applications while simultaneously meeting demand for existing products. In response to these growing demands for higher volumes 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 materials science expertise, process technology and MOCVD production systems that enable the manufacture of commercial volumes of high-performance compound semiconductor wafers and devices. EMCORE believes that its proprietary TurboDiscTM deposition technology provides the most cost-effective production systems for the commercial volume manufacture of high-performance compound semiconductor wafers and devices. EMCORE is capitalizing on its technology base to address the critical need of electronics manufacturers to cost-effectively get to market faster with high volumes of new and improved high-performance products. EMCORE offers its customers a broad range of products and services and a vertically integrated product line which includes device design, materials and process development, MOCVD production systems, epitaxial wafers and package-ready devices. The Company believes that its knowledge base and materials science expertise uniquely position the Company to become a valuable source for a broad array of solutions for the compound semiconductor industry.

[graphic depicting flowchart of registrant's expertise and registrant's products, indicating the ultimate end markets for those products]

STRATEGY

The Company believes that its close collaboration with its customers over the past twelve years has contributed to its position in the MOCVD process technology and production systems market. The Company's objective is to capitalize on this position to become a leading supplier of compound semiconductor wafers and package-ready devices. The key elements of the Company's strategy include:

Provide Complete Compound Semiconductor Solutions. The Company's vertically-integrated product offerings allow it to provide complete compound semiconductor solutions to a broad range of electronics manufacturers in order to meet their diverse technology requirements. The Company plans to capitalize on the growing need of electronics manufacturers to reach the market faster and more cost-efficiently with high volumes of end products. The Company assists its customers with device design, process development and optimal configuration of production systems. Moreover, the Company can also serve its customers as a reliable source for high volume production of wafers or package-ready devices. Through its materials science expertise, process technology and commercial production systems, the Company intends to become an integral part of its customers' compound semiconductor product life cycle.

Form Strategic Relationships with Customers. By developing enabling technologies, the Company seeks to form strategic alliances with its customers in order to obtain long-term development and high volume production contracts. For example, the Company currently has a strategic relationship with General Motors under which it has developed and enhanced the device structure and production process for, and has received a purchase order to manufacture, MR sensor products for use in General Motors' automotive applications. In addition, the Company has been integrally involved with a large telecommunication concern in connection with the development of solar cell technologies for satellites. Throughout its association with this customer, the Company has successfully customized its production systems to meet the customer's special high-performance device requirements. The Company intends to actively seek similar strategic relationships with other key customers in order to further expand its technological and production base.

Expand Technology Leadership. The Company has developed and optimized its compound semiconductor processes and has developed higher

performance production systems through substantial investments in research and development. The Company works closely with its customers to identify specific performance criteria in its production systems, wafers and package-ready devices. The Company intends to continue to expend substantial resources in research and development in order 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 package-ready devices for its customers. The Company employs 15 persons holding Ph.D.s in various science applications, nine of whom work in research and development.

PRODUCTS

Production Systems and Materials Processes. The Company is a leading supplier of MOCVD compound semiconductor production systems, and, in 1995, had a 26% share of this market, according to VLSI Research Inc. which regularly publishes research on this market. The Company has shipped more than 180 systems to date and believes that its TurboDiscTM systems offer significant cost of ownership advantages over competing systems. The Company believes that its MOCVD production systems produce materials with superior uniformity of thickness, electrical properties and material composition. Each system is designed for the customer's particular applications and can be customized for the customer's throughput, wafer size and process chemistry requirements.

The Company's proprietary TurboDiscTM technology utilizes a unique high speed rotating disk in a stainless steel growth chamber with integrated vacuum-compatible loading chambers. To produce an epitaxial wafer, a bare substrate, such as gallium arsenide, indium phosphide or germanium, is placed on a wafer carrier in the TurboDiscTM 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 then become deposited on the substrate in a highly uniform manner. resulting epitaxial wafer thus carries one or more ultra-thin layers of compound semiconductor material such as gallium arsenide, gallium nitride, or indium aluminum phosphide. The TurboDiscTM technology not only ensures 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 TurboDiscTM technology platform allows users to scale easily from research to commercial volumes with substantially reduced time and effort. Wafers from two inches to 14 inches in diameter can be prepared using the same platform technology.

Upon removal from the growth chamber, the epitaxial wafer is then transferred to a device processing facility for various steps such as photolithography, etching, masking, metallization and dicing. Upon completion of these steps, the package-ready devices are then sent to the customer's facility for the attachment of leads and encapsulation in resin prior to the ultimate inclusion in the customer's product. The production of such compound semiconductor devices is substantially less complex than that of silicon integrated circuits.

[schematic diagram of production system fabricated and sold by the registrant] $\begin{tabular}{ll} \hline \end{tabular}$

Wafers are loaded on a multiple wafer holder 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.

Compound semiconductor manufacturers, much like their counterparts in the silicon semiconductor industry, place great pressure on process equipment suppliers to decrease the cost of ownership of production systems. Cost of ownership is determined by yield, throughput, direct costs and capital. Yield is primarily determined by 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. The Company believes that the high throughput capabilities of its TurboDiscTM systems make possible the lowest cost of ownership for the manufacture of compound semiconductor materials as well as superior reproducibility of thickness, composition, electrical profiles and layer accuracy required for electronic and optoelectronic devices. The Company's production systems also achieve a high degree of reliability with an average time available for production, based on customer data, of approximately 95%.

The Company offers the following family of systems:

Model List Price Application

Explorer \$350,000-450,000 Research

Discovery \$600,000-1,100,000 Development/Pilot

Production

Enterprise \$1,300,000-2,500,000 Volume Production

Wafer and Device Fabrication. Since its inception, the Company has worked closely with its customers in designing and developing materials processes to be used in production systems for its customers' end use applications. When a customer orders a production system, the customer provides the Company with certain performance criteria. The Company then determines the chemistry and process to meet these requirements and manufactures and configures the production system to produce the materials needed by the customer. The Company has recently begun to leverage its process and materials science knowledge base to manufacture wafers and package-ready devices in its own facility. The Company's expansion into wafer and package-ready device production has been spurred almost entirely by requests from customers whose epitaxial wafer needs exceed their available in-house production capabilities.

The Company fabricates package-ready devices on four-inch diameter wafers at its facility in Somerset, New Jersey with a combined clean room area totalling 3,500 square feet. Production capacity is currently 3,000 wafers per year. The Company currently anticipates utilizing a significant portion of the net proceeds of the Offering to expand this facility to approximately 7,500 square feet.

The Company is working with its customers to design, engineer and manufacture commercial quantities of wafers and/or package-ready compound semiconductor devices such as MR sensors, HBTs, HEMTs, FETs, HB LEDs, solar cells and other electronic and optoelectronic devices. An example of the Company's close collaboration with its customers is the Company's ongoing relationship with General Motors. In 1985, General Motors was the Company's first customer for compound semiconductor MOCVD production systems. Over the last twelve years, General Motors has frequently consulted the Company for assistance in developing its materials process solutions. In 1995, General Motors asked the Company to determine if it could develop the capability to manufacture high-performance position sensors for use in a variety of automotive applications. Following a close working collaboration, General Motors asked the Company to assess and develop a plan to manufacture commercial volumes of an indium antimonide device that can operate at automotive temperatures. In 1996, General Motors and the Company entered into an agreement under which General Motors paid the Company approximately \$1.6 million to develop and enhance certain MR position sensors for commercial production. In the first quarter of fiscal 1997, the Company received a purchase order from General Motors, pursuant to which it began production of these package-ready position sensors

In addition, the Company has worked closely with several large telecommunications concerns to assist these customers in developing solar cell process technology for use as the power source on their communications satellites. After extensive working collaborations, the Company developed the materials process and a production system for a compound semiconductor material with outstanding performance characteristics. The Company's technology has also produced gallium arsenide solar cells that are not only

approximately 50% more efficient in light-to-power conversion than silicon-based solar cells but also are more radiation-resistant. The resulting advance allows a satellite manufacturer to increase the useful life and payload capacity of its satellites. Consequently, over the last two years, the Company's customers have for this purpose purchased several compound semiconductor MOCVD production systems from the Company. Recently, customers have requested the Company to begin producing four-inch epitaxial wafers for use in the manufacture of solar cells for space satellites. Additionally, the Company has completed initial process development phase with a large telecommunications concern. This collaboration has resulted in prototype solar cells that may lead to more efficient solar cells than those currently being used. The Company plans to offer solar cell production to its customers.

CUSTOMERS

The Company's customers include several of the largest semiconductor, telecommunications and computer manufacturing companies in the world and thirteen of the largest electronics manufacturers in Japan. In fiscal 1996, only one customer, Hughes-Spectrolab, accounted for more than 10% of the Company's revenues. In fiscal 1996, sales to this customer accounted for 23.6% of the Company's revenues. A number of the Company's customers are listed below:

General Motors
Hewlett Packard Co.
Honeywell Inc.
Hughes-Spectrolab
Hyundai Electronics
International Business Machines Corporation
LG Semiconductor Corp.

L.M. Ericsson AB Lucent Technologies, Inc. Motorola, Inc. Philips AG Polaroid Corporation Rockwell Samsung Co. Sharp U.S.A., Inc. Siemens AG Texas Instruments Incorporated Thomson CSF Westinghouse Electric Corp.

In fiscal 1996, the Company adopted a comprehensive Total Quality Management Program with special emphasis on total customer satisfaction. The Company seeks to encourage active customer involvement with the design and operation of its production systems. To accomplish this, the Company conducts user group meetings among its customers on three continents. At annual meetings, the Company's customers provide valuable feedback on key operations, process oriented services, problems and recommendations to improve the Company's products. This direct customer feedback has enabled the Company to constantly update and improve the design of its systems and processes. Changes that affect the reliability and capabilities of the Company's systems are embodied in new designs to enable current and future customers to utilize systems which the Company believes are high quality and cost-efficient. As of December 31, 1996, the Company employed 18 field service engineers who install the Company's systems and provide on-site support for all of the customers' needs. In its continuing effort to maintain and enhance its relationships with its customers, the Company is seeking ISO and QS 9000 quality certification.

SALES AND MARKETING

The Company markets and sells its products through its direct sales force in Europe and North America, and through representatives and distributors in Asia. In 1996, the Company signed a seven year exclusive distributorship agreement with Hakuto, its Asian distributor, whose territory encompasses seven Asian countries. The Company has reached preliminary agreement with Hakuto to replace the existing distributorship agreement with a new distributorship agreement whose term will be five

years and under which Hakuto will distribute additional products of the Company. The material terms of the agreement will otherwise remain the same. Hakuto has marketed and serviced the Company's products since 1988 and is a minority shareholder in the Company. As of December 31, 1996, the Company employed 13 persons in sales and marketing.

The Company'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' problems. The sales process begins by understanding the customer's requirements and then attempting to match them with the most optimal solution. Typically, the Company will first try to match the customer's requirements to an existing design or a modification of a standard design. Such modifications often involve changing platform or process design. When necessary, the Company 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. The Company will also frequently produce customized samples and aid the customer in matching the customized sample to the customer's requirement. 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. In addition, the sales cycle for wafers and package-ready devices also includes a period of two to six months during which the Company develops the formula of materials necessary to meet the customer's specifications and qualifies the materials, which may also require the delivery of samples. The Company 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.

International sales as a percentage of total sales in fiscal 1994, 1995, 1996 and the first fiscal quarter of 1997 were 58.6%, 36.0%, 42.5% and 64.0%, respectively. Sales to customers in the U.S. in fiscal 1994, 1995 and 1996 were approximately, \$3.7 million, \$11.6 million and \$16.0 million, respectively, while the Company's sales in Asia for the same time periods were \$4.9 million, \$4.0 million and \$8.2 million, respectively, and sales in Europe were \$0.3 million, \$2.5 million and \$3.6 million, respectively. In fiscal 1996, sales to Hughes-Spectrolab accounted for 23.6% of the Company's revenues. The Company receives all payments for all products and services in U.S. dollars.

SERVICE AND SUPPORT

The Company maintains an international 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 the Company is required to maintain an inventory of replacement parts and to service the equipment upon the request of the customer. The Company also sells replacement parts from inventory for customer needs. The Company pursues a program of system upgrades for customers to increase the performance of older systems. The Company generally does not offer extended payment terms to its customers and generally adheres to a warranty policy of one year. Consistent with industry practice, the Company 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.

RESEARCH AND DEVELOPMENT

To maintain and improve its competitive position, the Company's research and development efforts are focused on designing new proprietary products, improving the performance of existing systems, wafers and package-ready devices and reducing costs in the product manufacturing process. In addition, the Company has developed a research and development production

system for thin film ferroelectric oxide applications intended for use in large area memory and embedded logic devices. The Company has developed this experimental production system for the deposition of thin-film ferroelectric materials onto silicon. Ferroelectric oxides are anticipated to be necessary for the production of advanced memory chips for one-gigabit memory devices. The Company has sold two such systems.

The Company has dedicated six EMCORE TurboDiscTM systems for both research and production which are capable of processing virtually all compound semiconductor materials. The research and development staff utilizes state-of-the-art x-ray, optical and electrical characterization equipment which provide instant data allowing for shortened development cycles and rapid customer response. The Company's research and development expenses in fiscal 1994, 1995, 1996 and the first fiscal quarter of 1997 were approximately \$1.1 million, \$1.8 million, \$5.4 million and \$2.5 million, respectively. The Company expects that it will continue to expend substantial resources on research and development. As of December 31, 1996, the Company employed 26 persons in research and development, ten of whom hold Ph.D.s in materials science or related fields.

The Company also competes for research and development funds. In view of the high cost of development, the Company solicits research contracts that provide opportunities to enhance its core technology base or promote the commercialization of targeted products. The Company presently has three such contracts in process. The contracts fall under the Small Business Innovative Research programs or similar government sponsored programs. From inception until December 31, 1996, government and other external research contracts have provided approximately \$10.7 million to support the Company's research and development efforts. The Company is also positioned to market technology and process development expertise directly to customers who require it for their own product development efforts.

INTELLECTUAL PROPERTY

The Company's success and competitive position both for production systems, wafers and package-ready devices depend materially on its ability to maintain trade secrets, patents and other intellectual property protections. Trade secrets are routinely employed in the Company's manufacturing processes. 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. In order to protect its trade secrets, the Company takes certain measures to ensure their secrecy, such as executing non-disclosure agreements with its employees, customers and suppliers. Sales of the Company's production systems are substantially dependent upon the Company's ability to maintain its trade secrets relating to production system technology and operation. Sales of the Company's wafers and package-ready devices depend heavily on the Company's trade secrets related to its MOCVD technology and processes to give the Company a competitive advantage for winning new customer orders.

To date, the Company has been issued six U.S. patents. Provided that all requisite maintenance fees are paid, 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 the Company's systems, or wafers or devices.

To permit sales of its MOCVD production systems, the Company was in 1992 granted the Rockwell License under the Rockwell Patent issued on January 11, 1983 to Rockwell. The Rockwell Patent claimed, among other things, intellectual property rights in the use of MOCVD generally in unspecified applications and expires in 2000. In October 1996, the Company initiated

discussions with Rockwell to receive additional licenses to permit the Company to utilize MOCVD technology to manufacture and sell certain wafers and package-ready devices. On November 15, 1996, in litigation not involving the Company, the Rockwell Patent was declared invalid by the U.S. Court of Federal Claims. The Company believes that Rockwell will appeal this judgment. In the event the foregoing judgment is reversed by a court of appeal, the Company may be liable to Rockwell for royalty payments, as well as other amounts which the Company may ultimately be deemed to owe Rockwell in connection with the sales of its systems, wafers and packageready devices. Moreover, the Company may require additional licenses from Rockwell under the Rockwell Patent in order to manufacture and sell certain wafers and package-ready devices. There can be no assurance that the foregoing judgment will not be reversed, that the Rockwell License can be maintained or that licenses for wafers and package-ready devices can be obtained or maintained on commercially feasible terms, if at all. The failure to maintain or obtain such licenses could have a material adverse effect on the Company's business, financial condition and results of operations.

ENVIRONMENTAL REGULATIONS

The Company 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. Company 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. The Company also believes that the costs of complying with existing environmental and health and safety laws and regulations are not likely to have a material adverse effect on its business, financial position or results of operations. There can be no assurance, however, that future changes in such laws and regulations will not result in expenditures or liabilities, or in restrictions on the Company's operation, that could have such an effect. The production of wafers and package-ready devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsenic. The Company's expansion to offer wafers and package-ready devices will require the increased usage and maintenance of these materials on the Company's premises. While the Company believes it currently has and will continue to have in place sufficient control systems for the safe use and maintenance of these raw materials, there can be no assurance that the Company's control systems will be successful in preventing a release of these materials or other adverse environmental conditions, which could cause a substantial interruption in the Company's operations. Such an interruption could have a material adverse effect on the Company's business, financial condition and results of operation.

BACKLOG

As of December 31, 1996, the Company had an order backlog of approximately \$23.8 million consisting of \$20.7 million of production systems, \$1.0 million of research contracts and \$2.1 million of package-ready devices, compared to backlog of \$19.0 million as of December 31, 1995 consisting of \$17.2 million of production systems and \$1.8 million of research contracts. This increase in backlog was a result of increased market acceptance of the Company's production systems and multiple unit orders for such systems, and the introduction of the Company's wafer and package-ready device product lines. The Company includes in backlog only customer purchase orders which have been accepted by the Company and for which shipment dates have been assigned within the twelve months to follow and research contracts that are in process or awarded. The Company

receives partial advance payments or irrevocable letters of credit on most production system orders and has never experienced an order cancellation. The Company recognizes systems and package-ready device revenue upon shipment. 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 a portion of estimated gross profit as stipulated in such contracts, based on contract performance. The Company is seeking to increase capacity to meet anticipated continuing increased production needs; however, there can be no assurance that the Company will increase its capacity to meet its scheduled needs.

MANUFACTURING

The Company's manufacturing operations are located at the Company's headquarters in Somerset, New Jersey and include systems engineering and production, wafer fabrication and design and production of package-ready devices. Many of the Company's manufacturing operations are computer monitored or controlled, enhancing reliability and yield. The Company manufactures its own systems and outsources some components and sub-assemblies, but performs all final system integration, assembly and testing. Since nearly all steps in the production process are performed by the Company, any interruption in manufacturing resulting from earthquake, fire, equipment failures or other causes would have a material adverse effect on the Company. As of December 31, 1996, the Company employed 119 persons in its manufacturing operations.

Outside contractors and suppliers are used to supply raw materials and standard components and to assemble portions of end systems from Company specifications. The Company depends on sole or a limited number of suppliers of components and raw materials. The Company generally purchases these single or limited source products through standard purchase orders. The Company 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. The Company has recently implemented a vendor program through which it inspects quality and reviews supplies 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 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 the Company's inability to obtain reduced pricing from its suppliers in response to competitive pressures.

In fiscal 1996, the Company received substantial levels of new orders, which will require the Company to increase its manufacturing capacity to meet with demand for its compound semiconductor production systems and its wafers and package-ready devices. The Company currently anticipates utilizing a significant portion of the net proceeds from the Offering for this purpose.

COMPETITION

The markets in which the Company competes are highly competitive. The Company competes with several companies for sales of MOCVD systems including Aixtron, Nippon-Sanso and Thomas Swann. The primary competitors for the Company's wafer foundry include Epitaxial Products Inc., Kopin Corporation and Q.E.D. The Company also faces competition from manufacturers that implement in-house systems for their own use. The Company may experience competition from corporations that have been in business longer than the Company and have greater capital resources, more experience with high volume manufacturing, broader name recognition, substantially larger installed bases, alternative technologies which may be better

established than the Company's and significantly greater financial, technical and marketing resources than the Company. The Company competes with many research institutions and universities for research contract funding. The Company also sells its products to current competitors and companies with the capability of becoming competitors. As the markets for the Company's products grow, new competitors are likely to emerge, and present competitors may increase their market share.

The Company believes that the primary competitive factors in the markets in which the Company's products compete are yield, throughput, capital and direct costs, system performance, size of installed base, breadth of product line and customer satisfaction, as well as customer commitment to competing technologies. While the Company believes it is in a position to deliver low-cost and reliable solutions to its customers, many of the Company's competitors have significantly greater financial, technical, manufacturing, marketing, sales and other resources than the Company. Company 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. In marketing its products, the Company may face competition from suppliers employing new technologies in order to extend the capabilities of competitive products beyond their current limits or increase their productivity. In addition, increased competitive pressure could lead to intensified price-based competition, resulting in lower prices and margins, which would materially adversely affect the Company's business, financial condition and results of operations.

LEGAL PROCEEDINGS

The Company is aware of no pending or threatened litigation against it which would cause a material adverse effect on its operating results.

EMPLOYEES

As of December 31, 1996 the Company employed 204 persons. None of the Company's employees is covered by a collective bargaining agreement. The Company considers its relationships with employees to be good.

FACILITIES

The Company's executive office and manufacturing facility are located in Somerset, New Jersey, where the Company leases a 75,000 square foot facility. This facility lease expires on February 29, 2000. The Company has two five-year renewal options.

MANAGEMENT

The executive officers and directors of the Company and their ages as of the date of this Prospectus are as follows:

NAME	AGE	POSITION(S)
Reuben F. Richards, Jr	41	President, Chief Executive Officer and Director
Thomas G. Werthan	40	Vice President - Finance and Administration, Chief Financial Officer, Secretary, and Director
Richard A. Stall	40	Vice President - Technology and Director
William T. Kroll	52	Executive Vice President - Business Development
Paul T. Fabiano	32	Vice President - Engineering
Louis A. Koszi	52	Vice President - Device Manufacturing
Laurence P. Wagner	36	Vice President - Electronic Materials
David A. Hess	35	Controller
Thomas J. Russell(1)(2)	65	Chairman of the Board
Howard R. Curd $(1)(2)$	57	Director
Howard F. Curd $(1)(2)$	31	Director
Robert Louis-Dreyfus	50	Director-nominee

⁽¹⁾ Member of Audit Committee

All directors of the Company hold office until the next annual meeting of shareholders or until their successors are duly elected and qualified. All officers serve at the discretion of the Board of Directors.

Reuben F. Richards, Jr. - Mr. Richards joined the Company 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 the Company since May 1995. From September 1994 to the present, Mr. Richards has been a Senior Managing Director of Jesup & Lamont Capital Markets Inc. ("Jesup & Lamont") (an affiliate of a registered broker-dealer). From December 1994 to the present, he has been a member of and President of JLMP, the Company's largest shareholder. From 1992-1994, Mr. Richards was a principal with Hauser, Richards & Co., a firm engaged in corporate restructuring and management turnarounds. From 1986-1992, Mr. Richards was a Director at Prudential-Bache Capital Funding in its Investment Banking Division. Mr. Richards also serves as a director of S.A. Telecommunications, Inc., a full service long distance telecommunications company, located in Richardson, Texas.

Thomas G. Werthan - Mr. Werthan joined the Company in 1992 as its Chief Financial Officer, Vice President - Finance and Administration and a director. Mr. Werthan is a Certified Public Accountant and has over fourteen years experience in assisting high technology, venture capital financed growth companies. Prior to joining the Company 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, a member of and Chairman of JLMP and Chairman of the Board of Directors of the Company. From 1985 to 1989, Mr. Werthan served as Chief Operating Officer and Chief Financial Officer for Audio Visual Labs, Inc., a manufacturer of multi-media and computer graphics equipment.

Richard A. Stall, Ph.D. - Dr. Stall became a director of the Company in December 1996. Dr. Stall helped found the Company in 1984 and has been Vice President - Technology at the Company since October, 1984, except for a sabbatical year in 1993 during which Dr. Stall acted as a consultant to

⁽²⁾ Member of Compensation Committee

the Company 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 MBE 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 - Mr. Kroll joined the Company in 1994 as Vice President - Business Development and in 1996 became Executive Vice President - Business Development. 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 photoresist or applications, plasma strip, and related equipment.

Paul T. Fabiano - Mr. Fabiano joined the Company in 1985 as a process engineer and has served as Vice President - Engineering since March 1996. Mr. Fabiano has experience in all critical phases of the Company's operations including sales, service, manufacturing and engineering. During his tenure at the Company, Mr. Fabiano has held various managerial positions including Vice President, Manufacturing and Director of Field Engineering.

Louis A. Koszi - Mr. Koszi joined the Company in 1995 as Vice President - Device Manufacturing. 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.

Laurence P. Wagner - Mr. Wagner joined the Company in March 1996 as Vice President - Wafer Manufacturing, and has more than twelve years experience in operations, engineering and research in the electronic and semiconductor materials industries. Before joining EMCORE, he spent seven years at Rohm & Haas, a subsidiary of Shipley Company, L.L.C., where he served successively as Corporate Projects Manager, Product Engineer, Engineering Manager, Manufacturing Manager, and, from 1994 to 1996, Operating Unit Manager.

David A. Hess - Mr. Hess joined the Company in 1989 as General Accounting Manager. He was named Controller in 1990. He has more than ten 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 manufacturers).

Thomas J. Russell, Ph.D. - Dr. Russell has been a director of the Company since May 1995 and was elected Chairman of the Board on December 6, 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, Adidas AG, and Uniroyal Technology

Corporation ("UTC"). Mr. Russell is one of three trustees of the AER 1997 Trust, which is a member of JLMP.

Howard R. Curd - Mr. Curd has been a director of the Company since May 1995. Mr. Curd has been Chairman and Chief Executive Officer of UTC from September 1992 to the present. From 1986 to 1992, he was Chairman of Uniroyal Plastics Corp. He is the founder of UTC's predecessor business, Polycast Technology Corporation. He also sits on the advisory board for Investment Seminars, Inc., a provider of independent investment advice. Mr. Curd is a member of and Vice President of JLMP, the Company's majority shareholder. Mr. Curd is the father of Howard F. Curd, a director of the Company.

Howard F. Curd - Mr. Curd has been a director of the Company since May 1995. Since 1991, Mr. Curd has been president and chief executive officer and a director of Jesup & Lamont Group Holdings, Inc., a diversified financial holding company. Mr. Curd is a director of S.A. Telecommunications, Inc., a long distance telecommunication company, located in Richardson, Texas. Mr. Curd is the son of Howard R. Curd, a director of the Company.

Robert Louis-Dreyfus - Mr. Louis-Dreyfus has been nominated to serve on the Company's Board of Directors. It is expected that immediately following the Offering, the Board will elect Mr. Louis-Dreyfus to serve as a Director. Mr. Louis-Dreyfus has been the Chairman of the Board of Directors 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 at Saatchi & Saatchi plc (now Cordiant plc) in London, and he resigned from the Board of Directors of Saatchi & Saatchi in 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.

Within 90 days after completion of the Offering, the Company intends to expand the Company's Board of Directors to nine persons and to elect at least two outside directors to the Company's Board. It is the intention of the Company that such outside directors will be appointed to and replace the existing members of each of the Company's Audit Committee and Compensation Committee.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Company's Compensation Committee, which consists of Dr. Thomas J. Russell, Howard F. Curd and Howard R. Curd, reviews and recommends to the Board of Directors the compensation and benefits of all officers of the Company, reviews general policy matters relating to compensation and benefits of officers and employees of the Company and administers the issuance of stock options and stock appreciation rights and awards of restricted stock to the Company's officers and key salaried employees. No member of the Compensation Committee is now or ever was an officer or an employee of the Company. No executive officer of the Company serves as a member of the compensation committee of the Board of Directors of any entity one or more of whose executive officers serves as a member of the Company's Board of Directors or Compensation Committee. See "Certain Transactions."

AUDIT COMMITTEE

The Company's Audit Committee currently consists of Thomas J. Russell, Howard F. Curd and Howard R. Curd. The Audit Committee recommends the engagement of the Company's independent accountants, approves the auditing services performed, and reviews and evaluates the Company's accounting policies and systems of internal controls.

EXECUTIVE COMPENSATION

The following Summary Compensation Table sets forth certain information concerning the annual and long-term compensation for services in all capacities to the Company in fiscal 1996 of those persons who during such fiscal year (i) served as the Company's chief executive officer or (ii) were the five most highly-compensated officers (other than the chief executive officer) (collectively, the "Named Executive Officers"):

ANNUAL COMPENSATION

NAME AND PRINCIPAL POSITION	FISCAL YEAR	SALARY	ADDITIONAL COMPENSATION (1)	OTHER ANNUAL COMPENSATION(2)
Reuben F. Richards, Jr. (3) President and Chief Operating Officer	1996	\$193,750(4)	\$	\$
Thomas G. Werthan Vice President-Finance and Administration and Chief Financial Officer	1996	120,487	29,000	6,000
Richard A. Stall Vice President-Technology	1996	126,871	44,000	
William T. Kroll Executive Vice President- Business Development	1996	104,610	105,000	6,000
Paul T. Fabiano Vice President- Engineering	1996	98,303	15,000	
Norman E. Schumaker Chairman and Chief Executive Officer(3)	1996	180,330	103,050	6,750

LONG TERM COMPENSATION

NAME AND PRINCIPAL POSITION	SECURITIES UNDERLYING OPTIONS	
Reuben F. Richards, Jr. (3) President and Chief Operating Officer		
Thomas G. Werthan Vice President-Finance and Administration and Chief Financial Officer		
Richard A. Stall		
Vice President-Technology William T. Kroll Executive Vice President-		
Business Development Paul T. Fabiano Vice President- Engineering		
Norman E. Schumaker Chairman and Chief Executive Officer(5)		

Consists of bonuses, commissions and vacation pay.

⁽²⁾ Consists of insurance premiums and automobile allowances paid by the

 ⁽²⁾ Consists of insurance premiums and automobile allowances paid by the Company.
 (3) Mr. Richards became Chief Executive Officer in December, 1996.
 (4) Of this amount, \$145,000 was received from Jesup & Lamont. Mr. Richards' salary is now paid by the Company and his base annual compensation is \$195,000. See "Certain Transactions."
 (5) Dr. Schumaker served as Chairman and Chief Executive Officer until his retirement in December 1996.

No options were issued to any of the Named Executive Officers in fiscal 1996. There were no option exercises by the Named Executive Officers in fiscal 1996.

The following table sets forth the number of shares covered by exercisable and unexercisable options held by the Named Executive Officers on September 30, 1996 and the aggregate gains that would have been realized had these options been exercised on September 30, 1996, even though these options had not been exercised by the Named Executive Officers.

AGGREGATED OPTION EXERCISES IN FISCAL 1996 AND OPTION VALUES AT FISCAL YEAR END

	UNDERLYING	F SECURITIES G UNEXERCISED FISCAL YEAR END	IN-THE-MO	UNEXERCISED NEY OPTIONS YEAR END(1)
NAME	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Reuben F. Richards, Jr.	29,412		\$211,000	
Thomas G. Werthan	17,647	11,765	126,600	\$84,400
Richard A. Stall	20,294	13,529	145,590	97,060
William T. Kroll	5,882	8,824	42,200	63,300
Paul T. Fabiano	8,824	5,882	63,300	42,200
Norman E. Schumaker	26,471	17,647(2)	189,900	126,600

⁽¹⁾ Options are in-the-money if the market value of the shares covered thereby is greater than the option exercise price. This calculation is based on the fair market value at September 30, 1996 of \$10.20 per share, less the exercise price. If calculated based on the midpoint of the estimated range of the initial public offering price (\$10 per share), the value of unexercised in-the-money options at fiscal year end would be slightly lower.

STOCK OPTION PLAN

In 1995, the Company's Board of Directors and its shareholders approved the Company's 1995 Incentive and Non-Statutory Stock Option Plan (the "Plan"). Under the terms of the Plan, as amended by the shareholders of the Company in March 1996, options to acquire 647,059 shares of Common Stock may be granted. Options with respect to 339,412 shares were outstanding as of September 30, 1996, at exercise prices of \$3.03 to \$10.20 per share. Options granted generally become exercisable over five years. As of September 30, 1996, options with respect to 162,765 shares were exercisable.

The purpose of the Plan is to give officers and executive personnel, and consultants or non-employee directors, of the Company and its subsidiaries an opportunity to acquire Common Stock, to provide an incentive for key employees and other participants to continue to promote the best interests of the Company and enhance its long-term performance, and to provide an incentive for key employees and other participants to join or remain with the Company and its subsidiaries.

Incentive stock options ("ISOs") intended to qualify for special tax

⁽²⁾ Pursuant to Dr. Schumaker's retirement from the Company, these options have been cancelled and will not become exercisable.

treatment in accordance with Section 422 of the Internal Revenue Code of 1986, as amended, ("Code") and non-statutory stock options ("NSOs"), which do not qualify for such special tax treatment, may be granted under the Plan. In addition, stock appreciation rights ("SARs") may be granted under the Plan in conjunction with ISOs.

The Plan is administered by the Board of directors which, to the extent it shall determine, may delegate its administrative powers (other than its power to amend or terminate the Plan) to a committee (the "Committee") appointed by the Board of Directors and composed of not less than three members of the Board of Directors. The Board of Directors is authorized to determine (i) the persons to whom awards under the Plan shall be granted, (ii) the time or times at which such awards shall be granted, (iii) the form and amount of the awards, and (iv) the limitations, restrictions and conditions applicable to any such award. In general, the Board of Directors also may interpret the Plan, prescribe, amend, and rescind rules and regulations relating to it, and make all other determinations it deems necessary or advisable for the administration of the Plan.

The Board of Directors may from time to time alter, amend or suspend the Plan or any award granted thereunder, or may at any time terminate the Plan, except that it may not, without the approval of the Company's shareholders (except with respect to certain changes in corporate structure), (i) materially increase the total number of shares of Common Stock available for grant under the Plan, (ii) materially modify the class of eligible employees or participants under the Plan, (iii) materially increase benefits to any key employee who is subject to the restrictions of Section 16 of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") or (iv) effect a change relating to ISOs granted thereunder which is inconsistent with Section 422 of the Code and the regulations issued thereunder. No action taken by the Board of Directors in connection with the Plan, either with or without shareholder approval, may materially and adversely affect any outstanding award without the consent of the holder thereof. No award under the Plan may be granted after September 19, 2005

A stock option granted under the Plan will be exercisable and subject to such terms and conditions as the Board of Directors or the Committee determines and which may be set forth in a written option agreement. In general, the option price for ISOs shall not be less than 100% of the fair market value of the Common Stock on the date of the grant, and such ISO shall not be exercisable within one year of the date of grant. The option price for NSOs shall not be less than 10% of the fair market value of the Common Stock on the date of the grant. For purposes of the Plan, "fair market value" means, in general, the average of the mean between the bid and asked price for the Common Stock at the close of trading for the ten consecutive trading days immediately preceding a given date.

ISOs granted under the Plan may include a SAR, either at the time of the granting of the ISO or while the ISO is outstanding, which shall be exercisable only (i) to the extent that the underlying ISO is exercisable and (ii) for such period of time as determined by the Board of Directors. A SAR is exercisable only when the fair market value of a share of Common Stock exceeds the option price specified for the ISO under which the SAR was granted. A SAR shall entitle the participant to surrender to the Company unexercised the ISO, or portion thereof, to which such SAR is related, and to receive from the Company in exchange therefor that number of shares of Common Stock having an aggregate fair market value equal to the excess of the fair market value on the date of exercise of one share of Common Stock over the option price per share specified in such ISO, or portion thereof, which is so surrendered, or, at the election of the Board, cash in such amount.

ISOs, NSOs, and SARs shall not be exercisable more than ten years after the date of grant. Upon the termination of employment of an employee, or if the contractual relationship between a non-employee participant and the Company terminates, options and SARs granted to such participant shall expire no later than 30 days after such termination although the Board of Directors, in its sole discretion, may permit the exercise of such option or SAR to occur up to three months following such termination; provided, that if such termination occurs as a result of the participant's death or disability, outstanding options and SARs shall expire no later than one year thereafter; and provided further, that outstanding options and SARs held by a former employee participant shall earlier expire on the date that such participant violates the terms of any covenant not to compete, if any, in effect between the Company and such participant. Upon notice of an intent to exercise an option, the option price shall be paid in full in cash or by certified check or, in the Board of Directors' discretion, in shares of Common Stock already owned by the participant.

In the sole discretion of the Board of Directors, adjustments will be made in the number of shares of Common Stock available under the Plan, and the number of shares of Common Stock and the option price of shares subject to outstanding grants of options and SARs to reflect increases or decreases in the number of shares of issued Common Stock resulting from a reorganization, recapitalization, stock split-up, stock distribution or combination of shares, or the payment of a stock dividend or other increase or decrease in the number of such shares outstanding effected without receipt of consideration by the Company.

COMPENSATION OF DIRECTORS

All non-employee directors will receive a fee in the amount of \$3,000 per Board meeting attended and \$500 for each committee meeting attended (\$600 for the Chairman of the committee), including in each case reimbursement of reasonable out-of-pocket expenses incurred in connection with such Board or committee. Payment of all fees will be made in Common Stock of the Company at the average of the last reported bid and ask prices as of the close of trading that day on the Nasdaq National Market. No director who is an employee of the Company will receive compensation for services rendered as a director.

LIMITATION OF OFFICERS' AND DIRECTORS' LIABILITY AND INDEMNIFICATION MATTERS

The Company's Certificate of Incorporation and By-Laws include provisions (i) to reduce the personal liability of the Company's directors for monetary damage resulting from breaches of their fiduciary duty and (ii) to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. Prior to the consummation of this Offering, the Company intends to enter into indemnification agreements with each of its directors and executive officers and to obtain a policy of directors' and officers' liability insurance that insures such persons against the costs of defense, settlement or payment of a judgment under certain circumstances. There is no pending litigation or proceeding involving any director, officer, employee or agent of the Company as to which indemnification is being sought. The Company is not aware of any pending or threatened litigation that might result in claims for indemnification by any director or officer.

CERTAIN TRANSACTIONS

In May 1995, approximately 51% of the Company's outstanding shares of Common Stock were purchased by JLMP, a limited liability company whose five members are The AER 1997 Trust, Howard R. Curd, Howard F. Curd, Reuben F.

Richards, Jr. and Gallium Enterprises, Inc. Gallium Enterprises Inc. is controlled by Robert Louis-Dreyfus, a nominee to become a director of the Company. Howard F. Curd and Reuben F. Richards, Jr. together control a minority of the membership interests in JLMP and are co-owners of Jesup &Lamont Group Holdings, Inc., which owns all the shares of Jesup & Lamont Securities Co., a registered broker-dealer and of Jesup & Lamont Capital Markets, Inc. ("Jesup & Lamont"), a financial services advisory concern. Since 1995, four of the Company's six directors have been members of JLMP. In May 1995, the Company entered into a consulting agreement with Jesup & Lamont (herein, the "Agreement") pursuant to which Jesup & Lamont agreed to provide financial advisory services for the Company for one year. The Agreement provided for monthly retainers to be paid to Jesup & Lamont of \$12,500 per month. In October 1995, Reuben F. Richards, Jr. joined the Company's management team as President and Chief Operating Officer. On that date, the retainer to Jesup & Lamont was increased to \$25,000 per month to cover Mr. Richards' salary. At that time, Mr. Richards received no compensation directly from the Company. Jesup & Lamont covered all employee benefits and taxes for Mr. Richards until October 1, 1996 when Mr. Richards became a full-time employee of the Company, and the monthly retainer paid by the Company to Jesup & Lamont was decreased to \$10,000. The Agreement will terminate upon completion of the Offering.

In May 1996, the Company issued \$9,500,000 Subordinated Notes (the "Subordinated Notes") and warrants to purchase 2,328,432 shares of Common Stock at \$4.08 per share (the "\$4.08 Warrants"). The \$4.08 Warrants became exercisable on November 1, 1996. JLMP holds 78.5% of the Subordinated Notes and \$4.08 Warrants. In addition, Thomas G. Werthan, Vice President - Finance and Administration, Chief Financial Officer, Secretary and a director, currently holds \$96,233 of the Subordinated Notes and 23,587 of the \$4.08 Warrants; Dr. Richard Stall, Vice President - Technology and a director currently holds \$122,450 of the Subordinated Notes and 30,012 of the \$4.08 Warrants; William Kroll, Executive Vice President - Business Development, currently holds \$65,828 of the Subordinated Notes and 16,134 of the \$4.08 Warrants; Paul Fabiano, Vice President - Engineering, currently holds \$60,407 of the Subordinated Notes and 14,806 of the \$4.08 Warrants; and David Hess, Controller, currently holds \$4,753 of the Subordinated Notes and 1,165 of the \$4.08 Warrants.

In connection with the offering of the Subordinated Notes and \$4.08 Warrants on May 1, 1996, the Company executed a registration rights agreement (the "Registration Rights Agreement") with the holders of the \$4.08 Warrants (the "Warrant Holders"). Upon written notice given by a majority in interest of the Warrant Holders, the Company is obligated to use its best efforts to register all or part of each Warrant Holders' registrable securities, and to keep such registration open for period of not less than nine months. Pursuant to the Registration Rights Agreement, the Company must give notice to, and include if requested within thirty days of such notice, the Warrant Holders in any registration statement filed by the Company under the Securities Act, subject to certain exceptions. See "Description of Capital Stock - Registration Rights."

On September 1, 1996, the Company issued to JLMP \$2,500,000 additional subordinated notes (the "Additional Notes") with terms identical to those of the Subordinated Notes, and warrants to purchase 245,098 shares of Common Stock at \$10.20 per share (the "Additional Warrants"). The Additional Warrants become exercisable six months after issuance. In December 1996, the Company issued to JLMP warrants to purchase 980,392 shares on the same terms as the Additional Warrants in consideration for the grant by Thomas Russell, the Chairman of the Company's Board of Directors, of a security interest over certain assets he controls, in order to guarantee the Company's \$10 million demand note facility from First Union National Bank. The Company expects to use a portion of the proceeds of the Offering to pay down this facility. In connection with the issuance

of the warrants in September and December of 1996, the Company has entered into a registration rights agreement with JLMP similar to the Registration Rights Agreement.

Upon completion of the Offering, three of the Company's eight directors will be members of JLMP. Mr. Russell, the Chairman of the Company's Board of Directors, will be a trustee with respect to certain membership interests of JLMP. Mr. Louis-Dreyfus, a director-nominee, controls a company which is a member of JLMP. JLMP will retain an ownership interest in the Company of approximately 48.9%. Within 90 days of the commencement of the Offering, the Company will elect two independent directors, neither of whom will have any affiliation with JLMP.

From time to time, the Company has lent money to certain of its executive officers and directors. Between October and December, 1995, pursuant to the due authorization of the Company's Board of Directors the Company lent \$85,000 to Thomas G. Werthan, Vice President - Finance and Administration, Chief Financial Officer and a director of the Company. The promissory note executed by Mr. Werthan provides for forgiveness of the loan via bonuses payable to Mr. Werthan over a period of 25 years.

On December 4, 1996, Norman E. Schumaker, a founder of the Company and a beneficial holder of more than 5% of the Company's Common Stock, retired as Chairman and Chief Executive Officer. The Company and Dr. Schumaker have entered into a Consulting Agreement dated as of December 6, 1996, pursuant to which the Company agreed to retain Dr. Schumaker as a consultant for \$250,000 per year. The Company has also agreed to pay Dr. Schumaker \$103,055 in full satisfaction of accrued bonuses and vacation time. Dr. Schumaker has agreed to provide consulting services for eight eight-hour work days per month (approximately two days a week less vacation time) for a term of two years commencing January 1, 1997 and ending December 31, 1998. The Agreement will automatically renew for one successive two-year term unless either party gives the other notice of his or its intention not to renew the Agreement. The Company has also agreed to forgive \$115,300 of indebtedness of Dr. Schumaker to the Company and to provide him with a monthly automobile allowance of \$750 during the term of the Agreement. The Company has agreed to provide Dr. Schumaker with participation, during the period ending on December 31, 2001, in the Company's plan of medical benefits and to assign to Dr. Schumaker a disability insurance policy and two life insurance policies in the aggregate face amount of \$1,075,000. To the extent that these policies may not be so assigned, the Company has agreed to establish similar policies for Dr. Schumaker. The Company has also agreed to extend the exercise of Dr. Schumaker's vested stock options to March 4, 1997. Dr. Schumaker has agreed during the term of the Agreement not to become involved, directly or indirectly, in any business activity which the Company's Board of Directors determines to be competitive with the Company. Dr. Schumaker has also agreed, among others, to refrain from engaging in any business competing with the Company in the U.S. for an additional period of two years after the termination of the Agreement.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information known to the Company with respect to beneficial ownership of the Company's Common Stock as of February 1, 1997 and as adjusted to reflect the sale of shares offered pursuant to this Prospectus by: (i) each person who is known by the Company to be the beneficial owner of five percent or more of the Company's Common Stock, (ii) each of the Company's directors, (iii) each Named Executive Officer, and (iv) all officers and directors of the Company as a group.

PERCENTAGE OF SHARES BENEFICIALLY OWNED

NAME OF BENEFICIAL OWNER	NUMBER OF SHARES	PRIOR TO	AFTER
	BENEFICIALLY OWNED(1)(2)	OFFERING	OFFERING
Reuben F. Richards, Jr. (3)	3,724,034	73.1%	49.0%
Richard A. Stall (4)	129,870	4.3	
Thomas G. Werthan (5) Paul T. Fabiano (6) William T. Kroll (7) Howard R. Curd (8)	103,763	3.4	1.9
	62,879	2.1	1.1
	64,789	2.2	1.2
	3,694,622	72.9	48.9
Howard F. Curd (8)	3,694,622	72.9	48.9
	3,694,622	72.9	48.9
	3,694,622	72.9	48.9
All directors and executive officers as a group (12 persons) (11) Norman E. Schumaker (12)	4,090,470	78.1	52.9
	533,347	16.9	9.4

⁽¹⁾ Unless otherwise indicated in these footnotes, the persons named in the table above have sole voting and investment power with respect to all shares beneficially owned.

⁽²⁾ Based on 2,994,461 shares outstanding prior to the Offering and 5,869,461 shares to be outstanding after the Offering, except that shares underlying warrants and options exercisable within 60 days of February 1, 1997, are deemed to be outstanding for purposes of calculating shares beneficially owned and percentages owned by the holder of such warrants and options.

⁽³⁾ Consists of options to purchase 29,412 shares, and 1,621,557 shares and warrants to purchase 2,073,065 shares held by JLMP. See Note 10.

⁽⁴⁾ Includes options to purchase 20,294 shares and warrants to purchase 30,012 shares.

⁽⁵⁾ Includes options to purchase 17,647 shares and warrants to purchase 23,587 shares.

⁽⁶⁾ Includes options to purchase 8,824 shares and warrants to purchase 14,806 shares.

⁽⁷⁾ Includes options to purchase 5,882 shares and warrants to purchase $16,134 \, \text{shares}$.

⁽⁸⁾ Consists of 1,621,557 shares and warrants to purchase 2,073,065 shares of Common Stock held by JLMP. Gallium Enterprises Inc. is controlled by Robert Louis-Dreyfus, a nominee to become a member of the Board of Directors of the Company. See Note 10.

⁽⁹⁾ Consists of 1,621,557 shares and warrants to purchase 1,827,967

shares of Common Stock held by JLMP. The AER 1997 Trust is one of the five members of JLMP. Its three trustees are John Timoney, Robert Louis-Dreyfus, and Thomas J. Russell, the Chairman of the Company. The trustees share authority over the assets of the trust. After January 13, 2002, Avery E. Russell, the daughter of Thomas J. Russell, will be the primary beneficiary of the trust. See Note 10.

- (10) Includes warrants to purchase 2,073,065 shares of Common Stock. Does not include warrants to purchase 980,392 shares of Common Stock which become exercisable after May 6, 1997. JLMP is a limited liability company whose five members are The AER 1997 Trust, Howard R. Curd, Howard F. Curd, Reuben F. Richards, Jr. and Gallium Enterprises Inc. The members share voting and investment power. JLMP's address and its members' addresses are c/o JLMP, 650 Fifth Avenue, New York, New York 10019.
- (11) Includes options to purchase 82,941 shares and warrants to purchase 1,913,671 shares. See Notes 3 through 8 above.
- (12) Includes options to purchase 26,471 shares and warrants to purchase 138,831 shares. Pursuant to Dr. Schumaker's consulting agreement with the Company dated December 6, 1996, the warrants to purchase 138,831 shares of Common Stock have been placed in escrow until January 6, 1998. See "Certain Transactions." Dr. Schumaker's business address is 20 Upper Warren Way, Warren, New Jersey 07059.

DESCRIPTION OF CAPITAL STOCK

The authorized capital stock of the Company consists of 23,529,411 shares of Common Stock, no par value, of which 2,994,461 shares are outstanding prior to completion of this Offering, which shares are held by a total of 86 shareholders and 5,882,353 shares of Preferred Stock, none of which are outstanding. In addition, there are outstanding warrants to purchase 2,330,784 shares of Common Stock at \$4.08 per share, warrants to purchase 9,103 shares of Common Stock at \$17.00 a share, and warrants to purchase 1,225,490 shares of Common Stock at \$10.20 per share. Moreover, options to purchase 437,546 shares have been granted under the Plan ranging from \$3.03 per share to \$10.20 a share.

COMMON STOCK

Holders of Common Stock are entitled to one vote per share on matters to be voted upon by the shareholders of the Company. Subject to the preferences that may be applicable to any outstanding shares of Preferred Stock, the Holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. See "Dividend Policy." In the event of liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to the prior liquidation rights of any outstanding shares of Preferred Stock. The Common Stock has no preemptive, redemption, conversion or other subscription rights. The outstanding shares of Common Stock are, and the shares offered by the Company in the Offering will be, when issued and paid for, fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Preferred Stock currently or outstanding or which the Company may designate and issue in the future.

The Company has applied for listing of the Common Stock on the Nasdaq National Market under the symbol "EMKR."

PREFERRED STOCK

The Company is authorized to issue up to 5,882,352 shares of Preferred Stock that may be issued from time to time in one or more classes or series upon authorization of the Board of Directors. The Board of Directors, without further approval of the shareholders, is authorized to designate in any such class or series resolution, such par value and such priorities, power, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine.

The ability of the Company to issue Preferred Stock in this manner, while providing flexibility in connection with possible acquisitions and other corporate purposes, could adversely effect the voting power of the voters of the Common Stock and could have the effect of making it more difficult for a person to acquire, or of discouraging a person from seeking to acquire, control of the Company. The potential for issuance of this "blank check preferred stock" may have an adverse impact on the market price of the Common Stock outstanding after the Offering. The Company has no present plans to issue any of the Preferred Stock.

WARRANTS

The Company has outstanding the following warrants: warrants to purchase a total of 9,103 shares of Common Stock at a purchase price of \$17.00 per share, which warrants expire in July 1997; warrants to purchase a total of 2,330,784 shares of Common Stock at a purchase price of \$4.08

per share which expire in May 2001 and warrants to purchase 1,225,490 shares of Common Stock at \$10.20 per share, which warrants expire in September 2001. The last two classes of warrants may be repurchased by the Company at \$0.85 per share after May 1997 and September 1997, respectively. The Company will not call the warrants unless it can issue registered securities therefor and the average daily market price of the Company's Common Stock exceeds 150% of the warrant exercise price for each of thirty consecutive days.

NEW JERSEY LAW AND OTHER LIMITATIONS UPON TRANSACTIONS WITH "INTERESTED SHAREHOLDERS"

The New Jersey Business Corporation Act provides that in determining whether a proposal or offer to acquire a corporation is in the best interest of the corporation, the Board of Directors may, in addition to considering the effects of any action on shareholders, consider any of the following: (a) the effects of the proposed action on the corporation's employees, suppliers, creditors and customers, (b) the effects on the community in which the corporation operates and (c) the long-term as well as short-term interests of the corporation and its shareholders, including the possibility that these interests may best be served by the continued independence of the corporation. The statute further provides that if, based on these factors, the Board of Directors determines that any such offer is not in the best interest of the corporation, it may reject the offer. These provisions may make it more difficult for a shareholder to challenge the Board of Directors' rejection of, and may facilitate the Board of Directors' rejection of, an offer to acquire the Company.

The Company is also subject to the Protection Act, which prohibits certain New Jersey corporations such as the Company from engaging in business combinations (including mergers, consolidations, significant asset dispositions and certain stock issuances) with any Interested Shareholder (defined to include, among others, any person that after the Offering becomes a beneficial owner of 10% or more of the affected corporation's voting power) for five years after such person becomes an Interested Shareholder, unless the business combination is approved by the Board of Directors prior to the date the shareholder became an Interested Shareholder. In addition, the Protection Act prohibits any business combination at any time with an Interested Shareholder other than a transaction that (i) is approved by the Board of Directors prior to the date the Interested Shareholder became an Interested Shareholder, or (ii) is approved by the affirmative vote of the holders of two-thirds of the voting stock not beneficially owned by the Interested Shareholder, or (iii) satisfies certain "fair price" and related criteria. The New Jersey Act does not apply to certain business combinations, including those with persons who acquired 10% or more of the voting power of the corporation prior to the time the corporation was required to file periodic reports pursuant to the Exchange Act, or prior to the time the corporation's securities began to trade on a national securities exchange.

REGISTRATION RIGHTS

Following the closing of the Offering, persons who hold warrants to purchase 3,556,274 shares of Common Stock (herein, the "Holders") will be entitled to certain rights with respect to the registration of such shares under the Securities Act. Pursuant to terms of registration rights agreements between the Company and the Holders, the Holders have the right on written notice given by a majority of the Holders, to require the Company, on only one occasion, to file a registration statement under the Securities Act in order to register all or any part of their shares of Common Stock. The Company may in certain circumstances defer such registrations, and the underwriters have the right, subject to certain limitations, to limit the number of shares included in such registrations.

In the event that the Company proposes to register any of its securities under the Securities Act, either for its own account or the account of other security holders, the Holders are also entitled to include their shares of Common Stock in such registration, subject to certain marketing and other limitations. Generally, the Company is required to bear the expense of all such registrations.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Stock is American Stock Transfer & Trust Company.

SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of the Offering, the Company will have outstanding 5,494,461 shares of Common Stock assuming no exercise of outstanding options or warrants. Of these shares, 2,500,000 shares sold in the Offering (plus any shares issued upon exercise of the Underwriters' overallotment options) will be freely tradeable without restriction under the Securities Act, unless purchased by "affiliates" of the Company. As defined in Rule 144, an "affiliate" of an issuer is a person that directly or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with such issuer. The remaining 2,994,461 shares of Common Stock outstanding will be "restricted securities" within the meaning of Rule 144 under the Securities Act ("Restricted Shares"). Restricted Shares may not be sold in the absence of registration under the Securities Act unless an exemption from registration is available, including the exemptions contained in Rule 144. Sales of the Restricted Shares in the public market, or the availability of such shares for sale, could adversely affect the market price of the Common Stock.

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated), including an "affiliate," who has paid for shares is entitled, beginning two years from the later of the date of acquisition of the shares from the Company or from an affiliate of the Company, to sell within any three-month period up to that number of shares that does not exceed the greater of (i) one percent of the shares outstanding, as shown by the most recent report or statement published by the Company, or (ii) the average weekly reported volume of trading in the shares during the four calendar weeks preceding the date on which notice of sale is filed with the Commission. A person (or persons whose shares are aggregated) who is not deemed an affiliate of the Company, who has not been an affiliate within three months prior to the sale and who has paid for his shares is entitled, beginning three years from the later of the date of the acquisition from the Company or from an affiliate of the Company, to sell such shares under Rule 144(k) without regard to the volume limitations described above. Affiliates continue to be subject to such volume limitations after the three-year holding period.

On May 1, 1996, the Company issued warrants to purchase 2,330,784 shares of Common Stock. The exercise price of the warrants sold in May 1996 is \$4.08 per share. The Company has entered into a Registration Rights Agreement in connection with the issuance of such warrants. If such registration rights are exercised, the shares covered thereunder can be sold in the open market. On September 1, 1996, the Company issued warrants to purchase 245,098 shares of Common Stock to JLMP. The exercise price of the warrants sold in September is \$10.20 per share. On December 20, 1996, the Company issued warrants to purchase 980,392 shares of Common Stock to JLMP. The exercise price of the warrants issued in December is \$10.20 per share. These warrants are first exercisable on July 1, 1997. In connection with the issuance of the warrants in September and December, 1996, the Company has entered into a registration rights agreement similar to the Registration Rights Agreement. See "Description of Capital Stock --Warrants" and "-- Registration Rights."

The Company, executive officers and directors of the Company and certain shareholders of the Company have agreed that they will not sell any shares of Common Stock (other than by operation of law or pursuant to bona fide gifts or other transactions not involving a public distribution to a person or other entity who agrees in writing not to so sell) for a period of 180 days after the date of the final Prospectus (the "lock-up period") without the written consent of Donaldson, Lufkin & Jenrette Securities Corporation. Upon expiration of the lock-up period, or earlier upon the consent of Donaldson, Lufkin & Jenrette Securities Corporation, 777,657 shares will become eligible for sale without restriction under Rule 144(k),

and an additional 2,216,804 shares will become eligible for sale subject to the restrictions of Rule 144.

Any employee or director of or consultant to the Company who has been granted options to purchase shares or who has purchased shares pursuant to a written compensatory plan or written contract prior to the effective date of this Offering pursuant to Rule 701 will be entitled to rely on the resale provisions of Rule 701, which permits non-affiliates to sell their Rule 701 shares without having to comply with the public information, holding-period, volume-limitation or notice provisions of Rule 144 and permits affiliates to sell their Rule 701 shares without having to comply with the Rule 144 holding period restrictions, in each case commencing 90 days after the date of this Prospectus.

Following the Offering, the Company intends to file a registration statement under the Securities Act to register shares of Common Stock issuable upon the exercise of stock options granted under the Plan. Shares issued upon the exercise of stock options after the effective date of such registration statement generally will be available for sale in the open market. Immediately following the completion of the Offering, the Company estimates that there will be 437,546 shares issuable upon the exercise of options outstanding under the Plan and 209,013 shares of Common Stock reserved for future grants of options.

The Company is unable to estimate the number of shares that may be sold under Rule 144 or otherwise because this will depend on the market price for the Common Stock of the Company, the individual circumstances of the sellers and other factors. Prior to the Offering, there has been no public market for the Common Stock. Future sales of shares of Common Stock, or the availability for sale of substantial amounts of Common Stock, or the perception that such sales could occur, could adversely affect prevailing market prices for the Common Stock and could impair the Company's future ability to raise capital through an offering of its equity securities.

UNDERWRITING

Subject to the terms and conditions set forth in an underwriting agreement (the "Underwriting Agreement") the Underwriters named below, for whom Donaldson, Lufkin & Jenrette Securities Corporation and Needham & Company, Inc. are acting as representatives (the "Representatives") have severally agreed to purchase from the Company 2,500,000 shares of Common Stock. The number of shares of Common Stock that each underwriter has agreed to purchase is set forth opposite its name below:

NAME	NUMBER OF SHARES
Donaldson, Lufkin & Jenre	
Securities Corporation . Needham & Company, Inc	

The Underwriting Agreement provides that the obligation of the several Underwriters to purchase all of the shares of Common Stock is subject to the approval of certain legal matters by counsel and as to certain other conditions. If any of the shares of Common Stock are purchased pursuant to the Underwriting Agreement, all such shares of Common Stock (other than the over-allotment option described below) must be so purchased.

Prior to the Offering, there has been no established trading market for the Common Stock. The initial price to the public for the Common Stock offered hereby has been determined by negotiations between the Company and the Representatives. The factors considered in determining the initial price to the public include the history of and the prospects for the industry in which the Company competes, the ability of the Company's management, the past and present future earnings of the Company, the historical results of operations of the Company, the prospects for future earnings of the Company, the general condition of the securities markets at the time of this Offering and the recent market prices of generally comparable companies.

The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the Underwriters may be required to make in respect thereof.

The Company has been advised by the Representatives that the Underwriters propose to offer the shares of Common Stock to the public initially at the public offering price set forth on the cover page of this Prospectus, and to certain securities dealers (who may include the Underwriters) at such price less a concession not in excess of \$___ per share. The Underwriters may allow, and such dealers may re-allow, discounts not in excess of \$___ per share to any other Underwriter and certain other dealers.

The Company has granted to the Underwriters an option to purchase up to an aggregate of 375,000 additional shares of Common Stock at the initial public offering price less the underwriting discounts and commissions solely to cover over-allotments. Such option may be exercised at anytime until 30 days after the date of this Prospectus. To the extent that the Underwriters exercise such options, each of the Underwriters will be committed, subject to certain conditions, to purchase a number of option shares proportionate to such Underwriter's initial commitment as indicated in the preceding table.

The Company, all directors and executive officers of the Company and certain shareholders, have agreed that, without the prior written consent

of Donaldson, Lufkin & Jenrette Securities Corporation, they will not, directly or indirectly, offer, sell, contract to sell, grant any option to purchase or otherwise dispose of any share of Common Stock or any securities convertible into or exercisable for such Common Stock, or in any other manner transfer all or a portion of the economic consequence associated with ownership of such Common Stock, except to the Underwriters pursuant to the Underwriting Agreement, for a period of 180 days after the date of this Prospectus.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by White & Case, New York, New York, who may rely upon Dillon, Bitar & Luther, New Jersey counsel for the Company as to matters of New Jersey law. Certain legal matters in connection with the Offering will be passed upon for the Underwriters by Brobeck, Phleger & Harrison LLP, New York, New York.

EXPERTS

The balance sheets as of September 30, 1996 and 1995, and the statements of operations, shareholders' (deficit) equity and cash flow for the three years in the period ended September 30, 1996, included in this Registration Statement, have been included herein in reliance on the report of Coopers & Lybrand L.L.P., independent accountants, given on the authority of that firm as experts in accounting and auditing.

The statements in this Prospectus set forth under the captions "Risk Factors - Risks From Reliance on Trade Secrets; No Assurance of Continued Intellectual Property Protections," " - Risks Arising From Reversal of Declaratory Judgment in Rockwell Patent Litigation" and "Business - Intellectual Property" have been reviewed and approved by Lerner David Littenberg Krumholz & Mentlik, Westfield, New Jersey, patent counsel for the Company, as experts on such matters, and are included herein in reliance upon such review and approval.

ADDITIONAL INFORMATION

The Company has filed with the Commission a Registration Statement on Form S-1 under the Securities Act with respect to the Common Stock offered This Prospectus does not contain all the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and such Common Stock, reference is made to the Registration Statement and the exhibits and schedules filed as part thereof. Statements contained in this Prospectus as to the contents of any contract or other document referred to are materially complete, and, in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement. The Registration Statement, including exhibits and schedules thereto, may be inspected without charge at the Commission's principal office, the Public Reference Room of the Securities and Exchange Commission, Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at regional offices of the Commission at Seven World Trade Center, 13th Floor, New York, New York 10048 and Northwestern Atrium Center, Suite 1400, 500 West Madison Street, Chicago, Illinois 60661. Copies of all or any part thereof may be obtained from the Commission at its principal office in Washington, D.C. and its public reference facilities in Chicago, Illinois and New York, New York after payment of fees prescribed by the Commission.

The Company intends to furnish to its shareholders annual reports containing consolidated financial statements audited by its independent public accountants, and quarterly reports containing unaudited consolidated financial statements for the first three quarters of each fiscal year.

Upon completion of the Offering, the Company shall be subject to the informational requirements of the Exchange Act, and in accordance therewith will file reports and other information with the Securities and Exchange Commission. Such reports, proxy and information statements and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission in Washington, D.C., and at its regional offices set forth above, and copies of such material can be obtained from the Public Reference Section of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The Commission maintains a Web site that contains reports, proxy and information statements and other information regarding the Company and other registrants that file electronically with the Commission. The address of such site is: http://www.sec.gov.

EMCORE CORPORATION

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To the Board of Directors and Shareholders of ${\tt EMCORE}$ Corporation:

We have audited the accompanying balance sheets of EMCORE Corporation (the "Company") as of September 30, 1996 and 1995, the related statements of operations, shareholders' equity (deficit) and cash flows for each of the three years in the period ended September 30, 1996. We have also audited the financial statement schedule listed in Item 16(b). These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and the financial statement schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of EMCORE Corporation as of September 30, 1996 and 1995, and the consolidated results of its operations and its cash flows for each of the three years in the period ended September 30, 1996, in conformity with generally accepted accounting principles. In addition, in our opinion, the financial statement schedule taken as a whole, presents fairly, in all material respects, the information required to be included therein.

COOPERS & LYBRAND L.L.P.

Parsippany, New Jersey November 1, 1996, except for Notes 13 and 15 as to which the date is December 6, 1996 and Note 16 as to which the date is February 3, 1997

EMCORE CORPORATION BALANCE SHEETS

ASSETS					AS OF DECEMBER 31		
		AS 0F 1995		SEPTEMBER 30, 1996		(unaudited) 1996	
Current assets:							
Cash and cash equivalents Accounts receivable, net of allowance for doubtful accounts of approximately \$164,000, \$310,000 and \$370,000 at September 30, 1995 and 1996 and December 31, 1996,	\$	2,322,896	\$	1,367,386	\$	1,901,453	
respectively		2,129,633		3,025,171		6,626,935	
Inventories, net		3,339,474		7,645,040		9,306,869	
uncompleted contracts		16,440		19,322		57,247	
assets		33,151		59,935		42,908	
Total current assets		7,841,594		12,116,854		17,935,412	
Property and equipment, net		2,120,784		7,796,832		7,940,354	
Other assets, net		180,365		520,735		3,407,609	
Total assets	\$	10,142,743	\$	20,434,421	\$	29, 283, 375	

Current liabilities:	AS 01 1995	F SEPTEMBER 30, 1996	AS OF DECEMBER 31, (UNAUDITED) 1996
Accounts payable	\$ 1,934,360 1,208,747 2,183,795 306,359		2,255,952
Total current liabilities	5,633,261	10,965,861	19,896,901
Long-term debt: Subordinated notes, net Convertible notes payable	3,000,000	8,946,971 -	9,062,957
Commitments and contingencies			
Shareholders' equity:			
Common stock, no par value; authorized shares - 23,529,411; issued and outstanding shares 2,994,461 at September 30, 1995 and 1996 and December 31, 1996	16,637,566	18,977,566	22,577,566
Accumulated deficit	(14,981,977)	(18, 158, 291)	(21,956,363)
	1,655,589	819,275	621,203
Notes receivable from warrant issuances and stock sales	(146,107)	(297,686)	(297,686)
Total shareholders' equity	1,509,482	521,589	323,517
Total liabilities and shareholders' equity	\$ 10,142,743	\$ 20,434,421	\$ 29,283,375

EMCORE CORPORATION STATEMENTS OF OPERATIONS

YEARS ENDED SEPTEMBER 30, 1994 1995 1996

Revenues:			
Systems and materials \$	7,352,813	\$ 16,616,236 \$	24,066,506
Gyocomo and maco. 2020	.,002,020	ψ 13/313/133 ψ	2.,000,000
Services	1,685,388	1,520,431	3,712,379
Total revenues	9,038,201	18,136,667	27,778,885
Cost of Sales:			
Systems and materials	3,793,042	8,782,674	16,132,335
Services	1,419,880	1,144,297	2,474,085
	, ,	, ,	, ,
Total cost of sales	5,212,922	9,926,971	18,606,420
Gross profit	3,825,279	8,209,696	9,172,465
Operating expenses:			
Selling, general and administrative	2,697,172 1,064,149	4,451,534 1,851,798	6,524,482 5,401,413
transactions	(51,846)	-	-
Operating income (loss) .	115,804	1,906,364	(2,753,430)

Other expense:

Interest expense Stated interest, net of interest income of \$12,468, \$84,101 and \$71,460 for the years ended September 30, 1994, 1995 and 1996 and \$21,555 and \$657 for the periods ended December 31, 1995 and 1996, 285,613 255,384 297,093 non-cash 125,791 10,000 (Loss) income before income taxes . . . (169,809)1,640,980 (3, 176, 314)Provision for income taxes 125,000 Net (loss) income \$ (169,809) 1,515,980 \$ (3,176,314) Per share data: Shares used in computation of net 4,402,907 4,649,648 \$ 4,438,403 (.04) .33 \$ (.72)

PERIOD ENDED DECEMBER 31, (UNAUDITED) 1995 1996

RA	/en	HE	c.

Systems and materials	\$ 3,690,403	\$	8,539,477
Services	565,039		51,879
Total revenues	4, 255, 442		8,591,356
Cost of Sales:			
Systems and materials	2,379,620		6,716,547
Services	402,669		7,271
Total cost of sales	2,782,289		6,723,818
Gross profit	1,473,153		1,867,538
Operating expenses:			
Selling, general and administrative	1,511,124 792,727		2,202,742 2,250,221
Operating income (loss)	(830,698)	(2,585,425)

Other expense:

Interest expense Stated interest, net of interest income of \$12,468, \$84,101 and \$71,460 for the years ended September 30, 1994, 1995 and 1996 and \$21,555 and \$657 for the periods ended becember 31, 1995		
and 1996, respectively	39,345	196,660
Imputed warrant interest, non- cash	-	1,015,987
Other	-	-
(Loss) income before income taxes .	(870,043)	(3,798,072)
Provision for income taxes	15,000	-
Net (loss) income	(885,043)	(3,798,072)
Shares used in computation of net income (loss)		4,438,403 \$ (.86)

EMCORE CORPORATION STATEMENTS OF SHAREHOLDERS' (DEFICIT) EQUITY As of September 30, 1994, 1995, 1996 and December 31, 1996 (unaudited)

	Common	Stock	Class	Class I Preferred S		
	Shares	Amount	Shares	Amount	Discount	
BALANCE AT SEPTEMBER 30, 1993	58,364	\$ 301,924	693,900	\$ 1,235,142	\$ (934,454)	
Notes receivable due from shareholders in connection with issuance of 146,107 shares of Class IV redeemable, convertible preferred stock						
BALANCE AT SEPTEMBER 30, 1994	58,364	301,924	693,900	1,235,142	(934,454)	
Warrants exercised and conversions	30,586	92,554	528,450			
November 1994 preferred stock conversions into common stock and retirement of preferred treasury shares	149,572 2,755,939	15,350,689 892,399	1,222,350	(1, 235, 142)	934, 454	
Net income						

BALANCE AT SEPTEMBER 30, 1995 Issuance of common stock purchase warrants	2,994,461	16,637,566 2,340,000		
Notes receivable due from shareholders in connection with issuance of detachable warrants				
Net loss	2,994,461	\$18,977,566	\$	\$
Issuance of common stock purchase warrants Net loss		3,600,000		
BALANCE AT DECEMBER 31, 1996	10,181,168	\$22,577,566	\$	\$

	Accumulated Deficit	Treasury Stock	Shareholders' Notes Receivable	Total Shareholders' Equity (Deficit)
BALANCE AT SEPTEMBER 30, 1993	\$(15,087,291)	\$ (28,104)		\$(14,512,783)
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share Notes receivable due from shareholders in connection with issuance of 146,107 shares of Class IV	(1,240,857)			(1,240,857)
redeemable, convertible preferred stock			\$(146,107)	(146,107)
Net loss	(169,809)			(169,809)
BALANCE AT SEPTEMBER 30, 1994	(16,497,957)	(28,104)	(146,107)	(16,069,556)
Warrants exercised and conversions				92,554
Repurchase of Class I Preferred Stock November 1994 preferred stock conversions into common stock and retirement of preferred treasury		(12,645)		(12,645)
shares		40,749		15,090,750
August 1995 conversion of Class A preferred stock into common stock	1,515,980			892,399 1,515,980

BALANCE AT SEPTEMBER 30, 1995	(14,981,977)	-	(146,107)	1,509,482	
Issuance of common stock purchase warrants				2,340,000	
Notes receivable due from shareholders in connection with issuance of detachable warrants	(3,176,314)		(151,579)	(151,579) (3,176,314)	
BALANCE AT SEPTEMBER 30, 1996 Issuance of common stock purchase warrants	\$(18,158,291)	\$	\$(297,686)	\$ 521,589 3,600,000	
Net loss	(3,798,072)			\$(3,798,072)	
BALANCE AT DECEMBER 31, 1996	\$(21,956,363)	\$	\$(297,686)	\$(323,517)	

EMCORE CORPORATION STATEMENTS OF CASH FLOWS

YEARS ENDED SEPTEMBER 30,

	1994	1995	1996
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net (loss) income	\$ (169,809)	\$ 1,515,980	\$ (3,176,314)
Adjustments to reconcile net (loss) income to net cash provided by (used for) operating activities:			
Depreciation and amortization Provision for doubtful accounts . Provision for inventory valuation Detachable warrant accretion Amortization of deferred gain on sale/leaseback transactions	599,114 22,101 24,849 - (51,846)	887,132 95,430 15,379	1,871,016 146,418 105,000 125,792
CHANGE IN ASSETS AND LIABILITIES:			
Accounts receivable	(1,041,443) (256,427)	(353,895) (2,209,540)	(1,041,956) (4,410,566)
uncompleted contracts	25,876	17,282	(2,882)
current assets	(2,319) (74,333) 408,039 82,617 1,006,984	(18,858) (8,988) 1,100,338 538,719 1,176,831	(26,784) (468,565) 3,398,078 777,899 1,122,667
on uncompleted contracts Unearned service revenue Total adjustments	- - 743,212	306,359 - 1,546,189	(306,359) 12,315 1,302,073
Net cash and cash equivalents provided by (used for) operating activities	573,403	3,062,169	(1,874,241)

CASH FLOWS FROM INVESTING ACTIVITIES:

Purchase of property and equipment		(1,153,722)	(1,316,968)		(7,090,869)
Net cash and cash equivalents used for investing activities		(1,153,722)	(1,316,968)		(7,090,869)
Proceeds from demand note facility		-	-		-
note issuance		-	-		11,009,600
purchase warrants		-	102,554 (12,645)		-
Preferred Stock		61,583	-		
Payments on long-term debt and capital lease obligations		(94,287)	-		(3,000,000)
Proceeds from 7.5% convertible notes payable		1,000,000	-		-
		967,296	89,909		8,009,600
Net increase (decrease) in cash and cash equivalents		386,977	1,835,110		(955,510)
Cash and cash equivalents at beginning of period		100,809	487,786		2,322,896
Cash and cash equivalents at end of period	\$	487,786	\$ 2,322,896	\$	1,367,386
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:					
Cash paid for interest	\$ \$	170,174	\$ 285,413	\$	276,012 55,000
Non-cash expenditures for purchases of property and equipment included in accounts payable	\$			\$	229 000
		-	-	Þ	328,000

(UNAUDITED) PERIOD ENDED DECEMBER 31, 1995 1996

CASH FLOWS FROM OPERATING ACTIVITIES:		
Net (loss) income	\$ (885,043)	\$(3,798,072)
Adjustments to reconcile net (loss) income to net cash provided by (used for) operating activities:		
Depreciation and amortization Provision for doubtful accounts Provision for inventory valuation Detachable warrant accretion Amortization of deferred gain on sale/leaseback transactions	314,927 18,000 9,000 -	1,017,060 60,000 60,000 1,015,987
CHANGE IN ASSETS AND LIABILITIES:		
Accounts receivable	(1,204,874) (1,533,787)	. , , ,
contracts	(29,013)	(37,925)
current assets	7,220 (80) 1,659,614 201,311 2,667,185	17,027 (191,584) 1,054,632 269,306 1,609,417
Billings in excess of costs on uncompleted contracts Unearned service revenue	- - 2,109,503	(12,315) (521,988)
Net cash and cash equivalents provided by (used for) operating activities	1,224,460	(4,320,060)

The accompanying notes are an integral part of these financial statements $% \left(1\right) =\left(1\right) \left(1\right)$

CASH FLOWS FROM INVESTING ACTIVITIES:

Purchase of property and equipment	(2,044,216)	(1,145,873)
Net cash and cash equivalents used for investing activities	(2,044,216)	(1,145,873)
Proceeds from demand note facility Proceeds from subordinated note issuance Proceeds from the exercise of stock purchase	-	6,000,000
warrants	-	-
Stock	-	-
Net cash and cash equivalents provided by financing activities	-	6,000,000
equivalents	(819,756) 2,322,896 \$ 1,503,140	534,067 1,367,386 \$ 1,901,453
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid for interest	\$ 14,499 -	\$ 280,000
equipment included in accounts payable Reference is made to Note 11 - Preferred Stock - for disclosure relating to certain non-cash equity transactions	-	338,000

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. The Company offers its customers a complete, vertically-integrated solution for the design, development and production of compound semiconductor wafers and devices.

For the year ended September 30, 1996, the Company generated an operating loss and a negative cash flow from operations. The Company's operations are subject to a number of risks, including but not limited to a history of losses, future capital needs, dependence on key personnel, competition and risk of technological obsolescence, governmental regulations and approvals and limited compound semiconductor manufacturing and marketing capabilities. The Company's operations for the year ended September 30, 1996, were primarily funded through two subordinated debt issuances completed in May and September of 1996, amounting to \$8.5 million and \$2.5 million, respectively, of cash proceeds (see Note 8). A portion of the proceeds was used to extinguish \$3 million of debt due under a convertible debt agreement. The Company's operating and financing plans include, among other things, (i) attempting to improve operating cash flow through increased sales of compound semiconductor systems, wafers and package-ready devices, (ii) managing its cost structure to its anticipated level of revenues and (iii) seeking equity and debt financing sufficient to meet its obligations on a long-term basis in order to fund its business expansion plans. On October 25, 1996, the Company entered into a \$10.0 million demand note facility to finance its operating and capital requirements.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Interim Financial Information. The financial information as of December 31, 1996 and for the three-month periods ended December 31, 1995 and 1996 is unaudited but includes all adhustments (consisting only of normal recurring accruals) that the Company considers necessary for a fair presentation of the the financial position at such date and the operating results and cash flows for those periods. Operating results for the three months ended December 31, 1996 are not necessarily indicative of the results that may be expected for the entire year.

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 \$1,205,000 and \$106,000 in cash equivalents at September 30, 1995 and 1996, respectively.

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

Property and Equipment. Property and equipment are stated at cost. Significant renewals and betterments are capitalized. Maintenance and repairs which do not extend the useful lives of the respective assets are expensed.

Depreciation is recorded using the straight line method over the estimated useful lives of the applicable assets, which range from three to five years. Leasehold improvements are amortized using the straight-line method over the term of the related leases or the estimated useful lives of the improvements, whichever is less.

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.

In the event that facts and circumstance indicate that the value of assets may be impaired an evaluation of recoverability is performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset would be compared to the assets carrying amount to determine if an adjustment to the carrying amount is required.

Deferred Costs. Included in other assets are deferred costs related to obtaining product patents and long-term debt refinancing. Such costs are being amortized over a three to five year period, respectively. Amortization expense amounted to approximately \$56,000, \$58,000 and \$128,000 for the years ended September 30, 1994, 1995 and 1996, respectively.

As of December 31, 1996 deferred cost also included \$2,700,000 associated with the warrants issued in connection with the guarantee of the October demand note facility (See Note 8). It is the Company's intention to pay down its outstanding notes and to terminate the demand note facility upon the closing of the initial public offering. Therefore, the Company is amortizing such debt issuance costs over the estimated period that the facility will be in place (approximately four months) from December 6, 1996, the date the Company's Board of Directors approved the issuance of the warrants and instructed management that the facility could be utilized. Amortization expense for the quarter ending December 31, 1996 was \$900,000, which was reflected as interest expense.

Income Taxes. During fiscal 1994, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes." SFAS No. 109 required a change from the deferred method to the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. Under SFAS No. 109, the effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Under the deferred method, deferred taxes were recognized at the tax rate applicable to the year in which the difference between financial statement carrying amounts and the corresponding tax bases arose.

Revenue and Cost Recognition.

Systems, Components and Service Revenues

Revenue from systems sales is recorded by 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 recorded.

Component sales and service revenues are recognized when goods are shipped or services are rendered to the customer. Service revenue under contracts with specified service terms is recognized as earned over the service period in accordance with the terms of the applicable contract. Costs in connection with the procurement of the contracts are charged to

expense as incurred.

Contract Revenue

The Company's research contracts require the development or evaluation of new material 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 \$1,295,000, \$1,321,000, \$3,295,000 for the years ended September 30, 1994, 1995 and 1996, 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.

Fair Value of Financial Instruments. The Company has estimated fair value based upon discounted cash flow analyses using the Company's incremental borrowing rate on similar instruments as the discount rate. As of September 30, 1996, the carrying values of the Company's cash and cash equivalents, receivables and accounts payable recorded on the accompanying balance sheets approximate fair value. As of September 30, 1996, the fair value of the Company's subordinated debt exceeded the carrying value by approximately \$387,000.

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 accounts receivable and inventory valuation reserves, warranty and installation reserves, estimates of cost and related gross profits on certain research contracts and the valuation of long-lived assets.

NET (LOSS) INCOME PER SHARE

Net (loss) income per share data included in accompanying statement of operations was calculated pursuant to the Securities and Exchange Commission Staff Accounting Bulletin No. 64 ("SAB No. 64"). Under the provisions of SAB No. 64, common stock and common equivalent shares issued by the Company at prices below the initial public offering price within one year or in contemplation of the Company's offering are treated as if they were outstanding for all periods presented (using the treasury stock method). Accordingly, the weighted average number of shares outstanding has been increased by 1,443,936 equivalent shares, reflecting the common stock purchase warrants and stock options issued during the twelve months

preceding the filing date of the registration statement relating to the Company's initial public offering. The preferred stock restructuring activities described in Note 11 have been treated as a recapitalization for purposes of calculating earnings per share.

The historic per share data, in the following table, has been computed based on the income or loss for the period divided by the weighted average number of shares of common stock outstanding. The weighted average number of shares outstanding excludes the number of common shares issuable upon the exercise of outstanding stock options and warrants since such inclusion would be anti-dilutive.

								•	DITED)	
	1	YEARS 994		D SEPTEMBE 1995		, 1996		ERIOD ENDIN 1995		3ER 31, 996
Weighted average number of common shares outstanding	2,	958,970	3	,205,711	2	,994,461	2,	944,461	2	2,944,461
Net income (loss) per share	\$	(.06)	\$. 47	\$	(1.06)	\$	(.30)	\$	(1.27)

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

New Accounting Standards. In March 1995, the Financial Accounting Standards Board ("FASB") issued SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS No. 121"). This pronouncement establishes accounting standards for when impairment losses relating to long-lived assets, identifiable intangibles and goodwill related to those assets should be recognized and how the losses should be measured. The Company plans to implement SFAS No. 121 in fiscal 1997. The adoption of SFAS No. 121 is not expected to have an impact on the Company's financial position or results of operations since Emcore's current policy is to monitor assets for impairment and record any necessary write-downs.

In October 1995, the FASB issued SFAS No. 123 "Accounting for Stock Based Compensation" ("SFAS No. 123"). The provision of SFAS No. 123 sets forth the method of accounting for stock based compensation based on the fair value of stock options and similar instruments, but does not require the adoption of this preferred method. SFAS No. 123 also requires the disclosure of additional information about stock compensation plans, even if the preferred method of accounting is not adopted. The Company plans to implement SFAS No. 123 in fiscal 1997. The Company does not intend to change its method of accounting for stock based compensation to the preferred method under SFAS No. 123, but instead will continue to apply the provisions of No. 25 "Accounting for Stock Issued to Employees." However, the Company will disclose the pro forma effect of SFAS No. 123 on net income and earnings per share.

NOTE 3. CONCENTRATION OF CREDIT RISK

The Company sells its compound semiconductor systems domestically and internationally. The Company also sells wafers and package-ready devices in the U.S. The Company's international sales are generally made under letter of credit arrangements.

For the years ended September 30, 1994, 1995 and 1996, the Company sold 59%, 36%, and 43% of its products to foreign customers, respectively.

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

	AS OF SEPTEMBER 30,
	1994 1995 1996
Customer A	\$ - \$ 5,238,620 \$6,558,930
Customer B	1,870,871 887,390 2,075,722
Customer C	- 1,036,000 1,530,000
Customer D	749,000 2,092,986 -
Total	\$ 2,619,871 \$ 9,254,996 \$ 10,164,652

The Company's 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 specific customers, historical trends and other information. To reduce credit risk, and to fund manufacturing costs, the Company requires periodic prepayments on equipment orders. Credit losses have generally not exceeded the Company's expectations.

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

NOTE 4. INVENTORIES

The components of inventories consisted of the following:

	AS OF SEPTEMBER 30,			OF DECEMBER 31, NAUDITED)
	1995		1996	1996
Raw materials	\$ 2,330,991	\$	4,964,917	\$ 4,978,786
Work-in-progress	646,696		2,680,123	4,328,083
Finished goods	361,787			
	\$ 3,339,474	\$	7,645,040	\$ 9,306,869

NOTE 5. PROPERTY AND EQUIPMENT

Major classes of property and equipment are summarized below:

	AS OF SEPTEMBER 30,			AS OF DECEMBER 31, (UNAUDITED)
	1995		1996	1996
Equipment	\$ 6,617,014	\$	11,748,577	\$ 12,661,667
Furniture and fixtures	904,326		1,650,488	1,859,317
Leasehold improvements	605,890		2,147,034	2,180,987
Less: accumulated depreciation and amortization	8,127,230 (6,006,446)		15,546,099 (7,749,267)	16,701,971 (8,761,617)
	\$ 2,120,784	\$	7,796,832	\$ 7,940,354

The provisions for depreciation and amortization amounted to approximately \$543,000, \$829,000 and \$1,743,000 for the years ended September 30, 1994, 1995 and 1996, respectively and \$300,270 and \$1,012,350 for the three-month periods ended December 31, 1995 and 1996, respectively.

Included in equipment above are twelve systems, ten systems and eight systems with a combined net book value of approximately \$1,220,000, \$2,124,000 and \$2,792,000 at September 30, 1995 and 1996 and December 31, 1996, respectively. Such systems are utilized for systems demonstration purposes, in-house materials applications research, contract research funded by third parties, system sales support and the production of compound semiconductor wafers and package-ready devices for sale to third parties.

NOTE 6. COSTS AND BILLINGS ON UNCOMPLETED CONTRACTS

Costs incurred and billings on uncompleted contracts are summarized below:

	AS OF SEPTE 1995	MBER 30,	1996
Costs incurred on uncompleted contracts	\$ 178,081	\$	19,322
Billings applicable to uncompleted contracts	\$ (468,000) (289,919)	\$	- 19,322
The uncompleted contract costs and billings are classified in the accompanying balance sheets under the following captions:			
Costs in excess of billings on uncompleted contracts	\$ 16,440	\$	19,322
Billings in excess of costs on uncompleted contracts	(306,359)		-
	\$ (289,919)	\$	19,322

Accrued expenses consisted of the following:

		SEPTE	•	(UNAUDITED) AS OF DECEMBER 31,				
	1995		1996		1996			
Accrued payroll, vacation and other								
employee expenses Installation and	\$ 476,505	\$	990,538	\$	1,192,898			
warranty costs	389,676		562,231		747,472			
Interest	177,048		269,315		156,835			
Other	165,518		164,562		158,747			
	\$ 1,208,747	\$	1,986,646	\$	2,255,952			

NOTE 8. LONG-TERM DEBT

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, have a stated interest rate of 6.0% which is payable semi-annually on May 1 and November 1. In addition, the noteholders were issued 2,328,432 common stock purchase warrants with an exercise price of \$4.08 per share which expire on May 1, 2001. The warrants are exercisable after November 1, 1996 and are callable at the Company's option, after May 1, 1997, at \$0.85 per warrant. The Company has the legal right of offset with respect to the note 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 in the contra equity note receivable account, representing the portion of the employee note receivable associated with common stock purchase warrants issued to them. 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 majority shareholder with terms identical to the Subordinated Notes issued on May 1, 1996. In addition, under the terms of this offering, 245,098 common stock purchase warrants were issued to purchase common stock at \$10.20 per share 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 the Black-Scholes Option Pricing Model, incorporating such factors including the terms of the warrants, the underlying asset price, volatility and marketability. In addition, the Company compared the resulting effective interest rate to those which could be obtained from third-party creditors. 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.

A portion of the proceeds from the May 1, 1996 Subordinated Notes issuance was used to extinguish \$3,000,000 of debt due to Hakuto & Co. Ltd. ("Hakuto"), the Company's Asian distributor, under a convertible debt agreement (the "Agreement") scheduled to expire on June 2, 1998. Under the June 2, 1993 Agreement, the Company was permitted to borrow up to \$3,000,000 at an interest rate of 7.5%. As of September 30, 1995, the entire \$3,000,000 was outstanding.

In connection with the Agreement, the Company issued 10,000 warrants to Hakuto to purchase shares of the Company's Class IV Preferred Stock at \$1.00 per share (See Note 11). The warrants were exercised on January 1, 1995

Under the Agreement, the \$3,000,000 of debt was convertible into preferred stock subject to the Company authorizing a new Class V series of preferred stock prior to March 31, 1998. The debt was convertible in \$1,000,000 increments at a conversion rate of \$2.50 per share of Class V Preferred Stock. In addition, Hakuto had certain rights of first refusal, with respect to the purchase of the Company through June 2, 1998, and the distribution of the Company's products in Asia, excluding Taiwan and Korea.

The Agreement was collateralized by all the Company's assets. The New Jersey Economic Development Authority ("NJEDA") had guaranteed 90% of the Company's obligation pertaining to \$1,000,000 of its outstanding debt. Under the terms of the Agreement, the Company was required to repay \$1,000,000 of the debt upon expiration of the NJEDA guarantee. The NJEDA guarantee expired on August 31, 1995, however, the lender permanently waived the \$1,000,000 repayment requirement through the expiration date of the Agreement.

The Agreement contained certain covenants which included an employment agreement with the Company's Chief Executive Officer for a period of five years, and a personal guarantee from the Chief Executive Officer in the amount of \$100,000.

The Company had a \$250,000 revolving loan agreement (the "Revolving Loan") with the NJEDA which expired on February 14, 1996. The Revolving Loan provided for the advancement of funds upon the Company's receipt of an export sales contract and required repayment upon receipt of payment from such customer or one hundred twenty days from the date of the advance. The loan bore interest at a rate of the Federal Discount Rate (5.25% at September 30, 1995). The Revolving Loan was collateralized by applicable outstanding letters of credit. As of September 30, 1995, there were no amounts outstanding under this facility.

The Revolving Loan Agreement contained restrictive covenants which included among other restrictions, the Company could not issue any additional stock, declare dividends, purchase its own stock, transfer excess funds to an affiliated entity, borrow any funds or grant a collateral position without the expressed written consent of the NJEDA.

The Company did not obtain the required written consent of the NJEDA for the fiscal year 1995 capital restructuring activities as described in Note 11

On October 25, 1996, the Company entered into a \$10.0 million demand note facility (the "Facility"). The Facility bears interest at the rate of LIBOR plus 75 basis points, has a term of one year and is due and payable on demand. The Facility has been guaranteed by the Company's majority shareholder who has provided collateral for the Facility. In return for guaranteeing the facility, in December 1996 the Company granted the majority shareholder 980,392 common stock purchase warrants at \$10.20 per share which expire September 1, 2001. These warrants are exercisable after July 1, 1997 and are callable at the Company's option after December 1, 1997 at \$0.85 per warrant. As of December 31, 1996, the Company has utilized \$6.0 million of the Facility.

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 the Black-Scholes Option Pricing Model. This value has been accounted for as debt issuance cost and is reflected as a deferred cost in the accompanying December 31, 1996 balance sheet.

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.

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

Facility and equipment rent expense amounted to approximately \$298,000, \$292,000 and \$350,000 for the years ended September 30, 1994, 1995 and 1996, 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, 1996 are as follows:

PERIOD ENDING SEPTEMBER 30,	OPERATING
1997 1998 1999 2000	\$ 322,749 301,120 296,794 126,250
Total minimum lease payments	\$ 1,046,913

In November 1996, the Company signed an agreement to occupy the remaining 26,000 square feet that they previously had not occupied, which will increase the total future minimum lease payments over the remaining 4 years of the lease by approximately \$ 863,000.

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.

NOTE 10. INCOME TAXES

As described in Note 2, effective October 1, 1993, the Company adopted SFAS No. 109. The adoption of SFAS No. 109 did not have an impact on the financial position of the Company, as a full valuation allowance was provided against the net deferred tax asset position, as of the date of adoption, due to the uncertainty of the ultimate realization of such assets.

Income tax expense consists of the following:

Current:	1994	YEAR ENDED	SEPTEMBER 3 1995	0,	1996
Federal \$ State	-	\$	70,000 55,000	\$	- -
Deferred:					
Federal	-		-		-
Total	-	\$	125,000	\$	-

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

	YEAR ENDED SEPTEMBER 30,		
	1994	1995	1996
U.S. statutory income tax (benefit) expense rate	(34.0)%	34.0%	(34.0)%
Net operating loss carryforward		(45.4)	
Net operating loss not utilized Expenses not yet deductible for tax purposes	34.0	11.4	27.7 6.3
AMT and state taxes		7.6	
Effective tax rate	0.0%	7.6%	0.0%

		SEPTEMB 1995	ER 30,	1996
Deferred tax assets:				
Federal net operating				
loss carryforwards	\$	2,489,641	\$	3,283,003
Research credit carryforwards	•	237,177	-	264,966
Inventory reserves		77,313		142,593
Accounts receivable reserves		55,601		105,383
Interest payable		,		84,022
Accrued installation reserve		68,000		109,684
Accrued warranty reserve		57,721		81,475
State net operating		,		,
loss carryforwards		576,095		801,555
Other		85 ['] , 597		68,858
Valuation reserve - federal		(3,057,926)		(4,048,583)
Valuation reserve - state		(576,095)		(801,555)
Total deferred tax assets		13,124		91,401
Deferred tax liabilities:				
Fixed assets and intangibles		(13, 124)		(91,401)
Total deferred tax liabilities		(13, 124)		(91,401)
Net deferred taxes	\$	-	\$	- '

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

As of September 30, 1996, the Company has net operating loss carryforwards for regular tax purposes of approximately \$9,600,000 which expire in the years 2003 through 2011. The Company 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 ("IRC"). Due to the change in control, the Company's ability to use its net operating loss carryovers and research credit carryovers to offset future income and income taxes, respectively, are subject to substantial annual limitations under IRC Section 382 and 383.

NOTE 11. PREFERRED STOCK

Preferred Stock Restructuring Activities. In October 1994, the Company offered the holders of 1,399,333 Class III preferred stock purchase warrants the right to convert such warrants into 528,450 shares (representing a reduced ratio of 1 to .38) of the Company's Class I preferred stock. All the warrant holders exercised such rights. This transaction increased the outstanding number of Class I preferred stock to 1,222,350 shares.

In November 1994, in an effort to simplify its capital structure, the Company's Board of Directors and shareholders approved a capital restructuring plan (the "Plan"). Pursuant to this Plan, a newly formed and wholly-owned subsidiary of the Company was formed and merged with and into the Company. Under the Plan, shares of the Company's Class IV preferred stock were exchanged for shares of Class A senior convertible preferred stock at an exchange rate of 1.5 to 1.0. The shares of all other classes of preferred stock were exchanged into common stock at the following ratios; Class I preferred stock at 100 to 1.18 and Class III preferred stock at 100 to 2.94. In addition, the Company effected a reverse stock

split of .29 for one hundred and retired its preferred treasury stock. Prior to this exchange, the Class I preferred stockholders were given the right to have their stock repurchased for \$.09 per share. The holders of approximately 140,000 shares exercised this right, resulting in a stock repurchase amounting to \$12,645.

In August 1995, the outstanding shares of Class A senior convertible preferred stock were exchanged for shares of common stock on the basis of seven shares of common stock for each Class A security. This transaction reduced the classes of stock outstanding to common stock.

As part of the August 1995 restructuring activities, holders of warrants to purchase common stock were allowed to exercise their warrants at \$3.03 per share, resulting in the exercise of 30,588 warrants for aggregate cash consideration of \$92,554.

In January 1995, the holder of 15,000 warrants to purchase Class A senior convertible preferred stock exercised their rights by paying \$0.67 per share, or \$10,000. In August 1995, these 15,000 shares of Class A preferred stock were converted into 30,882 shares of common stock.

The basis of all exchanges were approved by the Company's Board of Directors and its shareholders and reflected the priorities of the Class A securities upon liquidation and other factors.

The following table summarizes the Company's preferred stock activities from October 1, 1993 through September 30, 1995.

	Class I Preferred Stock			Class III Preferred Stock	
	Shares	Amount	Discount	Shares	Amount
Balance at September 30, 1993	696,900	\$ 1,235,142	\$ (934,454)	6,617,227	\$13,849,893
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share					1,240,857
Issuance of 207,690 shares of Class IV redeemable, convertible preferred stock, redeemable at \$2.50 per share					
Balance at September 30, 1994	696,900	1,235,142	(934, 454)	6,617,227	15,090,750
Warrants exercised and conversions	528,450				
November 1994 preferred stock conversions into common stock and Class A preferred stock August 1995 conversion of Class A preferred stock into common stock	(1,222,350)	(1,235,142)	934, 454	(6,617,227)	(15,090,750)
Balance at September 30, 1995	-	\$ -	\$ -	-	\$ -

	Class IV Preferred Stock		Class Preferred	
	Shares	Amount	Shares	Amount
Balance at September 30, 1993	674,709	\$ 674,709		
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share				
Issuance of 207,690 shares of Class IV redeemable, convertible preferred stock, redeemable at \$2.50 per share	207,690	207,690		
Balance at September 30, 1994 Warrants exercised and conversions	882,399	882,399	15,000	15,000
November 1994 preferred stock conversions into common stock and Class A preferred stock	(882,399)	(882,399)	1,323,599	882,399
August 1995 conversion of Class A preferred stock into common stock			(1,338,599)	(882,399)

- \$ -

Balance at September 30, 1995

- \$ -

Class I Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class I preferred stock.

Each share of 9% cumulative convertible \$1.78 par value preferred stock was entitled to one vote, a cumulative of 9% annual dividend and certain preference rights in the event of liquidation. Each preferred share was convertible into .36 shares of the common stock and could be redeemed for .36 shares of common stock upon an initial public offering of the Company's common stock.

Class III Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class III preferred stock.

Each share of the no par, Class III preferred stock was entitled to one vote, an annual dividend, when and as declared by the Company's Board $\,$ of Directors, of \$0.225 per share and had a liquidation preference senior to the Company's Class I preferred stock. This liquidation preference entitled each shareholder of the Class III preferred stock to \$2.50 per share, \$16,543,068, and an amount equal to such amount received by the Company's common stock shareholders upon liquidation. The Class III preferred stock had a mandatory redemption feature which required one-third of the outstanding stock to be redeemed on December 31, 1994, one-third on December 31, 1995 and one-third on December 31, 1996, for \$2.50 per share and 0.29 share of the Company's common stock. Further, in the event the Company was acquired, the Class III preferred stock was required to be redeemed at \$2.50 per share plus one share of the acquiring Company's common stock. The Class III preferred stock mandatory redemption amount of \$16,543,068 was in excess of the \$10,210,678 carrying amount of such stock as of the Company's March 28, 1990 recapitalization. Accordingly, the carrying amount was subject to periodic accretions, using the interest rate method, in order for the carrying amount to equal the mandatory redemption amount upon redemption. Each Class III preferred share was convertible into 1 share of common stock.

Class IV Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class IV preferred stock.

During fiscal year 1993, the Company issued 674,709 shares of Class IV preferred stock in connection with the conversion of \$674,709 of then outstanding 90-day notes. Each share of the Class IV Stock was entitled to five (5) votes, an annual dividend, when and as declared by the Company's Board of Directors, of \$0.09 per share, which dividend was cumulative, and had a liquidation preference senior to all other existing classes of stock. This liquidation preference entitled each shareholder of Class IV Preferred Stock to an amount equal to the sum of (i) \$1.00 per share, (ii) all accrued and unpaid dividends, and (iii) 95% of the proceeds up to \$14.00 per share.

The Class IV preferred stock had a mandatory redemption feature which required one-third of the outstanding stock to be redeemed on November 30, 1994, one-third on November 30, 1995 and one-third on November 30, 1996, for \$1.00 per 0.29 share plus 0.29 share of common stock. Each share of Class IV Preferred Stock was convertible into one share of common stock.

During fiscal year 1994, the Company issued 207,690 shares of Class IV preferred stock for \$1 per share. In connection with such issuance, the Company entered into notes receivable agreements with certain employees amounting to \$146,107. Such notes have been recorded as a reduction to equity. The notes bear interest at a rate of 6.0%.

Class A Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class A preferred stock.

In August 1995, all 1,338,599 shares of Class A preferred stock were converted into 2,755,939 shares of common stock. The Class A stock was issued in connection with the Company's plan to exchange the Class IV preferred stock at a ratio of 1.5 shares of Class A for each share of Class IV. The rights and preferences attached to the Class A preferred stock were similar to the Class IV preferred stock.

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 Board of Directors approved the 1995 Incentive and Non-Statutory Stock Option Plan (the "Option Plan") and such plan was subsequently approved at the annual meeting of shareholders held on June 23, 1995. 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 323,528 shares of common stock was approved.

Certain options under the Option Plan are intended to qualify as incentive stock options pursuant to Section 422A of the Internal Revenue Code. Options with respect to 281,470 and 339,412 shares were outstanding at September 30, 1995 and 1996 at an exercise prices ranging from \$3.03 to \$10.20 per share. At September 30, 1994, options with respect to 32,794 shares were outstanding under previous plan at exercise prices ranging from \$1.70 to \$8.50 per share.

Stock options granted generally vest over three to five years and are exercisable over a six year period. As of September 30, 1994, 1995 and 1996, options with respect to 28,618, 100,382 and 162,764 shares were exercisable, respectively.

The following table summarizes the activity under the plan:

Outstanding as of September 30, 1994 Granted

Granted 32,794 Exercised 281,470 Cancelled (32,794)

Outstanding as of September 30, 1995

Granted 281,470 Exercised 57,942

Cancelled

Outstanding as of

September 30, 1996 339,412

Warrants. In connection with the capital restructuring plan described in Note 11 above, certain of the Company's outstanding preferred stock purchase warrants were exchanged for common stock purchase warrants. Set forth below is a summary of the Company's outstanding warrants at September 30, 1996:

SECURITY	PREVIOUS SECURITY	EXERCISE PRICE	WARRANTS	EXPIRATION DATE
Common Stock	Class III preferred stock	\$17.00	9,102	July 24, 1997
Common Stock	-	\$4.08	2,330,784	May 1, 2001
Common Stock	-	\$10.20	245,097	September 1, 2001

The above table excludes: (i) Class III preferred stock purchase warrants which were exchanged for Class I preferred stock in October 1994, (ii) warrants exercised in August 1995, as described in Note 11 and (iii) warrants to purchase 15,000 shares of Class A senior convertible preferred stock which were exercised in January 1995, as described in Note 8 and 11.

As described in Note 8 in December 1996, the Company issued an additional 980,392 common stock purchase warrants with a \$10.20 exercise price and September 1, 2001 expiration date.

NOTE 13. RELATED PARTIES

In May 1995, 52% of the Company's outstanding shares of Common Stock were purchased by Jesup & Lamont, L.L.C. ("JLMP"). Since that date four of the Company's six directors have been members of JLMP. As of September 30, 1996, JLMP has an ownership interest in the Company of approximately 59.8%. In May 1995, the Company entered into a consulting agreement with Jesup & Lamont Capital Markets, Inc. ("Jesup & Lamont") (the "Agreement") 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 and \$288,385 for the years ended September 30, 1995 and 1996, respectively.

In December 1996, the Company's chairman and chief executive officer retired. The Company has 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 has agreed to extend the period for the exercise of his vested stock options to March 4, 1997.

NOTE 13. EXPORT SALES

The information below summarizes the Company's export sales by geographic area.

The Company's export sales are as follows:

		FAR EAST	EUR0PE	TOTAL
Year ended September 30, 1994	\$	4,974,957	\$ 319,788	\$ 5,294,745
Year ended September 30, 1995 Year ended September 30, 1996	\$ \$, ,	. , ,	\$ 6,524,419 11,797,375

NOTE 15. SUBSEQUENT EVENTS

On December 6, 1996, the Board of Directors authorized management of the Company to file a Registration Statement with the Securities and Exchange Commission permitting the Company to sell shares of its common stock to the public.

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

No dealer, salesperson, or other person has been authorized to give any information or to make any representations other than those contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or any of the Underwriters. This Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates or any offer to sell or the solicitation of an offer to buy such securities in any jurisdiction where such an offer or solicitation would be unlawful. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that the information contained herein is correct as of any time subsequent to the date hereof.

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[LOGO]

EMCORE CORPORATION

COMMON STOCK

PROSPECTUS

DONALDSON, LUFKIN & JENRETTE SECURITIES CORPORATION

NEEDHAM & COMPANY, INC.

FEBRUARY ___, 1997

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. 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, the NASD filing fee and the Nasdaq National Market application fee.

	To Be Paid By The Registrant*
Securities and Exchange Commission	
registration fee	\$ 9,090.91
NASD filing fee	3,500.00
Nasdaq National Market application fee .	19,375.00
Accounting fees and expenses	180,000.00
Printing expenses	35,000.00
Transfer agent and registrar fees	2,000.00
Blue Sky fees and expenses	5,000.00
Legal fees and expenses	450,000.00
Other expenses	6,034.09
Total	\$710,000.00

^{*}Estimated

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's 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:

 ${\tt INDEMNIFICATION\ OF\ DIRECTORS,\ OFFICERS\ AND\ EMPLOYEES}$

- (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 $% \left(1\right) =\left(1\right) \left(1\right) \left($

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 arbitrative 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 $\ensuremath{\mathsf{I}}$

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 15. RECENT SALES OF UNREGISTERED SECURITIES

Since December 1, 1993, the Company has sold and issued the following unregistered securities:

 November 30, 1994. Exchange of 198,439 shares of common stock, 1,081,850 shares of Class I Stock, 6,617,227 shares of Class III Stock, and 882,399 shares of Class IV Stock pursuant to a merger by EMCORE Merger Subsidiary Corporation with and into EMCORE Corporation. All purchasers of these shares were existing shareholders of the Company. The exchange ratio was as follows: 100 shares of Class IV Stock for 150 shares of Class A Stock; 100 shares of Class III Stock for 10 shares of Common Stock; 100 shares of Class I Stock for 4 shares of Common Stock; and, 100 shares of old Common Stock for 1 share of new Common Stock. No cash was involved in this transaction. The transaction was exempt from registration pursuant to Section 3(a)(9) of the Securities Act.

- 2. October 25, 1995. The issuance of 9,370,200 shares of Common Stock in exchange for 1,338,600 shares of Class A Common Stock pursuant to a merger of EMCORE Merger Subsidiary Two Corporation with and into EMCORE Corporation. All purchasers of these shares were existing shareholders of the Company. No cash was involved in this transaction. This exchange was exempt from registration pursuant to Section 3(a)(9) of the Securities Act.
- 3. October 25, 1995. Sale of 103,993 shares at \$0.89 a share to five holders of the Company's warrants to purchase the Company's Common Stock at \$5.00 a share until 1997. The consideration received included the surrender of warrants plus a total cash consideration of \$92,554. The purchasers were knowledgeable and able to bear the risk and had access to the information relevant to their investment. No general selling efforts were made. Transfer restrictions were imposed. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.

The following description of share exchanges or issuances indicate share numbers and warrant exercise prices that reflect the 3.4:1 reverse stock split effective February 3, 1997.

- 4. December 1, 1995. Issuance of 30,882 shares of Common Stock to Hakuto, a Japanese corporation, upon exercise of warrants. The warrants had been issued in connection with a Distributorship Agreement with Hakuto. The total amount of cash consideration was \$10,000. The offer was made in Japan; the buyer was in Japan and is not a U.S. person, and no directed selling efforts were made. This transaction was exempt from registration pursuant to Regulation S under the Securities Act.
- 5. May 1, 1996. Issuance to nineteen persons of \$9,500,000 of 6% Subordinated Notes due 2001 in a unit paired with warrants to purchase 2,328,432 shares of Common Stock at \$4.08 a share. Purchasers of the Notes were all current shareholders of the Company. Holders have the right to use the principal amount of the Note to exercise the warrants until the expiration date. The warrants expire on the maturity date of the Notes. In this Offering, \$9,500,000 was raised, of which \$1,000,000 was in the form of notes from officers of the Company. The purchasers were knowledgeable and able to bear the risk and had access to the information relevant to their investment. No general selling efforts were made. Transfer restrictions were imposed. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
- 6. July 12, 1996. Sale to Dane C. Scott. \$9,600 6% Subordinated Notes due 2001 in a unit paired with warrants to purchase 2,353 shares of Common Stock at \$4.08 a share in the aggregate amount of \$9,600. Mr. Scott is a Senior Design Engineer of the Company. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.

- Employee stock options were granted at various times after the $\,$ adoption of the Plan in 1995 at prices ranging from \$3.03 a share to \$10.20. These transactions were exempt from registration pursuant to Section 4(2) of and Rule 701 under the Securities
- September 1996. Sale to JLMP of \$2.5 million 6% Subordinated Note and warrants to purchase 2,450,098 shares at \$10.20 a share. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
- December 1996. Issuance to JLMP of warrants to purchase 980,392 shares at \$10.20 a share in consideration for guaranteeing and securing the guarantee of a \$10 million demand note facility. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act. JLMP was a shareholder of the Company; no general selling efforts were made.

EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following exhibits are filed with this Registration

Statement:

Exhibit No. Description

1.1	Eorm	οf	Underwriting	Aaroomont*

- 3.1 Restated Certificate of Incorporation as amended February 3,
- 3.2 Amended By-Laws, as amended January 11, 1989
- 4.1 Specimen certificate for shares of Common Stock*
- Opinion of White & Case 5.1
- 1995 Incentive and Non-Statutory Stock Option Plan 10.1
- 1996 Amendment to Option Plan 10.2
- 10.3 Specimen Incentive Stock Option Agreement
- . Hakuto Distributorship Agreement 10.4
- Amendment to Lease for premises at 394 Elizabeth Avenue, 10.5
 - Somerset, New Jersey 08873
- 10.6 Registration Rights Agreement relating to September 1996
- warrant issuance
- 10.7 Registration Rights Agreement relating to December 1996
- warrant issuance
- 10.8 Form of 6% Subordinated Note Due May 1, 2001
- Form of 6% Subordinated Note Due September 1, 2001 10.9
- Form of \$4.08 Warrant 10.10
- Form of \$17.00 Warrant 10.11
- Form of \$10.20 Warrant 10.12
- Demand note facility with First Union National Bank 10.13
- Consulting Agreement dated December 6, 1996 between the Company and Norman E. Schumaker 10.14
- Company and Norman E. Schumaker
 Purchase Order issued to the Company by General Motors
 Corporation on November 17, 1996. Confidential treatment has
 been requested by the Company with respect to portions of this
 document. Such portions are indicated by "[*]".
 Statement of Computation of Per Share Amounts
 Consent of Company & Lybrand L. J. 10.15
- 11.1
- Consent of Coopers & Lybrand L.L.P. 23.1
- 23.2
- Consent of White & Case (included in Exhibit 5.1)
 Consent of Lerner David Littenberg Krumholz & Mentlik 23.3
- Consent of Robert Louis-Dreyfus Power of Attorney** 23.4
- 24.1
- Financial Data Schedule** 27.1
- 99.1 Schedule II: Valuation and Qualified Accounts & Reserves**
 - To be filed by amendment
 - ** Previously filed

(b) Financial Statement Schedule

The following Financial Statement Schedule is filed pursuant to Item 11(e) of Regulation S-X:

Schedule II: Valuation and Qualified Accounts & Reserves**

All other schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or Notes thereto.

ITEM 17. UNDERTAKINGS

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 to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denomination and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, 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.
- registration statement as of the time it was declared effective.

 (2) For the purpose of determining any liability under the Securities Act, 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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Somerset, State of New Jersey, on February 5, 1997.

EMCORE CORPORATION

By /s/ Reuben F. Richards, Jr. Name: Reuben F. Richards, Jr. Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-1 has been signed by the following persons in the capacities indicated, on February 5, 1997.

Signature Title

* President, Chief Executive

Reuben F. Richards, Jr. Officer and Director

(Principal Executive Officer)

* Vice President, Chief

Thomas G. Werthan
Financial Officer, Secretary and Director (Principal

and Director (Principal Accounting and Financial

Officer)

Richard A. Stall Director

Chairman of the Board

Thomas J. Russell and Director

* Director

Howard R. Curd

* Director

Howard F. Curd

*By /s/ Reuben F. Richards, Jr. Reuben F. Richards, Jr.

EXHIBIT INDEX

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10.9	Form of 6% Subordinated Note Due September 1, 2001
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10.14	Consulting Agreement dated December 6, 1996 between the Company and Norman E. Schumaker
10.15	Purchase Order issued to the Company by General Motors Corporation on November 17, 1996. Confidential treatment has been requested by the Company for portions of this document. Such portions are indicated by "[*]".
11	Statement of Computation of Per Share Amounts
23.1	Consent of Coopers & Lybrand L.L.P.
23.2	Consent of White & Case (included in Exhibit 5.1)
23.3	Consent of Lerner David Littenberg Krumholz & Mentlik
23.4	Consent of Robert Louis-Dreyfus
24.1	Power of Attorney**
27.1	Financial Data Schedule**
99.1	Schedule II: Valuation and Qualified Accounts & Reserves**
	To be filed by amendment
* *	Previously filed

RESTATED CERTIFICATE OF INCORPORATION OF EMCORE CORPORATION

Reuben F. Richards, Jr., being over the age of eighteen and acting as a duly authorized officer of Emcore Corporation and by virtue of the provisions of the New Jersey Business Corporation Act, Title 14A of the Revised Statutes of the State of New Jersey, hereby certifies that the Restated Certificate of Incorporation of Emcore Corporation is as follows:

FIRST: The name of the Corporation is:

EMCORE Corporation

SECOND: The purpose for which this Corporation is organized is to engage in any activity within the purposes for which corporations may be organized under the New Jersey Business Corporation Act.

THIRD: The registered office of the Corporation is:

394 Elizabeth Avenue Somerset, NJ 08873

and the name of the corporation's registered agent at such address is:

Thomas G. Werthan

FOURTH: The total number of shares of Capital Stock of the Corporation shall be 29,411,763 shares of which:

- A. Of the Capital Stock, 23,529,411 shares shall consist of Common Stock which shall be entitled to one vote per share of all matters which holders of the Common Stock shall be entitled to vote on.
- B. Of the Capital Stock, 5,882,352 shares shall consist of Preferred Stock which may be divided into such classes and such series as shall be established from time to time by resolutions of the Board of Directors and filed as an amendment to this Certificate of Incorporation, without any requirement of vote or class vote of shareholders. The Board of Directors shall have the right and power to establish and designate in any such Class or Series Resolution such priorities, powers, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine.

FIFTH: The Board of Directors presently consists of six (6) persons and the names and addresses of the persons who are to serve on the Board of Directors are as follows:

Name Address Reuben F. Richards, Jr. 394 Elizabeth Avenue

Somerset, NJ 08873

Thomas G. Werthan 394 Elizabeth Avenue Somerset, NJ 08873
Richard A. Stall 394 Elizabeth Avenue Somerset, NJ 08873

Thomas J. Russell Jesup & Lamont Capital

Markets, Inc. 650 Fifth Avenue New York, NY 10019

Howard R. Curd Jesup & Lamont Capital

Howard F. Curd

Markets, Inc. 650 Fifth Avenue New York, NY 10019 Jesup & Lamont Capital Markets, Inc.

650 Fifth Avenue New York, NY 10019

SIXTH: Neither a Director nor an Officer shall be liable to the Corporation or its shareholders for damages for breach of any duty owed to the Corporation or its shareholders, except that this provision shall not relieve a Director or an 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 the receipt of such person of an improper personal benefit.

SEVENTH: Any director of the Corporation may be removed with or without cause by vote of the shareholders except that a director elected by a class may be removed only by a vote of the class that elected the director.

EIGHTH: The Board of Directors by a vote of a majority of the entire

EIGHTH: The Board of Directors by a vote of a majority of the entire Board may lend money to, guarantee any obligation of or otherwise assist any officer or employee of the Corporation who is also a director provided that such loan shall be adequately secured and no such loan, guarantee or other assistance shall be made unless there shall be an appropriate business

purpose.

 $\mbox{\sc NINTH:}$ The Corporation shall indemnify every officer and director of the corporation to the full extent permitted by law.

TENTH: The number of directors shall be as determined by any resolution of the Board of Directors unless a Class or Series Resolution adopted pursuant to Article FOURTH shall otherwise provide. In the event of an increase in the number of directors, the Board itself is authorized to fill any such directorship unless such a Class or Series Resolution shall otherwise provide.

ELEVENTH: This Corporation shall have perpetual existence.

IN WITNESS, the undersigned has set his hand this 3d day of February 1997.

/s/ Reuben F. Richards, Jr. Reuben F. Richards, Jr. President

BY-LAWS

ΩF

EMCORE CORPORATION

Adopted As of September 27, 1986 Amended Through January 11, 1989

ARTICLE I

OFFICES

- 1. Principal Place of Business. The principal place of business of the Corporation is 35 Elizabeth Avenue, Somerset, New Jersey 08873.
- 2. Other Places of Business. Branch or subordinate places of business or offices may be established at any time by the Board at any place or places where the Corporation is qualified to do business.

ARTICLE II

SHAREHOLDERS

- 1. Annual Meeting. The annual meeting of shareholders shall be held upon not less than ten or more than sixty days written notice of the time, place, and purpose of the meeting at 10 o'clock a.m. on the fourth Thursday of the month of October of each year at the corporate offices, or at such other time and place as shall be specified in the notice of meeting, in order to elect directors and transact such other business as shall come before the meeting. If that date is a legal holiday, the meeting shall be held at the same hour on the next succeeding business day.
- 2. Special Meetings. A special meeting of shareholders may be called for any purpose by the president or the Board. A special meeting shall be held upon not less than ten nor more than sixty days written notice of the time, place and purpose of the meeting.
- 3. Action Without Meeting. The shareholders may act without a meeting if, prior or subsequent to such action, each shareholder who would have been entitled to vote upon such action shall consent in writing to such action. Such written consent or consents shall be filed in the minute book.
- 4. Quorum. The presence at a meeting in person or by proxy of the holders of shares entitled to cast a majority of the votes shall constitute a quorum.

ARTICLE III BOARD OF DIRECTORS

- 1. Number and Term of Office. The Board shall consist of such number of members as may be determined from time to time by resolution of the Board. Each director shall be elected by the shareholders at each annual meeting and shall hold office until the next annual meeting of shareholders and until that director's successor shall have been elected and qualified.
- 2. Regular Meetings. A regular meeting of the Board shall be held without notice immediately following and at the same place as the annual shareholders' meeting for the purposes of electing officers and conducting such other business as may come before the meeting. The Board, by resolution, may provide for additional regular meetings which may be held without notice, except to members not present at the time of the adoption of the resolution.
- 3. Special Meetings. A special meeting of the Board may be called at any time by the president or a majority of the members of the Board for any purpose. Such meeting shall be held upon one days notice if given orally (either by telephone or in person) or by telegraph, or by three days notice if given by depositing the notice in the United States mails, postage prepaid. Such notice shall specify the time and place of the meeting.
- 4. Action Without Meeting. The Board may act without a meeting if, prior or subsequent to such action, each member of the Board shall consent in writing to such action. Such written consent or consents shall be filed in the minute book.
- 5. Quorum. One-half of the entire Board shall constitute a quorum for the transaction of business.
- 6. Vacancies in Board of Directors. Any vacancy in the Board, including a vacancy caused by an increase in the number of directors, may be filled by the affirmative vote of a majority of the remaining directors, even

though less than a quorum of the Board, or by a sole remaining director.

ARTICLE IV

WAIVERS OF NOTICE

Any notice required by these By-Laws, by the Certificate of Incorporation, or by the New Jersey Business Corporation Act may be waived in writing by any person entitled to notice. The waiver or waivers may be executed either before or after the event with respect to which notice is waived. Each director or shareholder attending a meeting without protesting, prior to its conclusion, the lack of proper notice shall be deemed conclusively to have waived notice of the meeting.

ARTICLE V

- 1. Election. At its regular meeting following the annual meeting of shareholders, the Board shall elect a president, a treasurer, a secretary, and it may elect such other officers, including one or more vice presidents, as it shall deem necessary. One person may hold two or more offices.
- 2. Duties and Authority of President. The president shall be chief executive officer of the Corporation. Subject only to the authority of the Board, he shall have general charge and supervision over, and responsibility for, the business and affairs of the Corporation. Unless otherwise directed by the Board, all other officers shall be subject to the authority and supervision of the president. The president may enter into and execute in the name of the Corporation contracts or other instruments in the regular course of business or contracts or other instruments not in the regular course of business which are authorized, either generally or specifically, by the Board. He shall have the general powers and duties of management usually vested in the office of president of a corporation.
- 3. Duties and Authority of Vice President. The vice president shall perform such duties and have such authority as from time to time may be delegated to him by the president or by the Board. In the absence of the president or in the event of his death, inability, or refusal to act, the vice president shall perform the duties and be vested with the authority of the president.
- 4. Duties and Authority of Treasurer. The treasurer shall have the custody of the funds and securities of the Corporation and shall keep or cause to be kept regular books of account for the Corporation. The treasurer shall perform such other duties and possess such other powers as are incident to that office or as shall be assigned by the president or the Board.
- 5. Duties and Authority of Secretary. The secretary shall cause notices of all meetings to be served as prescribed in these By-Laws and shall keep or cause to be kept the minutes of all meetings of the shareholders and the Board. The secretary shall have charge of the seal of the Corporation. The Secretary shall perform such other duties and possess such other powers as are incident to that office or as are assigned by the president or the Board.

ARTICLE VI

AMENDMENTS TO AND EFFECT OF

BY-LAWS FISCAL YEAR

- 1. Force and Effect of By-Laws. These By-Laws are subject to the provisions of the New Jersey Business Corporation Act and the Corporation's Certificate of Incorporation, as it may be amended from time to time. If any provision in these By-Laws is inconsistent with a provision in that Act or the Certificate of Incorporation, the provision of that Act or the Certificate of Incorporation shall govern.
- 2. Amendments to By-Laws. These By-Laws may be altered, amended or repealed by the shareholders or the Board. Any By-Law adopted, amended or repealed by the shareholders may be amended or repealed by the Board, unless the resolution of the shareholders adopting such By-Law expressly reserves to the shareholders the right to amend or repeal it.

3. Fiscal Year. The fiscal year of the Corporation shall begin on the first day of October of each year, commencing October 1, 1986.

MINUTES AND BY-LAWS

OF

EMCORE CORPORATION
COMMENCING: September 27, 1986

EMCORE CORPORATION

OATH OF SECRETARY

STATE OF NEW JERSEY) SS.: COUNTY OF MORRIS

I, Wilfried R. Wagner, Secretary of
EMCORE CORPORATION,
being of full age, depose and say that I will faithfully discharge the duties
of secretary of the Corporation to the best of my skill and ability.

Wilfried R. Wagner, Secretary

Sworn and Subscribed to before me this 27th day of September, 1986.

An Attorney at Law of New Jersey

		EXHIBIT 4.1	
Certificate No. For	Shares Issued to		
Transferred from	_ / /19		
Dated Receipt acknowledged	, 19		
No. Original Certificate			
No. Original Shares No. Of Shares Transferred			
No. 01 Shares Hansterreu			
NUMBER	SHARES		
INCORPO	RATED UNDER THE LAWS OF		
THE	STATE OF NEW JERSEY		
E	MCORE CORPORATION		
СОММО	N STOCK, NO PAR VALUE		
]	SPECIMEN]		
This Cortifies that	is the o	unor of	
This Certifies that	fully paid and non-assessable	Shares of	
	named Corporation transferable onl		
Attorney upon surrender of this	holder hereof in person or by dul Certificate properly endorsed.	y authorized	
	rporation has caused this Certific fficers and its Corporate Seal to		
	of A.D. 19		
SECRETARY/TREASURER	PRESIDENT		
EXPLAN	ATION OF ABBREVIATIONS		
The following abbrevi	ations, when used in the inscripti	on of	
	ertificate, shall be construed as	if they were	
	o applicable laws or regulations. hose appearing below, may be used.		
	3,		
JT TEN As joint tenant	s with right of survivorship and	TEN ENT	As tenants by the entireties
not as tenants	in common	UNIF GIFT MIN ACT	Uniform Gifts to Minors Act
TEN COM As tenants in c	ommon	CUST	Custodian for
For Value Received	hereby sell, assign and	transfer unto	
	or other identifying number of ass		
Share	s represented by the within Certif nd appoint	icate, and do	
to transfer the said Shares on	the books of the within named Corp	oration with	
full power of substitution in t	he premises.		
Dated 19			
in presence of			

White & Case 1155 Avenue of the Americas New York, New York 10036 (212) 819-8200

February 4, 1997

EMCORE Corporation 394 Elizabeth Avenue Somerset, New Jersey 08873

Dear Sirs:

We refer to the Registration Statement on Form S-1 (No. 333-18565, the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), filed by EMCORE Corporation, a New Jersey Corporation (the "Company"), with the Securities and Exchange Commission (the "Commission"), relating to the initial public offering of shares of the Company's common stock (the "Common Stock"). The Common Stock is to be sold to underwriters, including the underwriters listed on the cover page of the Prospectus forming part of the Registration Statement. The terms of the sale to the underwriters are to be approved in additional proceedings to be taken by the Company.

We have examined the originals, or photostatic or certified copies, of such records of the Company, certificates of officers of the Company and of public officials and such other documents as we have deemed relevant and necessary as the basis for the opinion set forth below. We have relied upon such certificates of officers of the Company and of public officials and statements and information furnished by officers of the Company with respect to the accuracy of material factual matters contained therein which were not independently established by us. In such examination we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as photostatic or certified copies, and the authenticity of the originals of such copies.

Based upon our examination described above, subject to the assumptions stated, and subject to such proposed additional proceedings being taken prior to the issuance of the Common Stock, to the authorization, execution and delivery of an underwriting agreement with respect thereto, it is our opinion that the Common Stock, upon issuance and sale by the Company as contemplated in the Registration Statement and any amendments and prospectus supplements thereto, will have been duly authorized by the Company and upon delivery thereof against payment therefor, validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm appearing under the caption "Legal Matters" in the Prospectus forming part of the Registration

Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours, White & Case

EMCORE CORPORATION

1995 INCENTIVE AND NON-STATUTORY STOCK OPTION PLAN

Purpose.

The purpose of this 1995 Incentive and Non-Statutory Stock Option Plan (the "Plan") is to give officers and executive personnel ("key employees") and consultants or non-employee directors ("other participants") of Emcore Corporation, a New Jersey corporation (the "Company"), and corporations with respect to which the Company directly or indirectly controls 50% or more of the combined voting power ("subsidiaries") an opportunity to acquire shares of the common stock of the Company, without par value ("Common Stock"), to provide an incentive for key employees and other participants to continue to promote the best interests of the Company and enhance its long-term performance, and to provide an incentive for key employees and other participants to join or remain with the Company and its subsidiaries.

2. Administration.

- (a) Board of Directors. The Plan shall be administered by the Board of Directors of the Company (the "Board"), which, to the extent it shall determine, may delegate its powers with respect to the administration of the Plan (except its powers under Section 12(c)) to a committee (the "Committee") appointed by the Board and composed of not less than three members of the Board If the Board chooses to appoint a Committee, references hereinafter to the Board (except in Section 12(c)) shall be deemed to refer to the Committee.
- (b) Powers. Within the limits of the express provisions of the Plan, the Board shall determine;
 - (i) the persons to whom awards hereunder shall be granted,
 - (ii) the time or times at which such awards shall be granted,
 - (iii) the form and amount of the awards, and
 - (iv) the limitations, restrictions and conditions applicable to any such award.

In making such determinations, the Board may take into account the nature of the services rendered by such key employees and other participants, or classes of employees, their present and potential contributions to the Company's success and such other factors as the Board in its discretion shall deem relevant.

- (c) Interpretations. Subject to the express provisions of the Plan, the Board may interpret the Plan, prescribe, amend and rescind rules and regulations relating to it, determine the terms and provisions of the respective awards and make all other determinations it deems necessary or advisable for the administration of the Plan.
- (d) Determinations. The determinations of the Board on all matters regarding the Plan shall be conclusive. A member of the Board shall only be liable for any action taken or determination made in bad faith.
- (e) Nonuniform Determinations. The Board's determinations under the Plan, including without limitation, determinations as to the persons to receive awards, the terms and provisions of such awards and the agreements evidencing the same, need not be uniform and may be made by it selectively among persons who receive or are eligible to receive awards under the Plan, whether or not such persons are similarly situated.
- 3. Awards Under the Plan.
- (a) Form. Awards under the Plan may be granted in any of the following forms:
 - (i) Incentive Stock Options, as described in Section 4,
 - (ii) Non-Statutory Stock Options, as described in Section 5, and
 - (iii) Stock Appreciation Rights, as described in Section 6.
- (b) Maximum Limitations. The aggregate number of shares of Common Stock available for grant under the Plan is 1,100,000 subject to adjustment pursuant to Section 8. Shares of Common Stock issued pursuant to the Plan may be either authorized but unissued shares or shares now or hereafter held in the treasury of the Company. In the event that, prior to the end of the period during which Stock Options may be granted under the Plan, any Stock Option under the Plan expires unexercised or is terminated, surrendered or canceled (other than in connection with the exercise of a Stock Appreciation Right with respect to which Common Stock is delivered to the key employee or other participants under Section 6(b)(ii)), without being exercised, in whole or in part, for any reason, the number of shares theretofore subject to such Stock Option, or the unexercised, terminated, forfeited or unearned portion thereof, shall be added to the remaining number of shares of Common Stock available for grant as a Stock Option under the Plan, including a grant to a former holder

of such Stock Option, upon such terms and conditions as the Board shall determine, which terms may be more or less favorable than those applicable to such former Stock Option.

- (c) Ten Percent Shareholder. Notwithstanding any other provision herein contained, no key employee may receive an Incentive Stock Option under the Plan if such employee, at the time the award is granted, owns (as defined in Section 424(d) of the Internal Revenue Code, as amended (the "Code")) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company, its parent or any subsidiary, unless the option price for such Incentive Stock Option is at least 110% of the fair market value of the Common Stock subject to such Incentive Stock Option on the date of grant and such Option is not exercisable after the date five years from the date such Option is granted.

 4. Incentive Stock Options.

It is intended that Incentive Stock Options granted under the Plan shall constitute Incentive Stock Options within the meaning of Section 422 of the Code. Incentive Stock Options may be granted under the Plan for the purchase of shares of Common Stock. Incentive Stock Options shall be in such form and upon such conditions as the Board shall from time to time determine, subject to the following:

- (a) Option Prices. The option price of each Incentive Stock Option shall be at least 100% of the fair market value of the Common Stock subject to such Incentive Stock Option on the date of grant,
- (b) Terms of Options. No Incentive Stock Option shall be exercisable prior to the date one year, or after the date ten years, from the date such Incentive Stock Option is granted.
- (c) Limitation on Amounts. The aggregate fair market value (determined with respect to each Incentive Stock Option as of the time such Incentive Stock Option is granted) of the capital stock with respect to which Incentive Stock Options are exercisable for the first time by a key employee during any calendar year (under this Plan or any other plan of the Company or the parent or any subsidiary of the Company) shall not exceed \$100,000.
- (d) Exercise. Incentive Stock Options shall be subject to such terms and conditions, shall be exercisable at such time or times, and shall be evidenced by such form of written option agreement between the optionee and the Company, as the Board shall determine; provided, that such determinations are not inconsistent with the other provisions of the Plan, and with Section 422 of the Code or regulations thereunder.
- (e) Manner of Exercise of Options and Payment for Common Stock. Incentive Stock Options may be exercised by an optionee by giving written notice to the Secretary of the Company stating the number of shares of Common Stock with respect to which the Incentive Stock Option is being exercised and tendering payment therefor. At the time that an Incentive Stock Option granted under the Plan, or any part thereof, is exercised, payment for the Common Stock issuable thereupon shall be made in full in cash or by certified check or, if the Board in its discretion agrees to accept, in shares of Common Stock of the Company (the number of such shares paid for each share subject to the Incentive Stock Option, or part thereof, being exercised shall be determined by dividing the option price by the fair market value per share of the Common Stock on the date of exercise). As soon as reasonably possible following such exercise, a certificate representing shares of Common Stock purchased, registered in the name of the optionee shall be delivered to the optionee.
- (f) Cancellation of Stock Appreciation Rights. The exercise of any Incentive Stock Option shall cancel that number, if any, of Stock Appreciation Rights (as defined in Section 6) included in such Incentive Stock Option, which is equal to the excess of (i) the number of shares of Common Stock subject to Stock Appreciation Rights included in such Incentive Stock Option, over (ii) the number of shares of Common Stock which remain subject to such Incentive Stock Option after such exercise.

5. Non-Statutory Stock Options.

Non-Statutory Stock Options (i.e., options which do not constitute Incentive Stock Options within the meaning of Section 422 of the Code) may be granted under the Plan for the purchase of Common Stock. Non-Statutory Stock Options shall be in such form and upon such conditions as the Board shall from time to time determine and further shall be subject to the provisions of

Section 4 of this Plan except:

- (a) Option Price. The option price shall be no less than 10% of the fair market value of the Common Stock subject to the Non-Statutory Stock Option on the date of grant.
- $\dot{}$ (b) Limitation on Amount. There shall be no limit on amount (subject only to the overall limit of the shares available under the Plan for option grant).

Stock Appreciation Rights.

- (a) Award. If deemed by the Board to be in the best interest of the Company, any Incentive Stock Option granted under the Plan may include a stock appreciation right ("Stock Appreciation Right"), either at the time of grant or thereafter while the Incentive Stock Option is outstanding.
- (b) Terms of Rights. Stock Appreciation Rights shall be subject to such terms and conditions not inconsistent with the other provisions of the Plan as the Board shall determine, provided that:
- (i) Limitations. Stock Appreciation Rights shall be exercisable to the extent, and only to the extent, the Incentive Stock Option in which it is included is exercisable and shall be exercisable only for such period as the Board may determine (which period may expire prior to, but not later than, the expiration date of such Incentive Stock Option). Notwithstanding the preceding sentence, a Stock Appreciation Right is exercisable only when the fair market value of a share of Common Stock exceeds the option price specified in such Incentive Stock Option.
- (ii) Surrender or Exchange. A Stock Appreciation Right shall entitle the optionee to surrender to the Company unexercised the Incentive Stock Option, or portion thereof, to which it is related, or any portion thereof and to receive from the Company in exchange therefor that number of shares of Common Stock having an aggregate fair market value equal to the excess of the fair market value on the date of exercise of one share of Common Stock over the option price per share specified in such Incentive Stock Option multiplied by the number of shares of Common Stock subject to the Incentive Stock Option, or portion thereof, which is so surrendered. The Board shall be entitled to elect to settle any part or all of the Company's obligation arising out of the exercise of a Stock Appreciation Right by the payment of cash or by check equal to the aggregate fair market value on the date on which the Stock Appreciation Right is exercised of that part or all of the shares of Common Stock the Company would otherwise be obligated to deliver.
- (c) Cash Settlement Restriction. (i) Notwithstanding Section B(b), so long as the grantee of a Stock Appreciation Right is an officer or director of the Company, the Company's right to elect to settle any part or all of its obligation arising out of the exercise of a Stock Appreciation Right by the payment of cash or by check shall not apply unless such exercise occurs no less than six months after the date of grant of the Right and either: (1) pursuant to the provisions of subsection (ii) below, or (2) during the period beginning on the third business day following the date of release by the Company for publication of its quarterly or annual summary statements of sales and earnings and ending on the twelfth business day following such date.
- (ii) In the event that, pursuant to Section 9, the Company shall cancel all unexercised Incentive Stock Options as of the effective date of a merger or other transaction provided therein, or in the case of dissolution of the

Company, then each Stock Appreciation Right held by an executive officer or director of the Company shall be automatically exercised for cash on such date within 30 days prior to the effective date of such transaction or dissolution as the Board shall determine and, in the absence of such determination, on the last business day immediately prior to such effective date.

7. Transferability.

No Incentive Stock Option, Non-Statutory Stock Option, or Stock Appreciation Right may be transferred, assigned, pledged or hypothecated (whether by operation of law or otherwise), except as provided by will or the applicable laws of descent or distribution, and no Incentive Stock Option, Non-Statutory Stock Option, or Stock Appreciation Right shall be subject to execution, attachment or similar process. Any attempted assignment, transfer, pledge, hypothecation or other disposition of an Incentive Stock Option, Non-Statutory Stock Option, or Stock Appreciation Right, or levy of attachment or similar process upon the Incentive Stock Option or Stock Appreciation Right not specifically permitted herein shall be null and void and without effect. An Incentive Stock Option or Stock Appreciation Right may be exercised only by a key employee during his or her lifetime, or pursuant to Section 11(c), by his or her estate or the person who acquires the right to exercise such Incentive Stock Option or Stock Appreciation Right upon his or her death by bequest or inheritance.

Adjustment Provisions.

The aggregate number of shares of Common Stock with respect to which Incentive Stock Options, Non-Statutory Stock Options and Stock Appreciation Rights may be granted, the aggregate number of shares of Common Stock subject to each outstanding Incentive Stock Option, Non-Statutory Stock Option and Stock Appreciation Right, and the option price per share of each may all be appropriately adjusted as the Board may determine for any increase or decrease in the number of shares of issued Common Stock resulting from a subdivision or consolidation of shares, whether through reorganization, recapitalization, stock split-up, stock distribution or combination of shares, or the payment of a share dividend or other increase or decrease in the number of such shares outstanding effected without receipt of consideration by the Company. Adjustments under this Section 8 shall be made according to the sole discretion of the Board, and its decisions shall be binding and conclusive.

9. Dissolution, Merger and Consolidation.

Except as otherwise provided in Section 6(c)(ii), upon the dissolution or liquidation of the Company, or upon a merger or consolidation of the Company in which the Company is not the surviving corporation, each Incentive Stock Option and Stock Appreciation Right granted hereunder shall expire as of the effective date of such transaction; provided, however, that the Board shall give at least 30 days' prior written notice of such event to each optionee during which time he or she shall have a right to exercise his or her wholly or partially unexercised Incentive Stock Option (without regard to installment exercise limitations, if any) or Stock Appreciation Right and, subject to prior expiration pursuant to Section 11(b) or (c), each Incentive Stock Option and Stock Appreciation Right shall be exercisable after receipt of such written notice and prior to the effective date of such transaction.

10. Effective Date and Period For Grants.

The Plan shall become effective on the date of the approval of the Plan by the holders of a majority of the shares of Common Stock of the Company $\left(\frac{1}{2} \right)$

which shall be June 20, 1995. No grant or award shall be made under the Plan more than 10 years from the earlier of the date of adoption of the Plan, provided, however, that the Plan and all Stock Options and Stock Appreciation Rights granted under the Plan prior to such date shall remain in effect and subject to adjustment and amendment as herein provided until they have been satisfied or terminated in accordance with the terms of the respective grants or awards and the related agreements.

11. Termination of Employment or Participation.

- (a) Each Incentive Stock Option, Non-Statutory Stock Option and Stock Appreciation Right shall, unless sooner expired pursuant to Section 11(b) or (c) below, expire on the first to occur of the tenth anniversary of the date of grant thereof and the expiration date set forth in the applicable option agreement.
- (b) An Incentive Stock Option, a Non-Statutory Stock Option or a Stock Appreciation Right shall expire on the first to occur of the applicable date set forth in paragraph (a) next above and the date thirty (30) days following the date that the employment or participation of the person with the Company terminates for any reason other than death or disability. Notwithstanding the preceding provisions of this paragraph, the Board, in its sole discretion, may, by written notice given, permit the ex-employee to exercise Stock Options or Stock Appreciation Rights during a period following his or her termination of employment, which period shall not exceed three months. In no event, however, may the Board permit an ex-employee to exercise a Stock Option or Stock Appreciation Right after the expiration date contained in the agreement evidencing such Stock Option or Stock Appreciation Right. Notwithstanding the preceding provisions of this paragraph, if the Board permits an ex-employee to exercise Stock Options or Stock Appreciation Rights during a period following his or her termination of employment pursuant to such preceding provisions, such Stock Options or Stock Appreciation Rights shall, to the extent unexercised, expire on the date that such ex-employee violates (as determined by the Board) any covenant not to compete in effect between the Company and the ex-employee.
- (c) If the employment of an employee or participation of another participant with the Company terminates by reason of disability (as defined in Section 422(0)(9) of the Code as determined by the Board) or by reason of death, his or her Stock Options and Stock Appreciation Rights, if any, shall expire no later than the first to occur of the date set forth in paragraph (a) of this Section 11 and the first anniversary of such termination of employment.

12. Miscellaneous.

- (a) Legal and Other Requirements. The obligation of the Company to sell and deliver Common Stock under the Plan shall be subject to all applicable laws, regulations, rules and approvals, including, but not by way of limitation, the effectiveness of a registration statement under the Securities Act of 1933 if deemed necessary or appropriate by the Company. Certificates for shares of Common Stock issued hereunder may be legended as the Board shall deem appropriate.
- (b) No Obligation To Exercise Options. The granting of a Stock Option shall impose no obligation upon an optionee to exercise such Stock Option.
- (c) Termination and Amendment of Plan. The Board, without further action on the part of the shareholders of the Company, may from time to time

alter, amend or suspend the Plan or any Stock Option or Stock Appreciation Right granted hereunder or may at any time terminate the Plan, except that it may not, without the approval of the shareholders of the Company (except to the extent provided in Section 8 hereof):

- (i) Materially increase the total number of shares of Common Stock available for grant under the Plan except as provided in Section 8:
- (ii) Materially modify the class of eligible employees or participants under the Plan;
- (iii) Materially increase benefits to any key employee who is subject to the restrictions of Section 16 of the Securities Exchange Act of 1934; or
- (iv) Effect a change relating to Incentive Stock Options granted hereunder which is inconsistent with Section 422 of the Code or regulations issued thereunder.

No action taken by the Board under this Section, either with or without the approval of the shareholders of the Company, may materially and adversely affect any outstanding Stock Option or Stock Appreciation Right without the consent of the holder thereof.

- (d) Application of Funds. The proceeds received by the Company from the sale of Common Stock pursuant to Stock Options will be used for general Corporate purposes.
- (e) Withholding Taxes. (i) Upon the exercise of any Stock Option or Stock Appreciation Right, the Company shall have the right to require the optionee to remit to the Company an amount sufficient to satisfy all federal, state and local withholding tax requirements prior to the delivery of any certificate or certificates for shares of Common Stock.
- (ii) Upon the disposition of any Common Stock acquired by the exercise of a Stock Option, the Company shall have the right to require the optionee to remit to the Company an amount sufficient to satisfy all federal, state and local withholding tax requirements as a condition to the registration of the transfer of such Common Stock on its books. Whenever under the Plan payments are to be made by the Company in cash or by check, such payments shall be net of any amounts sufficient to satisfy all federal, state and local withholding tax requirements.
- (f) Right To Terminate Employment. Nothing in the Plan or any agreement entered into pursuant to the Plan shall confer upon any key employee or other optionee the right to continue in the employment of the Company or any subsidiary or affect any right which the Company or any subsidiary may have to terminate the employment of such key employee or other optionee.
- (g) Rights as a Shareholder. No optionee shall have any right as a shareholder unless and until certificates for shares of Common Stock are issued to him or her.
- (h) Leaves of Absence and Disability. The Board shall be entitled to make such rules, regulations and determinations as it deems appropriate under the Plan in respect of any leave of absence taken by or disability of any key employee or other participant. Without limiting the generality of the foregoing, the Board shall be entitled to determine (i) whether or not any

such leave of absence shall constitute a termination of employment within the meaning of the Plan, and (ii) the impact, if any, of any such leave of absence on awards under the Plan theretofore made to any key employee who takes such leave of absence.

- - (i) If the Common Stock is traded on the over-the-counter market, the average of the mean between the bid and the asked price for the Common Stock at the close of trading for the 10 consecutive trading days immediately preceding such given date;
 - (ii) If the Common Stock is listed on a national securities exchange, the average of the closing prices of the Common Stock on the Composite Tape for the 10 consecutive trading days immediately preceding such given date; and
 - (iii) If the Common Stock is neither traded on the over-the-counter market nor listed on a national securities exchange, such value as the Board, in good faith, shall determine.

Notwithstanding any provision of the Plan to the contrary, no determination made with respect to the fair market value of Common Stock subject to an Incentive Stock Option shall be inconsistent with Section 422 of the Code or regulations thereunder.

- (j) Notices. Every direction, revocation or notice authorized or required by the Plan shall be deemed delivered to the Company (1) on the date it is personally delivered to the Secretary of the Company at its principal executive offices or (2) three business days after it is sent by registered or certified mail, postage prepaid, addressed to the Secretary at such offices, and shall be deemed delivered to an optionee (1) on the date it is personally delivered to him or her or (2) three business days after it is sent by registered or certified mail, postage prepaid, addressed to him or her at the last address shown for him or her on the records of the Company.
- (k) Applicable Law. All questions pertaining to the validity, construction and administration of the Plan and Stock Options and Stock Appreciation Rights granted hereunder shall be determined in conformity with the laws of the state of New Jersey, to the extent not inconsistent with Section 422 of the Code and regulations thereunder.
- (1) Elimination of Fractional Shares. If under any provision of the Plan which requires a computation of the number of shares of Common Stock subject to an Incentive Stock Option or Stock Appreciation Right, the number so computed is not a whole number of shares of Common Stock, such number of shares of Common Stack shall be rounded down to the next whole number.

[End of Plan]

[Amendment to Option Plan]

NOTICE
OF
ANNUAL MEETING OF SHAREHOLDERS
OF
EMCORE CORPORATION

TO THE SHAREHOLDERS OF EMCORE CORPORATION:

An Annual Meeting of the Shareholders of EMCORE Corporation (the "Company") will be held at the offices of EMCORE Corporation, 394 Elizabeth Avenue, Somerset, NJ 08873-1214 at 10:00 a.m. on Tuesday, April 30, 1996, to consider and act upon the following matters:

- A) To elect six (6) directors. It is anticipated that the following individuals will be nominated:
 - 1) Thomas Russell, Ph.D.
 - 2) Howard R. Curd
 - 3) Howard Curd, Jr.

- 4) Norman E. Schumaker, Ph.D.
- 5) Reuben F. Richards, Jr.
- 6) Thomas G. Werthan

Chairman & Chief Executive Officer President & Chief Operating Officer Vice President - Finance

) To increase the pool of Incentive Stock options to 2.2 million shares from 1. 1 million.

At the time of the meeting the Company shall consider and act upon any other business as may properly come before the meeting.

Only shareholders of record on the close of business on April 29, 1996, are entitled to Notice of and to vote at this meeting. Shareholders may vote in person or by this attached proxy; however, all proxies must be in writing and signed by a shareholder of record.

By Order of the Board of Directors Thomas G. Werthan, Secretary

PROXY
FOR
ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON
APRIL 30, 1996 -- 10:00 AM
AT
EMCORE

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints NORMAN E. SCHUMAKER AND THOMAS G. WERTHAN and each of them, as proxies of the undersigned, with full power of substitution and revocation to represent and vote in the manner specified herein, at the annual meeting of shareholders to be held on the above date and any adjournments thereof, all shares of EMCORE Corporation that the undersigned would be entitled to above if personally present.

The shares represented by this proxy, when properly signed, will be voted in the manner specified by the shareholder. If no specification is made, the shares will be voted FOR each item. The proxy holders are authorized to vote in their discretion on any other matters which may properly be brought before the meeting.

The Board of Directors recommends a vote FOR each nominee, and approval of the 1995 Stock Plan Amendment.

Election of Directors:

FOR	AGAINST	ABSTAIN
	FOR	FOR AGAINST

Date:	Signature:
	Name:

SPECIMEN STOCK OPTION AGREEMENT

This STOCK OPTION AGREEMENT, dated as of <>, between EMCORE CORPORATION, a New Jersey Corporation (the "Corporation"), and <> <>, an employee of the Corporation or its subsidiary (herein "Employee")

WITNESSETH:

The Corporation desires, by affording the employee an opportunity to purchase shares of its Common Stock, \$1.20 par value, to provide the Employee with an added incentive to join or to continue in the employment of the Corporation and to continue and increase his or her efforts in that connection. This Stock Option Agreement (this "Agreement") is being entered into pursuant to the Stock Corporation 1995 Incentive and Non-Statutory Stock Option Plan and is subject to the provisions thereof, including the determinations to be made by the Stock Option Committee (the "Committee") of the Board of Directors of the Corporation (the "Board").

In consideration or the mutual covenants hereinafter set forth and for other good and valuable consideration, the parties hereto hereby agree as follows:

- 1. Grant. The Corporation with the approval and direction of the Committee irrevocably grants the employee the right and option (the "Option") to purchase all or any part of an aggregate of <> shares of Common Stock on the terms and conditions herein set forth. This Option shall be an Incentive Stock Option.
- 2. Price. The purchase price of the shares of Common Stock covered by the Option shall be \$1.20 per share, being in excess of the fair market value of the Common Stock on the date hereof.
- 3. Time of Exercise. The term of the Option shall be for a period of ten (10) years from the date hereof, subject to earlier termination as provided in this Agreement. Except as provided in Paragraphs 5 and 6 hereof, the Option may not be exercised unless the Employee shall at the time of exercise be an employee of the Corporation. Neither the Option nor any rights related to the Option shall be exercisable for a period of one year from the date hereof when twenty percent (20%) of the Option shall become exercisable, except that: (i) if the Employee shall die, rehire or become disabled then the Option shall be fully exercisable commencing upon such event, (ii) if all of the capital stock of the Corporation or substantially all of its assets shall be transferred in exchange for cash only, then the Employee shall be entitled to receive from the Corporation an amount equal to (a) the price or distributable amount per share calculated as if all options containing this provision had been exercised less the exercise price, (b) multiplied by the number of options unexercised and (iii) if all of the capital stock of the Corporation is transferred in whole or in part in exchange for stock of

another Corporation then the Option shall be fully exercisable commencing upon such event. An additional twenty percent (20%) of the Option shall become exercisable each of the four successive anniversaries of the date hereof until the Option shall be fully exercisable, except that: (1) if the Employee has been employed for one year as of September 12, 1995, twenty percent (20%) shall be immediately vested with the remaining on each of the four (4) successive anniversaries of the date hereof, or, (2) if the employee has been employed for two years as of September 12, 1995, forty percent (40%) shall be immediately invested with the remainder vesting on each of the three (3) successive anniversaries of the date hereof.

- 4. No Transfer. The Option shall not be Transferable by the Employee otherwise than by Will or the laws of descent and distribution, and the Option may be exercised during his lifetime only by the Employee. The Option may not be assigned, transferred (except as aforesaid), pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted assignment, transfer, pledge, hypothecation or other disposition of the Option contrary to the provisions hereof and the levy of any attachment or similar process upon the Option shall be null and void and without effect.
- 5. Termination. In the event the employment of the Employee shall be terminated for any reason, (i) the Option may be exercised by the Employee at any time within thirty (30) days after such date (or one year after such date if the Employee is disabled within the meaning of Internal Revenue Code Section 22(e)(3), but in no event after the expiration of ten years from the date hereof, and only if and to the extent that he was entitled to exercise the Option at the date of termination, and (ii) so long as the stock of the Corporation is not listed on a national securities exchange or traded on the over-the-counter market, the Corporation may elect in its sole discretion to repurchase the stock at a price equal to the fair market value of the stock at the date of termination. The Option shall not be affected (i) by any change of duties or position so long as the Employee continues to be an employee of the Corporation or a subsidiary or (ii) by any temporary leave of absence that does not sever the employment relationship, which leave of absence is approved, if for a period of not more than three months, by an officer of the Corporation, or if for a period of more than three months, by the Board.

- 6. Death of Employee. If the Employee shall die while entitled to exercise the Option, the Option may be exercised by the legatee or legatees of the Option under the Employee's Will, the personal representative or distributees of the Employee to the extent that the Option would otherwise have been exercisable by the Employee at any time within a period of one year after the date of the Employee's death, but this provision shall not otherwise extend the ten (10) year duration of the Option.
- 7. Anti-Dilution Adjustments. In the event of any change in the outstanding Common Stock of the Corporation by reason of stock dividends, stock splits, recapitalizations, mergers, consolidations, combinations or exchanges of shares, split-ups, split-offs, liquidations or other similar changes in capitalization, or any distributions to common stockholders other than cash dividends, the numbers, class and prices of shares covered by this Option shall be appropriately adjusted by the Committee, whose determination shall be conclusive; provided, however, that no such adjustment shall give the Employee any additional benefits under the option.
- 8. Corporate Transaction. Notwithstanding the provisions of Paragraph 7, if any "corporate transaction" as defined in Section 1.425-1 of the Treasury Regulations promulgated under the Internal Revenue Code of 1986

occurs after the date of this Agreement, and in connection with such corporate transaction, the Corporation and another corporation enter into an agreement providing for the issuance of substitute stock options in exchange for the Option or the assumption of the Option, in either case giving the employee the right to purchase the largest whole number of shares of Common Stock of the Corporation or of any other corporation at the lowest option price permitted by said Section 1.425-1, the Option shall be deemed to provide for the purchase of such number of shares of Common Stock at such option price as shall be agreed upon by the Corporation and such other corporation, and the term "Corporation" herein shall mean the issuer of the stock then covered by the Option and the term "Common Stock" shall mean such stock.

- 9. No Employment Agreement. This Agreement does not confer upon the Employee any right to continue in the employ of the Corporation nor does it interfere in any way with the right of the Corporation or the right of the Employee to terminate the employment of the Employee at any time.
- 10. Restrictions. The obligation of the Corporation to sell and deliver shares of Common Stock with respect to the Option shall be subject to (i) all applicable laws, rules, regulations and such approvals by any governmental agencies as may be required, including the effectiveness of a registration statement under the Securities Act of 1933, as amended and (ii) the condition that the shares of Common Stock to be received upon exercise of the Option shall have been duly listed, upon official notice of issuance, on a stock exchange (to the extent that the Common Stock of the Corporation is then listed on any such stock exchange). In the event that the shares shall be delivered otherwise than in accordance with an applicable registration statement, the Corporation's obligation to deliver the shares is subject to the further condition that the Employee will execute and deliver to the Corporation an undertaking in form and substance satisfactory to the Corporation that (i) it is the Employee's intention to acquire and hold such shares for investment and not for resale or distribution, (ii) the shares will not be sold without registration or exemption from the requirement of registration under the Securities Act and (iii) the employee will indemnify the Corporation of any costs, liabilities and expenses which it may sustain by reason of any violation of the Securities Act or any other law regulating the sale or purchase of securities occasioned by any act on his part with respect to such shares. The Corporation may require that any certificate or certificates evidencing shares issued pursuant to the Plan bear a restrictive legend intended to effect compliance with the Securities Act or any other applicable regulatory measures, and stop transfer instructions with respect to the certificates representing the shares may be given to the transfer agent.
- 11. Exercise. Subject to the terms and conditions of this Agreement, the Option may be exercised only by written notice delivered to the Corporation at 394 Elizabeth Avenue, Somerset, New Jersey 08873-1214, attention of the Chief Financial Officer, of intention to exercise such option and by making payment of the purchase price of such shares against delivery of a certificate or certificates therefor as hereinafter provided. Such written notice shall:
 - (a) state the election to exercise the Option and the number of shares in respect of which it is being exercised;
 - (b) fix a date not less than seven (7) business days from the date such notice is received by the Corporation for delivery of the certificate or certificates for said shares and the payment of the purchase price therefor, and

(c) be signed by the person or persons so exercising the Option and in the event the Option is being exercised by any person or persons other than the Employee, be accompanied by appropriate proof of the right of such person or persons to exercise the Option.

On the date fixed in said written notice, a certificate or certificates for the shares as to which the Option shall have been so exercised, registered in the name of the person or persons so exercising the Option shall be issued by the Corporation and delivered to or upon the order of such person or persons against payment in full at the above-mentioned address or the purchase price of said shares in cash, by check or by surrender or delivery to the Corporation of shares of the Corporation's Common Stock with a fair market value equal to or less than the Option price, plus cash equal to any difference. All shares issued as provided herein will be fully paid and nonassessable. The Employee shall not have any of the rights of the stockholder with respect to the shares of Common Stock subject to the option until the certificate evidencing such shares shall be issued to him upon the due exercise of the Option.

- 12. Availability of Shares. The Corporation shall at all times during the term of the Option reserve and keep available such number of shares of Common Stock as will be sufficient to satisfy the requirements of this Agreement, shall pay all original issue taxes with respect to the issue of shares pursuant hereto and all other fees and expenses necessarily incurred by the Corporation in connection therewith and will from time to time use its best efforts to comply with all laws and regulations which in the opinion of counsel for the Corporation shall be applicable thereto.
- 13. Fair Market Value. As used herein, the "fair market value" of a share of Common Stock shall be:
 - (a) if the Common Stock is listed on a national securities exchange, the closing price of the Common Stock on the Composite Tape on the trading day immediately preceding such given date;
 - (b) if the Common Stock is traded on the over-the-counter market, the average of the bid and the asked price for the Common Stock as reported by the Wall Street Journal at the close of trading on the trading day immediately preceding such given date, and
 - (c) if the Common Stock is neither listed on a national securities exchange or traded on the over-the-counter market, such value as the Board in good faith shall determine.
- 14. The Plan. The Option is granted pursuant to the terms of the Plan, which terms are incorporated herein by reference, and the Option shall in all respects be interpreted in accordance with the Plan. The Committee shall interpret and construe the Plan and this Agreement, and the Committee's interpretations and determination shall be conclusive and binding on the parties hereto and any other person claiming an interest hereunder with respect to any issue arising thereunder or thereunder.
- 15. Governing Law. This Agreement has been entered into and shall be construed in accordance with the laws of the State of New Jersey.

IN WITNESS WHEREOF, the Corporation has caused this Agreement to be duly executed and sealed by its duly authorized officers and the Employee has hereunder set his hand, all as of the day and year first above written.

ATTEST:	EMCORE CORPORATION	
	Ву:	Thomas G. Werthan Chief Financial Officer
	Ву:	<> <> Employee

DISTRIBUTORSHIP AGREEMENT

This Agreement, made and entered into this 12th day of July, 1995, by and between EMCORE CORPORATION, a corporation duly organized and existing under the laws of New Jersey having its principal place of business at 35 Elizabeth Avenue, Somerset, New Jersey 08873 (hereinafter referred to as "EMCORE") and HAKUTO CO., LTD., a corporation duly organized and existing under the laws of Japan, having its principal place of business at 1-13, Shinjuku, I-Chome, Shinjuku-Ku, Tokyo 160, Japan (hereinafter referred to as "Hakuto").

W I T N E S S E T H

WHEREAS, EMCORE is engaged in the business of manufacturing technical equipment including the Products hereinafter defined, and WHEREAS, Hakuto is engaged in the business of selling and marketing merchandise throughout the world, including technical equipment, and WHEREAS, the parties heretofore entered into an agreement dated August 1, 1989 in accordance with which Hakuto distributed the Products in defined markets, and the parties desire to revise the terms of said agreement in accordance with which revised terms Hakuto will continue to serve as Emcore's distributor:

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, EMCORE and Hakuto do hereby agree to the terms and conditions set forth below.

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

"Product" or "Products" shall mean any or all products listed on Exhibit A attached hereto and made a part hereof. EMCORE shall have the right to modify, improve, or discontinue any or all of the Products in its sole discretion, provided that EMCORE shall give Hakuto not less than ninety (90) days' notice prior to the discontinuance or major modification of any Product. In the event EMCORE manufactures any new MOCVD deposition systems or MOCVD deposition equipment similar or related to the Products, EMCORE shall give Hakuto notice of such new products and the same shall be deemed added to Exhibit A hereto by reference.

"Territory" shall mean specifically Japan, Taiwan, Hong Kong, the Republic of China, Singapore, Malaysia, and Thailand but expressly excluding

2. Appointment and Acceptance. (a) EMCORE hereby appoints Hakuto as the sole and exclusive distributor of the Products in the Territory and Hakuto accepts such appointment, all in accordance with the terms and conditions set forth in this Agreement. All inquiries and/or orders received by EMCORE from customers or potential customers within the Territory or for delivery of Products in the Territory shall be referred to Hakuto for

disposition.

- (b) Hakuto shall exert its best efforts to attain and sustain maximum sales of Products in the Territory. Specifically and not in limitation hereof, if Emcore, based on its independent market research, believes that certain of the Products should be targeted to specific customers in the Territory, Emcore shall convey its findings to Hakuto forthwith, whereupon Hakuto shall promptly exert its full and best efforts to address these markets and will confer with EMCORE on best marketing strategies to promote sales of the Product, and otherwise fully coordinate its sales efforts with Emcore. Hakuto shall not market, distribute, sell or advertise for sale within the Territory any product that is competitive with the Products.
- (c) The relationship between EMCORE and Hakuto shall not be that of a principal and agent, but shall be that of a seller and purchaser, each acting as an independent contractor. Hakuto shall have no right or authority to incur, assume or create, in writing or otherwise, any warranty, liability or obligation of any kind, express or implied, in the name of or on behalf of
- (d) Hakuto shall not appoint any sub-distributor or sub-agent to perform any of its obligations under this Agreement without the prior written consent of EMCORE. Nothing herein, however, shall prohibit Hakuto from assigning certain parts of the Territory to its subsidiaries and affiliates, including specifically S&T Enterprises Ltd.
- (e) Notwithstanding the exclusive sales rights granted to Hakuto, Emcore may at its own expense and from time to time dispatch to the Territory its personnel to engage in market research, Product promotion, and other marketing activities, provided that all such activities shall at all times be coordinated with Hakuto, conducted with full disclosure to and knowledge of Hakuto, and provided further that any potential sale of any Product resulting from such activities of Emcore shall be referred to and channeled through
- Orders. (a) Systems. Hakuto may submit to EMCORE from time to time requests for quotations with respect to any system included as Products under this Agreement ("Systems"). Each such request for quotation shall identify Hakuto's prospective customer and shall set forth detailed specifications for the System required, including all optional features. EMCORE may respond to any such request by submitting a quotation on EMCORE's standard form setting forth the sales price to Hakuto for such System. All prices quoted by EMCORE shall be F.O.B. EMCORE's plant in Somerset, New Jersey. At Hakuto's specific request, EMCORE will include in its quotation:

- (i) a firm price for EMCORE's installation or assistance in installing the System, and/or (ii) a firm price for EMCORE's assistance in the start-up of the System and a demonstration of basic material specifications, provided that, in each case, such request contains sufficiently detailed information regarding the nature of the installation or assistance required or the material specifications to be demonstrated. The terms and conditions on quotations issued by EMCORE shall be binding upon the parties hereto, provided that, in the event any terms contained in a quotation are inconsistent with the terms of this Agreement, the terms of this Agreement shall govern unless the parties shall have agreed in writing that such inconsistent terms shall supersede the provisions of this Agreement.
- (b) Spare Parts. Hakuto may submit to EMCORE from time to time purchase orders with respect to spare parts or components included as Products under this Agreement ("Spare Parts"), setting forth the quantity and desired delivery date of such Spare Parts. To be effective, any such purchase order must be accepted in writing by EMCORE at its plant in Somerset, New Jersey.
- (c) Other Terms. The terms and conditions on purchase orders issued by Hakuto shall be deemed to be a part of this Agreement as a supplement hereto, provided that any provision in such purchase order which is inconsistent with or contrary to the provisions of this Agreement shall be

deemed to be deleted from the purchase order and of no force or effect unless the parties shall have specifically agreed in writing that said provision in the purchase order is intended to supersede the inconsistent provision of this Agreement, in which case the provisions of the purchase order shall prevail.

- 4. Prices and Terms of Payment. (a) The price for any Product sold by EMCORE to Hakuto shall be the price set forth in EMCORE's quotation, which price shall be valid for not less than ninety (90) days (unless otherwise specified in writing by EMCORE). The price for any Spare Part sold by EMCORE to Hakuto shall be the price for such Spare Part set forth on EMCORE's standard price list in effect on the date of shipment, less twenty percent (20%). EMCORE reserves the right to change its Spare Parts price list from time to time upon not less than ninety (90) days prior written notice to Hakuto. All prices will be F.O.B. EMCORE's plant in Somerset, New Jersey.
- (b) Hakuto shall pay for each Product or System purchased under this Agreement as follows:
 - (i) thirty percent (30%) of the approved purchase order price (or the price set forth in a letter of intent to purchase a Product issued by Hakuto preliminary to the issuance of its purchase order in customary form)
 - (A) not later than 180 days prior to the scheduled delivery date of the Product or $\,$
 - (B) within 30 days after issuance of Hakuto's purchase order or Hakuto's letter of intent if delivery of the Product is scheduled therein sooner than 180 days after the date of the purchase order or letter of intent.

Any payment accompanying a letter of intent shall be refundable to Hakuto in the event that the anticipated purchase order is not issued by reason of the customer's change of plans or other business decision; and

- (ii) seventy percent (70%) of the approved purchase order price within 30 days after shipment of the Product by Emcore and delivery of a bill of a lading evidencing such shipment.
- (c) Hakuto shall pay for all Spare Parts purchased under this Agreement, by making payment in full to EMCORE within thirty (30) days after shipment.
- (d) All payments for Products shall be in U.S. dollars, and shall be made without adjustment for any currency exchange or conversion rate changes, and without deduction for any taxes at any time levied by any governmental authority.
- 5. Shipment. (a) All Products shall be shipped via carrier designated in the purchase order, F.O.B. EMCORE's plant in Somerset, New Jersey. Hakuto shall bear and pay for all taxes of any nature imposed by any taxing authority after delivery to the carrier at the F.O.B. point. Hakuto shall also bear and pay for all charges for freight, shipping, consular fees, customs duties, and all costs and expenses incurred after delivery of the Products to the carrier at the F.O.B. point. Hakuto shall bear all risk of loss or damage to the Products after delivery to the carrier at the F.O.B. point.
- (b) Shipping dates, even when accepted by EMCORE, shall be understood only as best estimates. EMCORE shall attempt to respect all shipping dates, but shall not be liable to Hakuto for damages ensuing from any delay in shipment or delivery, however caused, except as otherwise expressly agreed by EMCORE in writing on a case-by-case basis.
- (c) EMCORE shall not be liable for any shortage or for any defect in the Products discoverable by visual inspection with respect to any shipment unless Hakuto notifies EMCORE in writing of the shortage or defect, prior to the earlier to occur of: (i) the expiration of sixty (60) days after receipt of such shipment by Hakuto, or (ii) the expiration of twenty (20) days after receipt of such shipment by Hakuto's customer. Upon receipt of such notice, together with evidence that such shortage or defect exists, EMCORE reserves

the right, at its election, to replace Products found to be defective or short in quantity, to issue a credit to Hakuto for the prorated invoice amount relating to such shortage or defect, or to repair Products found to be defective, all such remedial action to be taken by Emcore promptly without material adverse effect upon Hakuto's customer.

- 6. Installation and Service. (a) Except as set forth below with respect to warranty service, and except as otherwise expressly provided in quotations issued by EMCORE, Hakuto shall be responsible at its own expense for the installation and service of all Products purchased under this Agreement. Hakuto shall maintain trained personnel and shall purchase and maintain an inventory of Spare Parts sufficient in volume and assortment to promptly and efficiently perform necessary installation and service functions for all Products in the Territory. Hakuto shall give due consideration to EMCORE's suggested minimum inventories for various Spare Parts.
- (b) EMCORE shall make certain personnel available to assist Hakuto in initial installation of the Products at the customer's facility as well as in servicing the Products after installation until such time as Hakuto personnel are fully trained and are capable, in EMCORE's reasonable judgment, to perform such functions. The costs of initial installation shall be borne by Emcore (i.e., included in the sale price of the Product) unless other fee arrangements are agreed between Emcore and Hakuto on a specific matter. Hakuto shall pay Emcore for post-installation servicing at the rate of \$1,000 per person per day for field service engineers and \$1,500 per person per day for material process engineers, plus travel and living expenses. Said reimbursement rates are based on the U.S. Consumer Price Index in effect on the effective date of the Agreement and shall be subject to adjustment on an annual basis to conform to any increase or decrease in said U.S. Consumer Price Index as of each anniversary date of the Agreement.
- 7. Warranty and Insurance. (a) Material and Workmanship. Subject to the disclaimers, limitations and exclusions set forth below, EMCORE warrants to Hakuto and to the end user customer of Products that the Products shall be free from defects in material and workmanship. This warranty shall become effective upon completion of installation of the Product at the end user's facility and acceptance of the Product by the customer but in no event later than ninety (90) days after title passes from EMCORE to Hakuto, and shall extend for a period of one year thereafter Hakuto shall notify EMCORE from time to time of the installation completion and customer acceptance date of the Products. With respect to any non-conforming Products as to which EMCORE shall have received notification of such non-conformance within twenty (20) days after discovery of same, EMCORE shall at its election repair the same or provide a replacement Product at no cost to Hakuto or the end user. In no event shall EMCORE be liable for the cost of any labor or transportation charges incurred in the repair or replacement of any non-conforming Product, other than (i) labor costs incurred by EMCORE for Product repairs performed in the United States, (ii) cost of transportation incurred by EMCORE in the United States, and (iii) upon EMCORE's express written instructions only, costs of transportation by Hakuto to EMCORE of Products to be repaired by EMCORE, in the United States.
- (b) Warranty as to Specifications. EMCORE warrants that the Products shall conform to the published specifications of EMCORE or the specifications of an end user customer approved and accepted by EMCORE. With respect to any non-conforming Product under this warranty, EMCORE shall perform all necessary re-engineering, rework or other procedures necessary to conform the Product to the agreed specifications. Specifically, EMCORE shall be responsible for labor, travel and living costs of EMCORE personnel whether incurred in the United States or in Japan.
- (c) Exclusions and Disclaimer. EMCORE's warranties set forth in paragraphs 7(a) and (b) above do not apply to expendable items, including those items listed in Exhibit B attached hereto. Also excluded from EMCORE's

foregoing warranties are any components identified by EMCORE to Hakuto as being the subject of manufacturers' or licensors' warranties, which warranties shall be deemed assigned to Hakuto at the time title to the goods passes to Hakuto. With respect to all such components, Hakuto's remedy shall be limited to the warranty and remedy provided by the manufacturer or the licensor of said components, and EMCORE's liability obligation shall be limited to the exercise of its best efforts to assist Hakuto in obtaining the benefit of such manufacturer's or licensor's warranties.

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

- (d) EMCORE shall be responsible for supplying all Spare Parts necessary to satisfy EMCORE's obligations under the foregoing warranties, and Hakuto shall be responsible for supplying all installation or service relating to the warranty program except as otherwise provided in paragraph 7(b) with respect to specification non-conformance. In order to facilitate this program, EMCORE agrees to maintain with Hakuto, at such location in the Territory as Hakuto may designate, a consignment inventory of Spare Parts (the "Consignment Inventory") determined by EMCORE to be reasonably necessary for the prompt and efficient delivery of warranty service. Hakuto agrees to provide to EMCORE periodic reports setting forth (i) with respect to all warranty claims made during such month, the identity of the end user, the nature of the claim, the service provided and the Spare Parts used, if any, in providing such service and (ii) the current levels of all Spare Parts comprising the Consignment Inventory.
- (e) Each party shall maintain in force policies of products liability insurance with respect to the Products in an amount not less than \$2 million, each of which shall name the other party as an additional insured. Each party shall furnish the other satisfactory evidence of such insurance coverage.
- 8. Obligations of Hakuto. (a) In addition to and not in limitation of any other obligations of Hakuto under this Agreement, Hakuto shall, at its own expense unless otherwise expressly provided herein:

 (i) Exert its best efforts to vigorously promote the sale of the
 - (i) Exert its best efforts to vigorously promote the sale of the Products in the Territory and to develop a market demand for the Products in the Territory.
 - (ii) Advertise the Products throughout the Territory in appropriate advertising media and in a manner insuring proper and adequate publicity for the Products. EMCORE shall review and approve all advertising prior to release by Hakuto.
 - (iii) Prepare for EMCORE's review and approval, and update not less than quarterly, a detailed marketing plan for the sale of the Products in the Territory.
 - (iv) Establish and maintain within the Territory adequate business locations, including suitable facilities for the display, care and storage of the Products and shall provide adequate insurance against loss.
 - (v) Maintain within the Territory an inventory of Spare Parts (in

addition to the Consignment Inventory) sufficient to meet expected demands for service and upgrading of the Products in the Territory.

- (vi) Maintain a trained technical sales force and sufficient other personnel qualified to promote, install and service the Products in the Territory and send appropriate personnel to Emcore for one week training on an annual basis.
- (vii) Offer the Products for sale (including all advertising and promotional activities) under the EMCORE trademark as manufacturer and Hakuto's trademark as distributor.
- (viii) Assume full responsibility for the installation of the Products, and the warranty and post-warranty service and maintenance of the Products, in the Territory.
- (ix) Translate and prepare promotional and technical literature for use in the Territory.
- (x) Obtain all import and regulatory approvals necessary for the promotion and sale of the Products in the Territory, supply EMCORE with necessary customer import certificates, and otherwise advise and assist EMCORE in complying with U.S. regulations and with regulations and customs applicable in the Territory.
- (xi) Provide EMCORE with periodic reports (but not less often than quarterly) in form and substance satisfactory to EMCORE, setting forth detailed information for such period regarding sales, quotations, promotional efforts made, advertising, resale prices, competitors, activities in the Territory, installation and service activities performed, customer complaints, business trends and any other information likely to assist EMCORE in evaluating the performance of Hakuto in the Territory.
- (xii) Establish and maintain complete and accurate records of all sales and service of the Products in the Territory.
- (xiii) Refrain, without EMCORE's prior written consent, from seeking customers outside the Territory or from promoting the sale of the Products outside the Territory.
- $({\rm xiv})$ $\,$ Refrain from purchasing or soliciting orders for goods which compete in any way with the Product.
- (b) Hakuto will purchase during each of the first two Contract Years not less than \$3,100,000 of Products (said sum being based upon average annual purchases made by Hakuto during the five year period from October 1990 through September 1995). For each succeeding Contract Year of the Agreement, Hakuto and Emcore shall mutually agree on a minimum purchase amount for each such year prior to commencement of such Contract Year.

 In computing the value of the minimum purchase amount for each
- In computing the value of the minimum purchase amount for each Contract Year, there shall be included the value of all Products shipped during said Contract Year, the value of orders issued by Hakuto though not shipped by Emcore during the Contract Year, and the value of orders procured by Hakuto but cancelled by Hakuto's customer by reason of Emcore's inability to perfect delivery of the Product within six months from date of the order. The value of all of the foregoing orders which exceeds the minimum purchase commitment for any Contract Year shall be credited to Hakuto's minimum purchase commitment for the subsequent Contract Year. "Contract year" shall mean the twelve month period commencing on the date of this Agreement and each twelve month period thereafter during the term of this Agreement or any renewal term thereafter.
- 9. Trademark and Patent Rights. (a) Exhibit C attached hereto and made a part hereof identifies all trademarks and patents which have already been registered by EMCORE in the Territory or in which EMCORE otherwise claims a proprietary interest (the "Intellectual Property"). Hakuto is hereby granted the license and privilege to use the Intellectual Property during the term of this Agreement in furtherance of the objectives of this Agreement. Hakuto shall not have the right to sublicense the Intellectual

Property or otherwise permit its use by third parties.

- (b) Hakuto shall advise EMCORE from time to time of any additional filings, registrations or other actions that may be necessary or desirable for the protection of EMCORE's patent or trademark rights in the Territory. Upon EMCORE's request, Hakuto will assist EMCORE in connection with the issuance or registration of any new EMCORE patents or trademarks in the Territory.
- (c) Hakuto shall at all times respect and protect EMCORE's rights of total ownership of the Intellectual Property in the Territory. Hakuto shall promptly notify EMCORE of any infringements of such rights of which it has notice and shall assist EMCORE in taking such action against such infringement as EMCORE may elect.
- (d) Upon termination of this Agreement for any reason, Hakuto shall promptly relinquish to EMCORE any rights to the use of the Intellectual Property and shall thereafter refrain from using same.
- 10. Confidentiality. Hakuto agrees to use its best efforts to hold in strict confidence and not to disclose to others or use, either before or after termination of this Agreement, any technical or business information, manufacturing technique, process, experimental work, trade secret or other confidential matter relating to the Products or EMCORE's business, except to the extent necessary to further the objectives of this Agreement. Hakuto shall, upon request (and upon termination of this Agreement without request), deliver to EMCORE any and all drawings, notes, documents and materials received from EMCORE.
- 11. Assignment. Neither party shall assign, transfer or otherwise dispose of this Agreement or any of its rights or obligations hereunder in whole or in part to any individual, firm or corporation without the prior written consent of the other party, and any attempted assignment in violation of this provision shall be null and void.
- 12. Term and Termination. (a) This Agreement shall take effect on the date set forth on the first page hereof and shall remain in effect for a period of seven (7) years thereafter unless earlier terminated in accordance with the terms hereof. This Agreement may be terminated by either Party upon the expiration of the seven-year period by giving six (6) months prior written notice to the other party of its intent not to extend the Agreement for further periods. Unless such notice of intent to terminate is given, this Agreement shall continue to remain in effect after the initial seven-year period for further consecutive periods of one year each, subject, however, to the right of either party to terminate the Agreement at any time by giving six (6) months prior written notice to the other party of its intent to terminate.

 (b) In addition to the provisions of Section 12(a) above, either
- party may terminate this Agreement as follows:
 - Immediately and without prior written notice to the other (i) party in the event that proceedings in bankruptcy or insolvency are instituted by or against the other party, or a receiver is appointed or any substantial part of the assets of the other party is the subject of attachment, sequestration or other similar proceeding, and such proceeding is not vacated, terminated or stayed within 60 days after its commencement or institution; or
 - Immediately upon the occurrence of a default by the other (ii) party in the performance of its obligations under this Agreement, which default is not cured within 30 days after receipt by such party of written notice of the default; or
 - (iii) Immediately if either party is unable to obtain or renew any permit, license, or other governmental approval necessary to such party's performance under this Agreement; or
 - (iv) Upon thirty (30) days prior written notice to the other party of intent to terminate if the parties are unable to agree upon the terms and conditions of conversion or modification of that certain Senior Secured Note Purchase and Security Agreement dated as of June 2, 1993,

now in effect between the parties.

- (c) EMCORE reserves the right to terminate this Agreement by giving Hakuto six (6) months prior written notice of intent to terminate in the event Hakuto fails to purchase for delivery not less than \$3,100,000 of Products during each of the first two (2) years of this Agreement.

 13. Consequences Upon Termination. Upon expiration or termination
- of this Agreement for any reason:

 (a) EMCORE shall repurchase Hakuto's inventory of new and unused Spare Parts at EMCORE's then effective list price for such Spare Parts or Hakuto's cost therefor, whichever is lower. Hakuto shall deliver such Spare Parts, together with the Consignment Inventory, at EMCORE's expense, to EMCORE at such location, in such manner and at such time as EMCORE may direct.
- (b) Hakuto shall return to EMCORE all proprietary information and all sales and technical literature relating to the Product, and Hakuto shall deliver to EMCORE Hakuto's list of all customers and prospective customers for the Products in the Territory, including names, addresses, telephone numbers and contact persons.
- (c) Hakuto shall cease marketing the Products and using EMCORE's name and trademarks in the Territory, provided that all orders for Products accepted by EMCORE prior to expiration or termination of this Agreement shall be completed in accordance with their terms. Hakuto shall thereafter refer to EMCORE any and all inquiries, orders, correspondence and the like, whether in written or oral form pertaining to Products in the Territory.
- (d) EMCORE shall assume, commencing immediately upon termination of this Agreement, full responsibility for providing warranty service and postwarranty servicing of the Products to all customers theretofore serviced by Hakuto, and EMCORE shall hold Hakuto free and harmless from all such obligations.
- (e) EMCORE shall pay to Hakuto a commission equal to five percent (5%) of the purchase price of any System for which EMCORE issued a formal quotation prior to the expiration or termination of this Agreement, if and to the extent such System is sold in the Territory on substantially the same terms contained in such quotation and payment in full for such System is received by EMCORE within twelve (12) months after such expiration or termination.
- Provided that termination of this Agreement did not result by reason of the breach of or default under this Agreement by either party, neither party to this Agreement shall claim from the other party any indemnity, reimbursement, compensation or damages for alleged loss of clientele, good will, profits or anticipated sales or on account of expenditures, investments, leases or other commitments arising from the expiration or termination of this Agreement, each party acknowledging that it has made all decisions and investments in full awareness of the possibility of losses or damages arising from the expiration or termination of this Agreement.
- 14. Miscellaneous. (a) Notices. All notices and other communications in connection with this Agreement shall be in writing, shall be sent to the respective parties at the following addresses, or to such other addresses as may be designated by the parties in writing from time to time, by registered or certified mail, telegram, telecopy or recognized overnight delivery service, and shall be effective upon receipt:

TO EMCORE: EMCORE Corporation

> 35 Elizabeth Avenue Somerset, New Jersey 08873 Attention: Tom Werthan Telephone: 908-271-9090 Fax: 908-271-9686

TO HAKUTO: Hakuto Co., Ltd. 1-13 Shinjuku I-Chome, Shinjuki-Ku Tokyo 160, Japan

Attention: T. Yamawaki Telephone: 3-3225-8910 Fax: 3-3225-9007

WITH COPY TO: Drive, Suite 3200 Masuda, Funai, Eifert & Mitchell, Ltd. One East Wacker

Chicago, Illinois 60601-1802 Attention: Thomas P. McMenamin

Telephone: 312-245-7500 Fax: 312-245-7467

- (b) No Waiver. Any failure by any party hereto to enforce at any time any term or condition under this Agreement shall not be considered a waiver of that party's right thereafter to enforce each and every term and condition of this Agreement.
- (c) Governing Law; Arbitration. This Agreement is made and shall be construed according to the laws of the State of New Jersey, USA. All disputes, controversies, or differences which may arise between the parties, out of or in relation to or in connection with this contract, or the breach thereof, shall be finally settled by arbitration pursuant to the Japan-American Trade Arbitration Agreement, of September 16, 1952, by which each party hereto is bound. The arbitration proceeding shall be held in Somerset County, New Jersey, if Hakuto seeks arbitration and in Tokyo, Japan, if Emcore institutes such proceeding. Each party shall bear its own costs incurred in such arbitration proceeding.
- (d) Modification. This Agreement may be modified, amended or revised only by a written instrument duly executed by the parties hereto.
- (e) Compliance with Laws. Hakuto in the conduct of its business under this Agreement shall comply with the applicable laws, regulations, orders and the like prevailing in the Territory and shall hold EMCORE harmless from any claim, liability, cost or expense arising out of a violation thereof.
- from any claim, liability, cost or expense arising out of a violation thereof.

 (f) Entire Agreement. This Agreement, the exhibits and duly executed addenda thereto, and all approved purchase orders issued pursuant hereto shall contain the entire and only agreement between the parties relating to the subject matter hereof, and any representations, terms or conditions relating thereto but not incorporated herein shall not be binding upon either party. This Agreement wholly cancels, voids, and supersedes any agreement heretofore entered into between the parties with respect to the subject matter hereof, except as otherwise expressly provided herein.
- (g) Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions or affecting the validity or enforceability of any provision in any other jurisdiction.
- the validity or enforceability of any provision in any other jurisdiction.

 (h) Successors and Assigns. Subject to Section 11 hereof, all terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties and their respective transferees, successors and assigns.
- (i) Execution. This Agreement may be executed by duly authorized officers of the respective parties hereto in any number of counterparts, each of which shall be deemed the original. This Agreement may be translated into any other language and such translation may be initialed, but only this Agreement in the English language shall be deemed the original. If any conflict exists between the English language and the translation, the English language version shall control.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written. $\,$

EMCORE CORPORATION

By /s/ Norman E. Schumaker

Title: Chief Executive Officer

HAKUTO CO., LTD.

Ву

Title: President

Exhibit A

PRODUCTS [Paragraph 1(a)]

Explorer GS/3100 with glove box (no load lock) and limited options

Discovery	75	GS/3100
Discovery	125	GS/3200
Discovery	180	GS/3300

 $\mathsf{GS}/\mathsf{3300}$ with new Enterprise engineering (not yet Enterprise 200

available) Enterprise (GS/4400) GS/9400

Enterprise 300 Enterprise 400

Exhibit B

Consumable Items

Not Covered Under Warranty [Paragraph 7(c)]

(Subject to revision by Emcore)

- Pump Fluids (krytox, mechanical pump fluid) Oil Coalescing Filter Element
- 2.
- Oil Backstreaming Filter Element Oil Recirculation Filter Element 4.
- Graphite Heater Filament Loadlock Heater Bulbs
- 6.
- Copper Gaskets
- Nickel Gaskets 8.
- Viton-rings VCR Filter Gaskets 9.
- PD Cell Membrane
- Reactor Parts:
 - a. Moly Electrodes
 - Moly Standoff Nuts Moly Screws

 - Vented Screws
 - Laser Drilled Quartz Plate
- TGA (Activated Carbon)
- 13. MDA Tape
- MDA Thermal Print Paper
- 15. Motor Drive Belt
- 16. Needle Valve Belt
- 17. Computer Disks
- Fuses 18.
- Loadlock Operation Fluid 19.
- Stainless Steel Filter Medium 20.
- Fluorescent Light Bulbs Clean Air Filters 21.
- 23. Miscellaneous Hardware

Exhibit C

Patents:

Modular Gas Handling Apparatus Gas Treatment Apparatus and Method Gas Dispersion Device

Trade Mark:

EMCORE

[Lease for premises at 394 Elizabeth Avenue, Somerset, New Jersey 08873]

SKW REAL ESTATE LIMITED PARTNERSHIP 1650 Tysons Boulevard, 4th Floor McLean, Virginia 22102

December 1, 1996

Emcore Corporation 394 Elizabeth Avenue Somerset, New Jersey 08873

Re: The Drew Building
394 Elizabeth Avenue
a/k/a 720 Elizabeth Avenue
a/k/a 394 Elizabeth Avenue
Somerset, New Jersey
Franklin Township, Somerset County
Block 528.05, Lot 19.25

Ladies and Gentlemen:

Reference is hereby made to that lease of the Premises commencing November 1, 1992 between our predecessor-in-interest, New Jersey National Bank, and you, as the Tenant, amended by those certain letter agreements dated March 31, 1995 and January 29, 1996 (collectively the "Lease"). The Landlord and Tenant have agreed to modify the terms of the Lease as set forth herein. All capitalized terms used herein not defined herein shall have the meanings ascribed to them in the Lease.

a) Paragraph 1(c) is hereby modified to provide that the Premises is 74,850 square feet (37,010 square feet as per letter agreement dated March 31, 1995, plus 11,842 square feet of initial expansion space as per a letter agreement dated January 29, 1996 plus 25,998 square feet as per this letter agreement). The Premises now constitute the entire building -- 100% thereof. This percentage shall be used in all applicable prorations referenced in the Lease. Accordingly, as of the possession date (defined below) of the Expansion Space (as defined below), Tenant shall be liable for all of the real estate taxes and all Expense Rent (without reference to any Expense Base Year) relating to the Property. Landlord shall have no liability whatsoever for any repairs or maintenance of any portion of the Property or the Premises except for roof repair or replacement and the structural aspects of the Property, provided that the damage thereto shall not have been or caused by the negligence or deliberate acts of Tenant, or its agents, servants, employees, guest or invitees, in which event, the same shall be repaired by Tenant at

Tenant's sole cost and expense. The new space being added to the Premises (the "Expansion Space") is the cross-hatched area shown on EXHIBIT I annexed hereto.

- b) Paragraphs 1 (e) and 49 of the Lease are modified to provide that the Fixed Rental is \$533,762.70 per year, \$44,480.23 per month).
 - c) With respect to the Expansion Space:
 - The possession date thereof shall be the date Tenant or its counsel receives a copy of this letter agreement signed by all parties hereto.
 - The Expansion Space shall be delivered totally "as-is" to the Tenant. The Landlord shall not be required to make any improvements thereto except as expressly set forth herein, nor shall Landlord be required to demolish any existing walls or other structures therein.
 - Tenant shall be entitled to an abatement of Fixed Rental relating to the Expansion Space (\$13,540.63) for a period of one (1) month from its possession date (i.e., for this one (1) month abatement period, the Fixed Rental shall remain in the same amount as it was immediately prior to Tenant's possession of the Expansion Space -- \$30,939.60), provided, however, that the abatement of Fixed Rental provided for in this Lease is conditioned upon Tenant's full and timely performance of all of its obligations under the Lease during the abatement period.
 - 4) As soon as practicable, Tenant shall deliver to Landlord detailed plans and specifications for the construction of the improvements the Tenant proposes to construct in the Expansion Space. Landlord's approval of such plans and specifications shall not be unreasonably withheld or delayed provided that such plans and specifications comply with all laws, rules and regulations and are sufficiently detailed to allow construction of the improvements in a good and workmanlike manner. As used herein, "working Drawings" shall mean the final drawings approved by the

Landlord and the "Work" shall mean all improvements to be constructed in accordance with the Working Drawings. Landlord's approval of the Working Drawings shall not be a representation or warranty of Landlord that such drawings are adequate for any use or comply with any law and shall merely be the consent of the Landlord thereto. Any and all changes in the Work must receive the prior written consent of the Landlord which will not be unreasonably withheld. All contractors and subcontractors performing the Work shall be required to procure and maintain insurance against such risks, and in such amounts, and with such companies as Landlord may reasonably require. Certificates of such insurance, with paid receipts therefor, must be received by Landlord before any Work is to be commenced. The Work shall be performed in a good and workmanlike manner, free of defects and shall strictly conform with the Working Drawings. The entire cost of performing the Work (the "Total Construction Cost") shall be paid by Tenant.

- d) With respect to a New HVAC units to be installed for the Expansion Space, Landlord shall be responsible for the first \$108,000 of the cost of such units and installation thereof and Tenant shall be liable for any such costs in the excess of said sum. The HVAC units and the installation thereof shall be subject to the Landlord's prior approval which approval will not be unreasonably withheld or delayed.
- e) Upon execution hereof by both parties, the Tenant shall have the right to expand the existing elevated concrete storage pad and to construct a concrete pad for the storage of liquid nitrogen tanks (in accordance with EXHIBIT 2 annexed hereto) in strict accordance with all applicable governmental laws, rules, regulation and ordinances.
- f) Tenant shall deliver to Landlord, simultaneously herewith, and within ninety (90) days after the end of each of its fiscal years during the term hereof, copies of its then current annual financial statements prepared by its regularly engaged independent certified public accountants.
- h) The term "Lease" shall mean the Lease as amended and supplemented by this letter agreement. In all other respects, the Lease remains in full force and effect.

If this letter agreement accurately and completely sets forth our understanding, please execute the extra copy hereof where indicated below and return same to the undersigned.

Very truly yours, SKW REAL ESTATE LIMITED PARTNERSHIP

By: WSK GEN-PAR, INC., its General Partner

> By: /s/ Richard Schreiber RICHARD SCHREIBER Assistant Vice President

Agreed and accepted this 15th day of November, 1996.

EMCORE CORPORATION

By: /s/ Thomas G. Werthan THOMAS WERTHAN Vice President

cc: Mr. Richard Madison, Newmark Partners, Inc.

REGISTRATION RIGHTS AGREEMENT [relating to September 1996 warrant issuance]

REGISTRATION RIGHTS AGREEMENT, dated as of this 20th day of December 1996, between EMCORE CORPORATION, a New Jersey corporation (the "Corporation"), and the persons set forth on Schedule A hereto (the "Investors').

WITNESSETH

WHEREAS, the Corporation agreed to provide the Investors with registration rights as set forth herein as further consideration for the purchase by the Investors of 4,133,333 warrants to purchase shares of common stock of the Corporation (the "Common Stock"), 833,333 having been issued as of September 1, 1996 and 3,333,333 being issued as of the date of this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the terms and conditions hereof, the parties hereto agree as follows:

Definitions. For purposes of this Agreement, the following

terms shall have the following meanings:

Affiliate and Associate: Such terms shall have the respective meanings assigned to them pursuant to Rule 12b-2 under the Exchange Act.

Commission: The United States Securities and Exchange Commission and any successor federal agency having similar powers.

Common Stock: The Company's common stock, no par value.

Exchange Act: The Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations thereunder, all as at the time in effect.

Person: An individual, partnership, joint venture, corporation, trust, unincorporated organization or the government or any department or agency

Registrable Securities: All of the Corporation's Common Stock acquired or acquirable by the investors upon exercise of warrants acquired as of the date of this Agreement.

Registration Expenses: Except as otherwise specifically provided herein, all of the Corporation's out-of-pocket expenses, without limitation as to amount, incident to the Corporation's performance of or compliance with Section 2 herein, including, without limitation, all fees and expenses, outside messenger and delivery expenses, the fees and disbursements of counsel for the Corporation and of its independent public accountant, and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities and the expenses of one firm of attorneys who shall represent the

Investors. Registration Expenses shall not include any underwriter's discounts, commissions or transfer taxes paid by the Investors.

Securities Act: The Securities Act of 1933, as amended, or any similar federal statute, and the rules and regulations thereunder, all as at the time in effect.

Warrants: The Company's warrants, dated as of the date of this Agreement, to purchase one share of the Common Stock exercisable at \$3.00 per share and expiring September 1, 2001, and as otherwise set forth therein.

Registration

- 2.1 Registration on Request (Demand Registration). (a) Request. At any one time more than six (6) months after the date hereof, upon the written request of a majority in interest of Investors that the Corporation effect the registration under the Act of all or part of each Investor's Registrable Securities specifying the intended method or methods of disposition thereof, the Corporation will use its best efforts to effect the registration under the Securities Act of such securities to permit their disposition (in accordance with the intended methods thereof as aforesaid) and keep such registration open for a period of not less than nine (9) months, provided that if such registration may then be effected by the Corporation on Form S-3 or Form S-3B or any successor form of registration, then the Corporation shall keep such registration effective until the Registerable Securities may be sold publicly pursuant to Rule 144 by the Investors.
- (b) Registration Statement Form. Registrations under this Section 2.1 shall be on an appropriate registration form of the Commission as determined by the Corporation and shall permit the disposition of the Registrable Securities in accordance with the intended method or methods of disposition specified in the Investors' request for such registration.
- (c) Expenses. The Corporation will pay all Registration Expenses in connection with any registration of the Registrable Securities.
- 2.2 Incidental Registration (Piggyback Registration). (a) Notice and Request. If the Corporation at any time proposes to register any of its securities under the Securities Act (except registrations solely for registration of shares in connection with an employee benefit plan or a merger or consolidation), whether or not for sale for its own account, it will each

such time give prompt written notice to the investors of its intention to do so. Upon the written request of any Investor within 30 days after the receipt of any such notice (which request shall specify the Registrable Securities intended to be disposed of by the Investor, the Corporation will use its best efforts to effect the registration under the Securities Act of all Registrable Securities which the Corporation has been so requested to register by the Investor as part of the incidental registration, provided that if the Corporation shall determine for any reason not to register or to delay registration of such securities the Corporation may, at its election, give written notice of such determination to the Investors, and, thereupon, (i) in the case of a determination not to register, shall be relieved of its obligation to register any Registrable Securities in connection with such registration, without prejudice, however, to the rights of the Investors to request that such registration be effected as a registration under Section 2.1, and (ii) in the case of a determination to delay registering, shall be permitted to delay registering any Registrable Securities, for the same period as the delay in registering such other securities. No registration effected under this Section 2.2 shall relieve the Company of its obligation to effect

any registration upon request under Section .2.1. The Registration Expenses of the Investors shall be paid by the Corporation.

- (b) Underwriters Cutback. If, in any incidental registration referred to in Section 2.2(a) above, the managing underwriter or underwriters thereof shall advise the Corporation in writing that in its or their reasonable opinion the number of securities proposed to be sold in such registration exceeds the number that can be sold in such offering without having a material effect on the success of the offering (including, without limitation, an impact on the selling price or the number of shares that any participant may sell), the Corporation will include in such registration only the number of securities that, in the reasonable opinion of such underwriter or underwriters, can be sold without having a material adverse effect on the success of the offering as follows: (i) first, all of the shares to be issued and sold by the Corporation and (ii) second, the Registrable Securities requested to be included in such registration by the Investors and any other Person pro rata on the basis of the aggregate number of shares requested to be included.
- (c) Sales during Registration. The Investors participating in the incidental registration agree, if requested by the managing underwriter in an underwritten public offering, not to effect any public sale or distribution of securities of the Corporation of the same class as the Registrable Securities so registered, including a sale pursuant to Rule 144 under the Securities Act (except as part of such underwritten offering), during the ten-day period prior to, and during the 80-day period beginning on, the closing date of the underwritten offering. Each Investor agrees that it shall undertake, in its request to participate in any such underwritten offering, not to effect any public sale or distribution of any applicable class of Registrable Securities during the 90-day period commencing on the date of sale of such applicable class of Registrable Securities unless it has provided 90 days prior written notice of such sale or distribution to the underwriter(s).
- 2.3 Registration Procedures. Whenever the Corporation is required to effect. the registration of any Registrable Securities under the Securities Act as provided in Sections 2.1 and 2.2, it shall, as expeditiously as possible:
- (i) prepare and (within 120 days after a request for registration is given to the Corporation or as soon thereafter as possible) file with the Commission a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective:
- (ii) prepare and file with the Commission such amendments and supplements to the registration statement and prospectus used in connection therewith as may he necessary to keep such registration statement effective and to comply with the provisions of the Securities Act for nine (9) months if under 2.1 and 90 days if under 2.2:
- (iii) furnish to each Investor participating such number of conformed copies of such registration statement and of each amendment and supplement thereto (in each case including all exhibits), such number of copies of the prospectus contained in such registration statement (including each preliminary prospectus and any summary prospectus) and any other prospectus flied under Rule 424 under the Securities Act, in conformity with the requirements of the Securities Act, and such other documents, as such Investor may reasonably request;

- (iv) use its best efforts to register or qualify all Registrable Securities and other securities covered by such registration statements under such other' securities or blue sky laws of such jurisdictions where an exemption is not available and as the Investors participating shall reasonably request, to keep such registration or qualification in effect for so long as such registration statement remains in effect, and take any other action which may be reasonably necessary or advisable to enable the Investors participating to consummate the disposition in such jurisdictions of the securities owned by them, except that the Corporation shall not for any such purpose be required to qualify generally to do business as a foreign corporation in any jurisdiction wherein it would not but for the requirements of this subdivision (iv) be obligated to be so qualified or to consent to general service of process in any such jurisdiction; and
- (v) notify each Investor participating, at any time when a prospectus forming a part of such registration statement is required to be delivered under the Securities Act, upon discovery that, or upon the happening of any event as a result of which, the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made, and at the request of the participating investors promptly prepare and furnish to the participating investors a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such securities, such prospectus shall not include an untrue statement of a material fact or. omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they are made.
- 2.4 Limitations, Conditions and Qualifications to Obligations under Registration Covenants. The obligations of the Corporation to use its reasonable efforts to cause the Registrable Securities to be registered under the Securities Act are subject to each of the following limitations, conditions and qualifications.
- (a) The Corporation shall not be obligated to file any registration statement pursuant to Section 2.1 hereof at any time if the Corporation would be required to include financial statements audited as of any date other than the end of its fiscal year.
- (b) The Corporation shall be entitled to postpone for a period of time (which in the judgment of the Corporation is reasonable under the circumstances) the filing of any registration statement otherwise required to be prepared and filed by it pursuant to Section 2.1 if the Corporation determines, in its reasonable judgment, that such registration and offering would interfere with any financing, acquisition, corporate reorganization or other proposed material transaction involving the Corporation or any of its Affiliates or that it would require the Corporation to disclose material non-public Information that it deems advisable not to disclose and promptly gives the Investor written notice of such determination. Further, the Corporation shall have the right to require each Investor participating not to sell securities in a public offering for a period of up to 90 days during the effectiveness of any registration statement if the Corporation shall determine that such sale would interfere with any transaction involving the Corporation as described above or that such registration would require disclosure of such material non-public information. If pursuant to the preceding sentence the Corporation has required the Investor to discontinue the sale of securities during the effectiveness of a registration statement, then the period of time

any such registration statement must be kept effective pursuant to Section 2.3(ii) hereof shall be extended for a period equal to the length of such discontinuance.

- (c) If the Investor proposes that the sale of Registrable Securities pursuant to Section 2.1 hereof be an underwritten offering, the Corporation shall have the right to approve the choice of underwriters who undertake such offering.
- 2.5 Indemnification. (a) Indemnification by the Corporation. In the event of any registration of any Registrable Securities of the Corporation under the Securities Act pursuant to Section 2.1 or 2.2, the Corporation will, and hereby does, indemnify and hold harmless each Investor, its directors and officers, any underwriter and each other Person, if any, who controls any Investor or any such underwriter, against any losses, claims, damages or liabilities, to which any Investor or any such director or officer or underwriter or controlling person may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities arise out of or are based upon any untrue statement of any material fact contained in any registration statement under which such securities were registered under the Securities Act or any prospectus contained therein, or any omission or alleged omissions to state therein a material fact required to be stated therein or necessary to make the statements therein in light of the circumstances in which they were made not misleading, and the Corporation will reimburse each Investor, and each such director, officer, underwriter and controlling person for any legal or any other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim or liability or action or proceeding in respect thereof; provided that the Corporation shall not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises at of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement or any such prospectus, in reliance upon and in conformity with written information furnished to the Corporation by or on behalf of any investor or underwriter, as the case may be, specifically stating that it is for use in the preparation thereof; and provided, further, that the Corporation shall not be liable in any case to the extent that such loss, claim, damage, liability or expense arises out of an untrue or alleged untrue statement or omission or alleged omission in a prospectus, if such statement or omission is corrected in an amendment or supplement to the prospectus and the Investor thereafter fails to deliver such prospectus as amended or supplemented prior to or concurrently with the sale of the Registrable Securities. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any Investor, or any such director, officer or controlling person and shall survive the transfer of such securities by the Investor.
- (b) Indemnification by the Investors. The Corporation may require, as a condition to including any Registrable Securities in any registration statement filed pursuant to Section 2.1 or 2.2, that the Corporation shall have received an undertaking satisfactory in all respects to it from each Investor participating, to indemnify and hold harmless (in the same manner and to the same extent as set forth in subdivision (a) of this Section 2.5) the Corporation, each director of the Corporation, each officer of the Corporation and each other person, if any, who control the Corporation within the meaning of the Securities Act, with respect to any statement or alleged statement in or omission or alleged omission from such registration statement or any prospectus contained therein, if such statement or alleged statement or omission or alleged omission was made in reliance upon or in conformity with written information furnished to the Corporation by the Investor for use in

the preparation of such registration statement or prospectus. Such indemnity shall remain in full force and effect, regardless of any investigation made by or on behalf of the Corporation or any such director, officer or controlling person and shall survive the transfer of such securities by the investor.

- (c) Notices of Claims etc. Promptly after receipt by an indemnified party of notice of the commencement of any action or proceeding involving a claim referred to in the preceding subdivisions of this Section 2.5, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the latter of the commencement of such action, provided that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations under the preceding subdivisions of this Section 3.6, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an indemnified party, unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties may exist in respect of such claim, the indemnifying party shall be entitled to participate in and to assume the defense thereof, jointly with any other indemnifying party similarly notified to the extent that it may wish, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall be liable for any settlement of any action or proceeding effected without its written consent. No indemnifying party shall, without the consent of the indemnified party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect to such claim or litigation.
- (d) Other Indemnification. Indemnification similar to that specified in the preceding subdivisions of this Section 2.b (with appropriate modifications) shall be given by the Corporation and each Investor participating with respect to any required registration or other qualification of securities under any Federal or state law or regulation of any governmental authority other than the Securities Act.
- 3. Notices. All communication provided for hereunder shall be sent by first- class mail and, if to an Investor, addressed to the investor as the Investor may have designated to the Corporation in writing, and, if to the Corporation, addressed to it at c/o EMCORE Corporation, 394 Elizabeth Avenue, Somerset, NJ 08873-1214, Attention: Board Secretary, or to such other address as the Corporation may have designated to the Investor in writing.
- 4. Assignment. This Agreement shall be binding upon end inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns.
- 5. Descriptive Headings. The descriptive headings of the several sections and paragraphs of this Agreement are inserted for reference only and shall not limit or otherwise affect the meaning hereof.
- 6. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of New Jersey.

7. Counterparts. This Agreement may be executed simultaneously in any number of counterparts, each of which shall be deemed an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and delivered by their respective officers thereunto duly authorized as of the $\,$ date first above written.

EMCORE CORPORATION

By: /s/ Reuben F. Richards, Jr. Name: Reuben F. Richards, Jr. Title: President

The Investors by their Agent-in-Fact pursuant to Subscription Agreements signed by them

JESUP & LAMONT MERCHANT PARTNERS, L.L.C.

By: /s/ Howard Curd Name: Howard Curd Title: Manager

Schedule A

EMCORE Corporation Investors

Name & Address Amount Telephone Fax

REGISTRATION RIGHTS AGREEMENT [relating to December 1996 warrant issuance]

REGISTRATION RIGHTS AGREEMENT, dated as of this 20th day of December 1996, between EMCORE CORPORATION, a New Jersey corporation (the "Corporation"), and the persons set forth on Schedule A hereto (the

WITNESSETH

WHEREAS, the Corporation agreed to provide the Investors with registration rights as set forth herein as further consideration for the purchase by the Investors of 4,133,333 warrants to purchase shares of common stock of the Corporation (the "Common Stock"), 833,333 having been issued as of September 1, 1996 and 3,333,333 being issued as of the date of this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the terms and conditions hereof, the parties hereto agree as follows:

Definitions. For purposes of this Agreement, the following terms shall have the following meanings:

Affiliate and Associate: Such terms shall have the respective meanings

assigned to them pursuant to Rule 12b-2 under the Exchange Act.

Commission: The United States Securities and Exchange Commission and any successor federal agency having similar powers.

Common Stock: The Company's common stock, no par value.

Exchange Act: The Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations thereunder, all as at the time in effect.

Person: An individual, partnership, joint venture, corporation, trust, unincorporated organization or the government or any department or agency

Registrable Securities: All of the Corporation's Common Stock acquired or acquirable by the investors upon exercise of warrants acquired as of the date of this Agreement.

Registration Expenses: Except as otherwise specifically provided herein, all of the Corporation's out-of-pocket expenses, without limitation as to amount, incident to the Corporation's performance of or compliance with Section 2 herein, including, without limitation, all fees and expenses, outside messenger and delivery expenses, the fees and disbursements of counsel for the Corporation and of its independent public accountant, and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities and the expenses of one firm of attorneys who shall represent the

Investors. Registration Expenses shall not include any underwriter's discounts, commissions or transfer taxes paid by the Investors.

Securities Act: The Securities Act of 1933, as amended, or any similar federal statute, and the rules and regulations thereunder, all as at the time in effect.

Warrants: The Company's warrants, dated as of the date of this Agreement, to purchase one share of the Common Stock exercisable at \$3.00 per share and expiring September 1, 2001, and as otherwise set forth therein.

Registration

- 2.1 Registration on Request (Demand Registration). (a) Request. At any one time more than six (6) months after the date hereof, upon the written request of a majority in interest of Investors that the Corporation effect the registration under the Act of all or part of each Investor's Registrable Securities specifying the intended method or methods of disposition thereof, the Corporation will use its best efforts to effect the registration under the Securities Act of such securities to permit their disposition (in accordance with the intended methods thereof as aforesaid) and keep such registration open for a period of not less than nine (9) months, provided that if such registration may then be effected by the Corporation on Form S-3 or Form S-3B or any successor form of registration, then the Corporation shall keep such registration effective until the Registerable Securities may be sold publicly pursuant to Rule 144 by the Investors.
- (b) Registration Statement Form. Registrations under this Section 2.1 shall be on an appropriate registration form of the Commission as determined by the Corporation and shall permit the disposition of the Registrable Securities in accordance with the intended method or methods of disposition specified in the Investors' request for such registration.
- Expenses. The Corporation will pay all Registration Expenses in connection with any registration of the Registrable Securities.
- 2.2 Incidental Registration (Piggyback Registration). (a) Notice and Request. If the Corporation at any time proposes to register any of its securities under the Securities Act (except registrations solely for registration of shares in connection with an employee benefit plan or a merger or consolidation), whether or not for sale for its own account, it will each

such time give prompt written notice to the investors of its intention to do so. Upon the written request of any Investor within 30 days after the receipt of any such notice (which request shall specify the Registrable Securities intended to be disposed of by the Investor, the Corporation will use its best efforts to effect the registration under the Securities Act of all Registrable Securities which the Corporation has been so requested to register by the Investor as part of the incidental registration, provided that if the Corporation shall determine for any reason not to register or to delay registration of such securities the Corporation may, at its election, give written notice of such determination to the Investors, and, thereupon, (i) in the case of a determination not to register, shall be relieved of its obligation to register any Registrable Securities in connection with such registration, without prejudice, however, to the rights of the Investors to request that such registration be effected as a registration under Section 2.1, and (ii) in the case of a determination to delay registering, shall be permitted to delay registering any Registrable Securities, for the same period as the delay in registering such other securities. No registration effected under this Section 2.2 shall relieve the Company of its obligation to effect

any registration upon request under Section 2.1. The Registration Expenses of the Investors shall be paid by the Corporation.

- (b) Underwriters Cutback. If, in any incidental registration referred to in Section 2.2(a) above, the managing underwriter or underwriters thereof shall advise the Corporation in writing that in its or their reasonable opinion the number of securities proposed to be sold in such registration exceeds the number that can be sold in such offering without having a material effect on the success of the offering (including, without limitation, an impact on the selling price or the number of shares that any participant may sell), the Corporation will include in such registration only the number of securities that, in the reasonable opinion of such underwriter or underwriters, can be sold without having a material adverse effect on the success of the offering as follows: (i) first, all of the shares to be issued and sold by the Corporation and (ii) second, the Registrable Securities requested to be included in such registration by the Investors and any other Person pro rata on the basis of the aggregate number of shares requested to be included.
- (c) Sales during Registration. The Investors participating in the incidental registration agree, if requested by the managing underwriter in an underwritten public offering, not to effect any public sale or distribution of securities of the Corporation of the same class as the Registrable Securities so registered, including a sale pursuant to Rule 144 under the Securities Act (except as part of such underwritten offering), during the ten-day period prior to, and during the 80-day period beginning on, the closing date of the underwritten offering. Each Investor agrees that it shall undertake, in its request to participate in any such underwritten offering, not to effect any public sale or distribution of any applicable class of Registrable Securities during the 90-day period commencing on the date of sale of such applicable class of Registrable Securities unless it has provided 90 days prior written notice of such sale or distribution to the underwriter(s).
- 2.3 Registration Procedures. Whenever the Corporation is required to effect. the registration of any Registrable Securities under the Securities Act as provided in Sections 2.1 and 2.2, it shall, as expeditiously as possible:
- (i) prepare and (within 120 days after a request for registration is given to the Corporation or as soon thereafter as possible) file with the Commission a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective:
- (ii) prepare and file with the Commission such amendments and supplements to the registration statement and prospectus used in connection therewith as may he necessary to keep such registration statement effective and to comply with the provisions of the Securities Act for nine (9) months if under 2.1 and 90 days if under 2.2;
- (iii) furnish to each Investor participating such number of conformed copies of such registration statement and of each amendment and supplement thereto (in each case including all exhibits), such number of copies of the prospectus contained in such registration statement (including each preliminary prospectus and any summary prospectus) and any other prospectus flied under Rule 424 under the Securities Act, in conformity with the requirements of the Securities Act, and such other documents, as such Investor may reasonably request;

- (iv) use its best efforts to register or qualify all Registrable Securities and other securities covered by such registration statements under such other' securities or blue sky laws of such jurisdictions where an exemption is not available and as the Investors participating shall reasonably request, to keep such registration or qualification in effect for so long as such registration statement remains in effect, and take any other action which may be reasonably necessary or advisable to enable the Investors participating to consummate the disposition in such jurisdictions of the securities owned by them, except that the Corporation shall not for any such purpose be required to qualify generally to do business as a foreign corporation in any jurisdiction wherein it would not but for the requirements of this subdivision (iv) be obligated to be so qualified or to consent to general service of process in any such jurisdiction; and
- (v) notify each Investor participating, at any time when a prospectus forming a part of such registration statement is required to be delivered under the Securities Act, upon discovery that, or upon the happening of any event as a result of which, the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made, and at the request of the participating investors promptly prepare and furnish to the participating investors a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such securities, such prospectus shall not include an untrue statement of a material fact or. omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they are made.
- 2.4 Limitations, Conditions and Qualifications to Obligations under Registration Covenants. The obligations of the Corporation to use its reasonable efforts to cause the Registrable Securities to be registered under the Securities Act are subject to each of the following limitations, conditions and qualifications.
- (a) The Corporation shall not be obligated to file any registration statement pursuant to Section 2.1 hereof at any time if the Corporation would be required to include financial statements audited as of any date other than the end of its fiscal year.
- (b) The Corporation shall be entitled to postpone for a period of time (which in the judgment of the Corporation is reasonable under the circumstances) the filing of any registration statement otherwise required to be prepared and filed by it pursuant to Section 2.1 if the Corporation determines, in its reasonable judgment, that such registration and offering would interfere with any financing, acquisition, corporate reorganization or other proposed material transaction involving the Corporation or any of its Affiliates or that it would require the Corporation to disclose material non-public Information that it deems advisable not to disclose and promptly gives the Investor written notice of such determination. Further, the Corporation shall have the right to require each Investor participating not to sell securities in a public offering for a period of up to 90 days during the effectiveness of any registration statement if the Corporation shall determine that such sale would interfere with any transaction involving the Corporation as described above or that such registration would require disclosure of such material non-public information. If pursuant to the preceding sentence the Corporation has required the Investor to discontinue the sale of securities during the effectiveness of a registration statement, then the period of time

any such registration statement must be kept effective pursuant to Section 2.3(ii) hereof shall be extended for a period equal to the length of such discontinuance.

- (c) If the Investor proposes that the sale of Registrable Securities pursuant to Section 2.1 hereof be an underwritten offering, the Corporation shall have the right to approve the choice of underwriters who undertake such offering.
- 2.5 Indemnification. (a) Indemnification by the Corporation. In the event of any registration of any Registrable Securities of the Corporation under the Securities Act pursuant to Section 2.1 or 2.2, the Corporation will, and hereby does, indemnify and hold harmless each Investor, its directors and officers, any underwriter and each other Person, if any, who controls any Investor or any such underwriter, against any losses, claims, damages or liabilities, to which any Investor or any such director or officer or underwriter or controlling person may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities arise out of or are based upon any untrue statement of any material fact contained in any registration statement under which such securities were registered under the Securities Act or any prospectus contained therein, or any omission or alleged omissions to state therein a material fact required to be stated therein or necessary to make the statements therein in light of the circumstances in which they were made not misleading, and the Corporation will reimburse each Investor, and each such director, officer, underwriter and controlling person for any legal or any other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim or liability or action or proceeding in respect thereof; provided that the Corporation shall not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises at of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement or any such prospectus, in reliance upon and in conformity with written information furnished to the Corporation by or on behalf of any investor or underwriter, as the case may be, specifically stating that it is for use in the preparation thereof; and provided, further, that the Corporation shall not be liable in any case to the extent that such loss, claim, damage, liability or expense arises out of an untrue or alleged untrue statement or omission or alleged omission in a prospectus, if such statement or omission is corrected in an amendment or supplement to the prospectus and the Investor thereafter fails to deliver such prospectus as amended or supplemented prior to or concurrently with the sale of the Registrable Securities. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any Investor, or any such director, officer or controlling person and shall survive the transfer of such securities by the Investor.
- (b) Indemnification by the Investors. The Corporation may require, as a condition to including any Registrable Securities in any registration statement filed pursuant to Section 2.1 or 2.2, that the Corporation shall have received an undertaking satisfactory in all respects to it from each Investor participating, to indemnify and hold harmless (in the same manner and to the same extent as set forth in subdivision (a) of this Section 2.5) the Corporation, each director of the Corporation, each officer of the Corporation and each other person, if any, who control the Corporation within the meaning of the Securities Act, with respect to any statement or alleged statement in or omission or alleged omission from such registration statement or any prospectus contained therein, if such statement or alleged statement or omission or alleged omission was made in reliance upon or in conformity with written information furnished to the Corporation by the Investor for use in

the preparation of such registration statement or prospectus. Such indemnity shall remain in full force and effect, regardless of any investigation made by or on behalf of the Corporation or any such director, officer or controlling person and shall survive the transfer of such securities by the investor.

- (c) Notices of Claims etc. Promptly after receipt by an indemnified party of notice of the commencement of any action or proceeding involving a claim referred to in the preceding subdivisions of this Section 2.5, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the latter of the commencement of such action, provided that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations under the preceding subdivisions of this Section 3.6, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an indemnified party, unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties may exist in respect of such claim, the indemnifying party shall be entitled to participate in and to assume the defense thereof, jointly with any other indemnifying party similarly notified to the extent that it may wish, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall be liable for any settlement of any action or proceeding effected without its written consent. No indemnifying party shall, without the consent of the indemnified party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect to such claim or litigation.
- (d) Other Indemnification. Indemnification similar to that specified in the preceding subdivisions of this Section 2.b (with appropriate modifications) shall be given by the Corporation and each Investor participating with respect to any required registration or other qualification of securities under any Federal or state law or regulation of any governmental authority other than the Securities Act.
- 3. Notices. All communication provided for hereunder shall be sent by first- class mail and, if to an Investor, addressed to the investor as the Investor may have designated to the Corporation in writing, and, if to the Corporation, addressed to it at c/o EMCORE Corporation, 394 Elizabeth Avenue, Somerset, NJ 08873-1214, Attention: Board Secretary, or to such other address as the Corporation may have designated to the Investor in writing.

 4. Assignment. This Agreement shall be binding upon end inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns.
- 5. Descriptive Headings. The descriptive headings of the several sections and paragraphs of this Agreement are inserted for reference only and shall not limit or otherwise affect the meaning hereof.
- 6. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of $\,$ New Jersey.
 - 7. Counterparts. This Agreement may be executed simultaneously in any

number of counterparts, each of which shall be deemed an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and delivered by their respective officers thereunto duly authorized as of the date first above written.

EMCORE CORPORATION

By: /s/ Reuben F. Richards, Jr. Name: Reuben F. Richards, Jr. Title: President

The Investors by their Agent-in-Fact pursuant to Subscription Agreements signed by them

JESUP & LAMONT MERCHANT PARTNERS, L.L.C.

By: /s/ Howard Name: Howard Curd Title: Manager Howard Curd

Schedule A

EMCORE Corporation Investors

Name & Address Amount Telephone Fax

[Form of 6% Subordinated Note due May 1, 2001]

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE HOLDER HEREOF, BY PURCHASING THE SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY) THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION'S UNDER THE SECURITIES ACT, PROVIDED THAT THERE ARE NO DIRECTED SELLING EFFORTS IN THE UNITED STATES AND OTHER ADDITIONAL CONDITIONS OF REGULATION S FOR RESALE HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION IN ACCORDANCE WITH RULE 144 (IF AVAILABLE) UNDER THE SECURITIES ACT, (5) IN RELIANCE ON ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES.

THIS SECURITY MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

No. N-002 \$_____

EMCORE CORPORATION Somerset, New Jersey

6% Subordinated Note Due May 1, 2001 Issue Date: May 1, 1996

EMCORE Corporation, a New Jersey Corporation (the "Corporation"), for value received, promises to pay to ______ or registered assigns, the sum of _____ Dollars (\$______) on May 1, 2001 upon presentation and surrender of this Note at the office of the Corporation in Somerset, New Jersey, and to pay interest at the rate of six percent (6%) per annum semi-annually on the first day of November and May of each year, computed from the Issue Date, until payment of the principal amount of this Note has been made. Payment of principal and interest shall be made at the offices of the Corporation, in lawful money of the United States of America, and shall be mailed to the registered owner or owners hereof at the address appearing on the books of the Corporation.

1. The Note. This Note is one of a duly authorized issue of \$9,500,000

of notes of the Corporation designated as its 6% Subordinated Notes due May 1, 2001 (the "Notes"), all of like date, tenor and maturity, except variations necessary to express the amount and payee of each note and except for the Issue Date.

- 3. Redemption. The Notes may be redeemed in whole or in part at the option of the Corporation at any time at a redemption payment equal to 100% of the outstanding principal amount of the Note plus interest accrued to the date of redemption. In the event of a partial redemption, Notes shall be redeemed ratably from each holder thereof. The Corporation shall give notice by mail of any redemption at least 20 business days before the date of redemption.
- Redemption of Notes at Option of Holders Upon a Change in Control. In the event of a Change in Control (as defined below), the holder hereof will have the option to require the Corporation to purchase all or any part of this Note on a date that is 40 business days after the occurrence of such Change in Control (the "Change in Control Purchase Date") for a purchase price equal to 101% of the principal amount thereof plus accrued interest to the Change in Control Purchase Date, unless such control was acquired pursuant to a waiver by the Board of Directors of this provision. The Corporation covenants that, prior to the mailing of the notice to holders of Notes (the "Holders") provided for below, but in any event within 30 days following any Change in Control, the Corporation shall (i) repay in full all Senior Indebtedness (as defined below) or (ii) obtain the requisite consent under the Corporation's Senior Indebtedness to permit the repurchase of the Notes pursuant to this covenant and a failure to comply with the covenant of the preceding sentence despite good faith efforts shall not constitute a default The Corporation shall first comply with the covenant in the preceding sentence before it shall be required to repurchase the Notes pursuant to this covenant. Within 10 days after any Change in Control requiring the Corporation to deliver the notice to Holders provided for below, the Corporation shall so notify the Holders of Senior Indebtedness.

Within 20 business days after the occurrence of the Change in Control, the Corporation shall mail to each Holder or cause to be mailed a written notice of the Change in Control, setting forth, among other things, the terms

and conditions of, and the procedures required for exercise of, the Holder's right to require the purchase of such Holder's Notes.

To exercise the purchase right, a Holder must deliver written notice of such exercise to the Corporation at any time prior to the close of business on the Change in Control Purchase Date, specifying the Notes with respect to which the right of purchase is being exercised. Such notice of exercise may be withdrawn by the Holder by a written notice of withdrawal delivered to the Corporation at any time prior to the close of business on the Change in Control Purchase Date.

A "Change in Control" shall be deemed to have occurred at such time after the original issuance of the Notes as there shall occur the acquisition by any Person (including any syndicate or group deemed to be a "person" under Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended, or any successor provision to either of the foregoing) of beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions, through proxies or otherwise, of shares of capital stock of the Corporation entitling such Person to (a) exercise 50% or more of the total voting power of all shares of capital stock of the

Corporation entitled to vote generally in elections of directors; or (b) elect a majority of the members of the Corporation's Board of Directors pursuant to a proxy contest or otherwise (other than Jesup & Lamont Merchant Partners, L.L.C.). A change in control effected by a waiver of the Board of Directors shall not trigger this redemption feature.

5. Subordination. This Note is subordinate and junior in right of payment to all existing and future Senior Indebtedness of the Corporation, whether outstanding on the date hereof or thereafter created, incurred, assumed or guaranteed. Upon any payments or distribution of assets of the Corporation in any dissolution winding-up, liquidation or reorganization of the Corporation (whether in an insolvency or bankruptcy proceeding or otherwise), payment in full (including principal thereof, interest thereon and fees and expenses relating thereto) on such Senior Indebtedness shall occur prior to any payment or distribution being made with respect to the Notes. Upon the happening and during the continuance of a payment Event of Default under any Senior Indebtedness, no payment may be made by the Corporation on or in respect of the Notes. Upon the happening and during the continuance of a non-payment Event of Default under any Senior Indebtedness and following receipt by the Corporation of notice from such holder(s) of Senior Indebtedness, no payment may be made on the Notes for a period of up to 179 days during any consecutive 365 day period, unless such default shall be cured or waived. No such subordination will prevent the occurrence of any Event of

"Senior Indebtedness" means (a) the principal of and premium, if any, and interest (including, without limitation, any interest accruing subsequent to the filing of a petition or other action concerning bankruptcy or other similar proceedings, whether or not constituting an allowed claim in any such proceedings) of the following, whether presently outstanding or hereafter incurred or created: all indebtedness or obligations of the Company for money borrowed (other than that evidenced by the Notes) or assets acquired which is evidenced by a note, bond, or similar instrument (including a purchase money mortgage) given in connection with the acquisition of any property or assets (other than inventory or other similar property acquired in the ordinary course of business) including securities; (b) all obligations constituting bank debt; (c) all obligations of the Corporation:

- (i) for the reimbursement of any obligor on any letter of credit banker's acceptance or similar credit transaction, (ii) Under interest rate swaps, caps, collars, options and similar arrangements, and (iii) under any foreign exchange contract, currency swap agreement, futures contract, currency option contract or other foreign currency hedge; (d) all obligations for the payment of money relating to a capitalized lease obligation, (e) any liabilities of others described in the preceding clauses (a), (b), (c), and (d) which the Corporation has guaranteed or which are otherwise its legal liability; and (f) renewals, extensions, refundings, restructurings, amendments and modifications of any such indebtedness or guarantee. Notwithstanding anything to the contrary, Senior indebtedness shall not include (y) any indebtedness of the Corporation to a subsidiary except to the extent any such indebtedness is pledged by such subsidiary as security for any bank debt, or (z) any indebtedness or guarantee of the Corporation which by its terms or the terms of the instrument creating or evidencing it is not superior in right of payment of the Notes.
- 6. Amendments to the Note. All terms and provisions of this Note may be amended by the Holders of 51% of the aggregate principal amount of all Notes of this class outstanding on the date of the amendment.

- 7. Default. If any of the following, events occur ("Event of Default"), the entire unpaid principal amount of, and accrued and unpaid interest on, this Note shall immediately be due and payable.
 - The Corporation falls to pay any interest on this Note when it is due and payable, and the failure continues for a period of 30 days;
 - The Corporation fails to pay the principal of this Note at its maturity;
 - c) The Corporation commences any voluntary proceeding under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, receivership, dissolution, or liquidation law or statute, of any jurisdiction, whether now or subsequently in effect; or the Corporation is adjudicated insolvent or bankrupt by a court of competent jurisdiction; or the Corporation petitions or applies for, acquiesces in, or consents to, the appointment of any receiver or trustee of the Corporation or for all or substantially all of its property or assets; or the Corporation makes an assignment for the benefit of its creditors; or the Corporation admits in writing its inability to pay its debts as they mature; or
 - d) There is commenced against the Corporation any proceeding relating to the Corporation under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, receivership, dissolution, or liquidation law or statute, of any jurisdiction, whether now or subsequently in effect, and the proceeding remains undismissed for a period of 60 days or the Corporation by any act indicates its consent to, approval of, or acquiescence in, the proceeding; or a receiver or trustee is appointed for the Corporation or for all or substantially all of its property or assets, and the receivership or trusteeship remains undischarged for a period of 60 days; or a warrant of attachment, execution or similar process is issued against any substantial part of the property or assets of the Corporation, and the warrant or similar process is not dismissed or bonded within 60 days after the levy.
- 8. Exchange. The holder of this Note may, at any time on or before the date of its maturity, by surrendering this Note to the Corporation at its office, exchange this Note and/or any other of the Notes for another note or notes of a like principal amount and of like tenor, date and maturity.
- 9. Transfer. This Note may be transferred only at the office of the Corporation by the surrender hereof for cancellation, along with a proper instrument of transfer (with the signature guaranteed to the Corporation's satisfaction), and upon the payment of any stamp tax or other governmental charge connected with the transfer. If this Note is transferred, a new note or notes of like tenor, date and maturity shall be issued to the transferee.
- 10. Registered owner. The Corporation may treat the person or persons whose name or names appear hereon as the absolute owner or owners of this Note for the purpose of receiving payment of, or on account of, the principal and interest due on this Note and for all other purposes, and it shall not be affected by any notice to the contrary.
- 11. Corporate obligation. The holder or holders of this Note shall not have any recourse for the payment in whole or of any part of the principal or interest on this Note against any incorporator, or present or future stockholder of the Corporation by virtue of any law, or by the enforcement of

any assessment, or otherwise, or against any officer or director of the Corporation by reason of any matter prior to the delivery of this Note, or against any present or future officer or director of the Corporation. The holder of this Note, by the acceptance hereof and as a part of the consideration for this Note, expressly agrees that the Note is an obligation solely of the Corporation and expressly releases all claims and waives all liability against the foregoing persons in connection with this Note.

IN WITNESS WHEREOF, the Corporation has signed and sealed this 6% Note due May 1, 2001, this $__$ day of May, 1996.

EMCORE	CORPORATION

By:_				
-	Norman	Ε.	Schumaker,	President

Corporate Seal

By:_______Thomas G. Werthan, Secretary

[Form of 6% Subordinated Note due September 1, 2001]

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE HOLDER HEREOF, BY PURCHASING THE SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY) THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION'S UNDER THE SECURITIES ACT, PROVIDED THAT THERE ARE NO DIRECTED SELLING EFFORTS IN THE UNITED STATES AND OTHER ADDITIONAL CONDITIONS OF REGULATION S FOR RESALE HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION IN ACCORDANCE WITH RULE 144 (IF AVAILABLE) UNDER THE SECURITIES ACT, (5) IN RELIANCE ON ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES.

THIS SECURITY MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

No. N-002 \$_____

EMCORE CORPORATION Somerset, New Jersey

6% Subordinated Note Due September 1, 2001 Issue Date: September 1, 1996

EMCORE Corporation, a New Jersey Corporation (the "Corporation"), for value received, promises to pay to _______ or registered assigns, the sum of ______ Dollars (\$______) on September 1, 2001 upon presentation and surrender of this Note at the office of the Corporation in Somerset, New Jersey, and to pay interest at the rate of six percent (6%) per annum semi-annually on the first day of November and May of each year, computed from the Issue Date, until payment of the principal amount of this Note has been made. Payment of principal and interest shall be made at the offices of the Corporation, in lawful money of the United States of America, and shall be mailed to the registered owner or owners hereof at the address appearing on the books of the Corporation.

1. The Note. This Note is one of a duly authorized issue of \$2,500,000

of notes of the Corporation designated as its 6% Subordinated Notes due September 1, 2001 (the "Notes"), all of like date, tenor and maturity, except variations necessary to express the amount and payee of each note and except for the Issue Date.

- 3. Redemption. The Notes may be redeemed in whole or in part at the option of the Corporation at any time at a redemption payment equal to 100% of the outstanding principal amount of the Note plus interest accrued to the date of redemption. In the event of a partial redemption, Notes shall be redeemed ratably from each holder thereof. The Corporation shall give notice by mail of any redemption at least 20 business days before the date of redemption.
- Redemption of Notes at Option of Holders Upon a Change in Control. In the event of a Change in Control (as defined below), the holder hereof will have the option to require the Corporation to purchase all or any part of this Note on a date that is 40 business days after the occurrence of such Change in Control (the "Change in Control Purchase Date") for a purchase price equal to 101% of the principal amount thereof plus accrued interest to the Change in Control Purchase Date, unless such control was acquired pursuant to a waiver by the Board of Directors of this provision. The Corporation covenants that, prior to the mailing of the notice to holders of Notes (the "Holders") provided for below, but in any event within 30 days following any Change in Control, the Corporation shall (i) repay in full all Senior Indebtedness (as defined below) or (ii) obtain the requisite consent under the Corporation's Senior Indebtedness to permit the repurchase of the Notes pursuant to this covenant and a failure to comply with the covenant of the preceding sentence despite good faith efforts shall not constitute a default The Corporation shall first comply with the covenant in the preceding sentence before it shall be required to repurchase the Notes pursuant to this covenant. Within 10 days after any Change in Control requiring the Corporation to deliver the notice to Holders provided for below, the Corporation shall so notify the Holders of Senior Indebtedness.

Within 20 business days after the occurrence of the Change in Control, the Corporation shall mail to each Holder or cause to be mailed a written notice of the Change in Control, setting forth, among other things, the terms

and conditions of, and the procedures required for exercise of, the Holder's right to require the purchase of such Holder's Notes.

To exercise the purchase right, a Holder must deliver written notice of such exercise to the Corporation at any time prior to the close of business on the Change in Control Purchase Date, specifying the Notes with respect to which the right of purchase is being exercised. Such notice of exercise may be withdrawn by the Holder by a written notice of withdrawal delivered to the Corporation at any time prior to the close of business on the Change in Control Purchase Date.

A "Change in Control" shall be deemed to have occurred at such time after the original issuance of the Notes as there shall occur the acquisition by any Person (including any syndicate or group deemed to be a "person" under Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended, or any successor provision to either of the foregoing) of beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions, through proxies or otherwise, of shares of capital stock of the Corporation entitling such Person to (a) exercise 50% or more of the total voting power of all shares of capital stock of the

Corporation entitled to vote generally in elections of directors; or (b) elect a majority of the members of the Corporation's Board of Directors pursuant to a proxy contest or otherwise (other than Jesup & Lamont Merchant Partners, L.L.C.). A change in control effected by a waiver of the Board of Directors shall not trigger this redemption feature.

5. Subordination. This Note is subordinate and junior in right of payment to all existing and future Senior Indebtedness of the Corporation, whether outstanding on the date hereof or thereafter created, incurred, assumed or guaranteed. Upon any payments or distribution of assets of the Corporation in any dissolution winding-up, liquidation or reorganization of the Corporation (whether in an insolvency or bankruptcy proceeding or otherwise), payment in full (including principal thereof, interest thereon and fees and expenses relating thereto) on such Senior Indebtedness shall occur prior to any payment or distribution being made with respect to the Notes Upon the happening and during the continuance of a payment Event of Default under any Senior Indebtedness, no payment may be made by the Corporation on or in respect of the Notes. Upon the happening and during the continuance of a non-payment Event of Default under any Senior Indebtedness and following receipt by the Corporation of notice from such holder(s) of Senior Indebtedness, no payment may be made on the Notes for a period of up to 179 days during any consecutive 365 day period, unless such default shall be cured or waived. No such subordination will prevent the occurrence of any Event of

"Senior Indebtedness" means (a) the principal of and premium, if any, and interest (including, without limitation, any interest accruing subsequent to the filing of a petition or other action concerning bankruptcy or other similar proceedings, whether or not constituting an allowed claim in any such proceedings) of the following, whether presently outstanding or hereafter incurred or created: all indebtedness or obligations of the Company for money borrowed (other than that evidenced by the Notes) or assets acquired which is evidenced by a note, bond, or similar instrument (including a purchase money mortgage) given in connection with the acquisition of any property or assets (other than inventory or other similar property acquired in the ordinary course of business) including securities; (b) all obligations constituting bank debt; (c) all obligations of the Corporation:

- (i) for the reimbursement of any obligor on any letter of credit banker's acceptance or similar credit transaction, (ii) Under interest rate swaps, caps, collars, options and similar arrangements, and (iii) under any foreign exchange contract, currency swap agreement, futures contract, currency option contract or other foreign currency hedge; (d) all obligations for the payment of money relating to a capitalized lease obligation, (e) any liabilities of others described in the preceding clauses (a), (b), (c), and (d) which the Corporation has guaranteed or which are otherwise its legal liability; and (f) renewals, extensions, refundings, restructurings, amendments and modifications of any such indebtedness or guarantee. Notwithstanding anything to the contrary, Senior indebtedness shall not include (y) any indebtedness of the Corporation to a subsidiary except to the extent any such indebtedness is pledged by such subsidiary as security for any bank debt, or (z) any indebtedness or guarantee of the Corporation which by its terms or the terms of the instrument creating or evidencing it is not superior in right of payment of the Notes.
- 6. Amendments to the Note. All terms and provisions of this Note may be amended by the Holders of 51% of the aggregate principal amount of all Notes of this class outstanding on the date of the amendment.

- 7. Default. If any of the following, events occur ("Event of Default"), the entire unpaid principal amount of, and accrued and unpaid interest on, this Note shall immediately be due and payable.
 - The Corporation falls to pay any interest on this Note when it is due and payable, and the failure continues for a period of 30 days;
 - The Corporation fails to pay the principal of this Note at its maturity;
 - c) The Corporation commences any voluntary proceeding under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, receivership, dissolution, or liquidation law or statute, of any jurisdiction, whether now or subsequently in effect; or the Corporation is adjudicated insolvent or bankrupt by a court of competent jurisdiction; or the Corporation petitions or applies for, acquiesces in, or consents to, the appointment of any receiver or trustee of the Corporation or for all or substantially all of its property or assets; or the Corporation makes an assignment for the benefit of its creditors; or the Corporation admits in writing its inability to pay its debts as they mature; or
 - d) There is commenced against the Corporation any proceeding relating to the Corporation under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, receivership, dissolution, or liquidation law or statute, of any jurisdiction, whether now or subsequently in effect, and the proceeding remains undismissed for a period of 60 days or the Corporation by any act indicates its consent to, approval of, or acquiescence in, the proceeding; or a receiver or trustee is appointed for the Corporation or for all or substantially all of its property or assets, and the receivership or trusteeship remains undischarged for a period of 60 days; or a warrant of attachment, execution or similar process is issued against any substantial part of the property or assets of the Corporation, and the warrant or similar process is not dismissed or bonded within 60 days after the levy.
- 8. Exchange. The holder of this Note may, at any time on or before the date of its maturity, by surrendering this Note to the Corporation at its office, exchange this Note and/or any other of the Notes for another note or notes of a like principal amount and of like tenor, date and maturity.
- 9. Transfer. This Note may be transferred only at the office of the Corporation by the surrender hereof for cancellation, along with a proper instrument of transfer (with the signature guaranteed to the Corporation's satisfaction), and upon the payment of any stamp tax or other governmental charge connected with the transfer. If this Note is transferred, a new note or notes of like tenor, date and maturity shall be issued to the transferee.
- 10. Registered owner. The Corporation may treat the person or persons whose name or names appear hereon as the absolute owner or owners of this Note for the purpose of receiving payment of, or on account of, the principal and interest due on this Note and for all other purposes, and it shall not be affected by any notice to the contrary.
- 11. Corporate obligation. The holder or holders of this Note shall not have any recourse for the payment in whole or of any part of the principal or interest on this Note against any incorporator, or present or future stockholder of the Corporation by virtue of any law, or by the enforcement of

any assessment, or otherwise, or against any officer or director of the Corporation by reason of any matter prior to the delivery of this Note, or against any present or future officer or director of the Corporation. The holder of this Note, by the acceptance hereof and as a part of the consideration for this Note, expressly agrees that the Note is an obligation solely of the Corporation and expressly releases all claims and waives all liability against the foregoing persons in connection with this Note.

IN WITNESS WHEREOF, the Corporation has signed and sealed this 6% Note due September 1, 2001, this $__$ day of September, 1996.

EMCORE	CORPORATION	

By:_				
	Norman	Ε.	Schumaker,	President

Corporate Seal

By:_____ Thomas G. Werthan, Secretary

THE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, PROVIDED THAT THE CONDITIONS OF REGULATION S FOR RESALES HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION IN ACCORDANCE WITH RULE 144 (IF AVAILABLE) UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, (5) IN RELIANCE ON ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

Warrant No. W-

Number of Shares:

Price:\$4.08 per share

Date of Issuance: May 1, 1996

(subject to adjustment)

EMCORE CORPORATION SOMERSET, NEW JERSEY ISSUE DATE: MAY 1, 1996 WARRANT

EMCORE CORPORATION, a New Jersey corporation (The "Company"), for value received, hereby certifies that ______ or its registered assigns (the "Registered Holder"), is entitled, subject to the terms set forth below, to purchase from the Company, at any time or from time to time on or after November 1, 1996 and on or before May 1, 2001 at no later than 5:00 pm. (New York City time), up to ______ shares of the common stock of the Company ("Common Stock"), at a purchase price of \$1.20 per share. The shares purchasable upon exercise of this Warrant, and the purchase price per share, each as adjusted from time to time pursuant to the provisions of this Warrant, are hereinafter referred to as the "Warrant Shares" and the "Purchase Price," respectively.

Exercise.

- (a) Subject to the requirements of Section 4, this Warrant may be exercised by the Registered Holder, in whole or in part, by surrendering this Warrant, with the purchase form appended hereto as Exhibit I duly executed by such Registered Holder or by such Registered Holder's duly authorized attorney, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by payment in full, in lawful money of the United States, or with an equal principal amount the Company's 6% Subordinated Notes due May 1, 2001, of the Purchase Price payable in respect of the number of shares of Warrant Shares purchased upon such exercise.
- (b) Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided in subsection 1(a) above. At such time, the person or persons in whose name or names any certificates for warrant shares shall be issuable upon such exercise as provided in subsection 1(c) below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates.
- (c) As soon as practicable after the exercise of this Warrant in full or in part, and in any event within 10 days thereafter, the Company, at its expense, will cause to be issued in the name of, and delivered to, the Registered Holder, or such Holder (upon payment by such Holder of any applicable transfer taxes) as the Holder may direct:
- (i) a certificate or certificates for the number of full Warrant Shares to which such Registered Holder shall be entitled upon such exercise plus, in lieu of any fractional share to which such Registered Holder would otherwise be entitled, cash in an amount determined pursuant to Section 2 hereof; and
- (ii) in case such exercise is in part only, a new warrant or warrants (dated the date hereof) of like tenor, calling in the aggregate on the face or faces thereof for the number of Warrant Shares equal (without giving effect to any adjustment therein) to the number of such shares called

for on the face or this Warrant minus the number of such shares purchased by the Registered Holder upon such exercise as provided in subsection 1(a) above.

2. Call provision.

This Warrant may be called in whole or in part by the Board of Directors of the Company upon 30 days written notice to the holder at any time after May 1, 1997. No call of this warrant shall be made unless the call is made pro-rata as to principal amount with respect to all then outstanding warrants of this class.

3. Adjustments.

- (a) Effect of stock changes. If, at any time or from time to time the Company, by stock dividend, stock split, subdivision, reverse split, consolidation, reclassification or shares, or other similar structural change, changes as a whole its outstanding Common Stock into a different number or class of shares, then, immediately upon the occurrence of the change:
- (i) the class of shares into which the Common Stock has been changed shall replace the Common Stock, for the purposes of this Warrant and the terms and conditions hereof, so that the registered owner or owners of this Warrant shall be entitled to receive, and shall receive upon exercise of this Warrant, shares of the class of stock into which the Common Stock had been changed;
- (ii) the number of shares purchasable upon exercise of this Warrant shall proportionately be adjusted. (For example, if the outstanding common Stock of the Corporation is converted into X stock at the rate of one (1) share of Common Stock into three (3) shares of X stock, and prior to the change the registered owner or owners of this Warrant were entitled, upon exercise of this Warrant, to purchase one hundred shares of Common Stock, then the registered owner or owners shall, after the change, be entitled to purchase three hundred shares of X stock for the total same exercise price that the owner or owners had to pay prior to the change to purchase the one hundred shares of Common Stock); and
- (iii) the purchase price per share shall be proportionately adjusted. (In the above example, the purchase price per share would be reduced by two-thirds.)

Irrespective of any adjustment or change in the number or class of shares purchasable under this or any other Warrant of like tenor, or in the purchase price per share, this Warrant, as well as any other warrant of like tenor, may continue to express the purchase price per share and the number and class of shares purchasable upon exercise of this Warrant as the purchase price per share and the number and class of shares purchasable were expressed in this Warrant when it was initially issued.

(b) Effect of merger. If at any time while this Warrant is outstanding another corporation merges into the Company, the registered owner or owners of this Warrant shall be entitled, immediately after the merger becomes effective and upon exercise of this Warrant, to obtain the same number of shares of Common Stock of the Company (or shares into which the Common Stock has been changed as provided in the paragraph of this Warrant covering changes) to which the owner or owners were entitled upon the exercise hereof to obtain immediately before the merger became effective at the same exercise price. The Company shall take any and all steps necessary in connection with the merger to assure that sufficient shares of Common Stock to satisfy all conversion and purchase rights represented by outstanding convertible securities, options and warrants, including this Warrant, are available so that these convertible securities, options and warrants, including this

Warrant, may be exercised.

- (c) Effect of consolidation or sale. Notwithstanding any provision of this Warrant concerning the callability of this Warrant, if the Company consolidates with or merges into another corporation or other entity in a transaction in which the Company is not the surviving corporation, or receives an offer to purchase or lease all or substantially all of the assets of the $\ensuremath{\mathsf{I}}$ Company or an offer to purchase forty-five percent (45%) or more of the issued and outstanding Common Stock of the Company, or if all or substantially all of the assets of the Company are sold or leased or forty-five percent (45%) or more of the issued and outstanding Common Stock of the Company is purchased by any person or group of persons acting in concert, then This Warrant shall be called by the Company on the Effective Date of such consolidation or merger or asset sale, or in the case of an offer to purchase forty-five percent (45%) of the Company's Common Stock, on the date such offer is accepted by the Company. The right to exercise this Warrant shall terminate when it is called. The call price shall be determined by the board of directors of the Company in accordance with the provisions of the second and third sentences of paragraph 3 hereof as of the time the event triggering the call occurs, or the value of the securities or the other consideration that shall be received in the transaction by the owner of a number of outstanding shares of Common Stock equal to the number of shares purchasable upon exercise of this Warrant. call price shall be payable not later than sixty (60) days after the effective date of the call to the registered owner or owners of this Warrant upon its surrender for cancellation at the offices of the Company, together with the transfer or assignment form which forms a part hereof, duly completed and executed in blank.
- (d) Dissolution. In the event that a voluntary or involuntary dissolution, liquidation or winding up of the Company (other than in connection with a merger where the Company is the surviving corporation as covered in this Warrant, or a merger or consolidation with or into another corporation, a sale or lease of all or substantially all of the assets of the Company, or a sale of a specified portion or percentage of its stock as covered in this Warrant) is at any time proposed during the term of this Warrant, the Company shall give written notice to the registered owner or owners of this Warrant at least thirty (30) days prior to the record date of the proposed transaction. The notice must contain:
 - (i) the date on which the transaction is to take place;
- (ii) the record date (which must be at least thirty (30) days after the giving of the notice) as of which holders of the Common Stock entitled to receive distributions as a result of the transaction shall be determined;
 - (iii) a brief description of the transaction;
- (iv) a brief description of the distributions, if any, to be made to holders of the Common Stock as a result of the transaction; and(v) an estimate of the fair market value of the distributions.
- On the date of the transaction, if it actually occurs, this Warrant and all rights existing under this Warrant shall terminate.
- 4. Fractional Shares. The Company shall not be required upon the exercise of this Warrant to issue any fractional shares, but shall pay in cash an amount determined by multiplying the fraction to which the Holder is entitled by the fair market value of the Common Stock on the date of exercise.

Should the Common Stock then be traded on an Exchange or quoted on a quotation system for which a last sale reporting system is in effect, the reported last sale on the exercise date shall be deemed to be such fair market value. If the Common Stock is quoted on a quotation system without last sale reporting, the fair market value shall be deemed to be the highest bid price of any broker/dealer regularly making a market in the Common Stock on the exercise date. In all other cases fair market value shall be as determined in good faith by the Company.

- 5. Certain Requirements for Transfer and Exercise.
- (a) In the absence of an effective Registration Statement under the Securities Act of 1933, as amended (the "Act"), it shall be a condition to any transfer or any exercise of this Warrant that the Issuer shall have received, at the time of such transfer or exercise:
- (i) A representation in writing from the proposed transferee that the Warrant is being transferred or the Common Stock being purchased is being acquired for investment and not with a view to any sale or distribution thereof which would constitute or result in a violation of the Act;
- (ii) an opinion of counsel, which opinion is reasonably satisfactory to the Issuer, that the transaction shall not result in a violation of state or federal securities laws.
- (b) In such case, each certificate representing the Warrant or the Warrant Shares shall bear a legend substantially in the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, PROVIDED THAT THE CONDITIONS OF REGULATION S
FOR RESALES HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM
REGISTRATION IN ACCORDANCE WITH RULE 144 AVAILABLE) UNDER THE SECURITIES
ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, (5) IN RELIANCE ON ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

6. No Impairment. The Company will not, by amendment of its charter or through reorganization, consolidation, merger, dissolution, sale of assets 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 action as may be necessary or appropriate in order to protect the rights of the holder of this Warrant against impairment.

- 7. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery upon the exercise of this Warrant, such number of Warrant Shares and other stock, securities and property as from time to time shall be issuable upon the exercise of this Warrant.
- 8. Exchange of Warrants. Upon the surrender by the Registered Holder of any Warrant or Warrants, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 4 hereof, issue and deliver to or upon the order of such Holder, at the Company's expense, a new Warrant or Warrants of like tenor, in the name of such Registered Holder or as such Registered Holder (upon payment by such Registered Holder of any applicable transfer taxes) may direct.
- 9. Replacement of Warrants. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and (in the case of loss, theft or destruction) upon delivery of an indemnity agreement (with surety if reasonably required in an amount reasonably satisfactory to the Company), or in the case of mutilation upon surrender and cancellation of this Warrant, the Company will issue, in lieu thereof, a new Warrant of like tenor.

10. Transfers, etc.

- (a) The Company will maintain a register containing the names and addresses of the Registered Holders of this Warrant. Any Registered Holder may change its or his address as shown on the warrant register by written notice to the Company requesting such change.
- (b) Subject to the provisions of Section 4 hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant with a properly executed assignment (in the form of Exhibit II hereto) at the principal office of the Company.
- (c) Until any transfer of this Warrant is made in the warrant register, the Company may treat the Registered Holder of this Warrant as the absolute owner hereof for all purposes; provided, however, that if and when this Warrant is properly assigned in blank, the Company may (but shall not be obligated to) treat the bearer hereof as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.
- 11. Required Notices. The Company shall give the Registered Holder such notices as it may, from time to time, be required to give the holders of the Common Stock, as if the Registered Holder was a holder of Common Stock at the time such notices are required to be given. The Company shall also give Registered Holder written notice of: (i) each adjustment of the Purchase Price or other warrant item made pursuant to Section 2 hereof; and (ii) of each dividend and distribution payable with respect to any security which may be acquired by exercise of the Warrant, at least ten (10) business days prior to the record date for such dividend or distribution so that the Registered Holder may exercise the warrant and participate in the dividend or distribution.
 - 12. Mailing of Notices, etc. All notices and other communications from

the Company to the Registered Holder of this Warrant shall be mailed by first-class certified or registered mail, postage prepaid, to the address furnished to the Company in writing by the last Registered Holder of this Warrant who shall have furnished an address to the Company in writing. All notices and other communications from the Registered Holder of this Warrant or in connection herewith to the Company shall be mailed by first-class certified or registered mail, postage prepaid, to the Company at its principal office set forth below. If the Company should at any time change the location of its principal office to a place other than as set forth below, it shall give prompt written notice to the Registered Holder of this Warrant and thereafter all references in this Warrant to the location of its principal office at the particular time shall be as so specified in such notice.

EMCORE Corporation Attention: Secretary 394 Elizabeth Avenue Somerset, New Jersey 08873-1214

- 13. No Rights as Stockholder. Until the exercise of this Warrant, the Registered Holder of this Warrant shall not have or exercise any rights by virtue hereof as a stockholder of the Company.
- 14. Change or Waiver. Any term of this Warrant may be changed or waived only by an instrument in writing signed by the party against which enforcement of the change or waiver is sought.
- 15. Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.
- 15. Governing Law. This Warrant will be governed by and construed in accordance with the laws of the State of New Jersey.

EMCORE CORPORATION

	Bv:			
[CORPORATE SEAL]	,	Norman E.	Schumaker,	President
ATTEST:				
Thomas G Warthan	Secretary			

PURCHASE FORM

To: EMCORE CORPORATION	Dated:	
attached Warrant (No),	rsuant to the provisions set forth in the hereby irrevocably elects to purchase c Common Stock of Emcore Corporation covered by es payment of \$ representing the shares at the price per share provided for in by delivery of an equal principal amount of the es, due May 1, 2001, IN an equal amount.	
	Holder:	
	Phone:Fax:	

EXHIBIT II

ASSIGNMENT FORM

	7.0020		
FOR VALUE RECEIVE	ED,	hereby sells, assig	ns and
transfers all of the rights	s of the undersigned ι	ınder the attached Warra	nt
(No) including the	right to purchase the	number of shares of EM	CORE
Corporation Common Stock co	overed thereby set for	th below, unto:	
Name of Assignee	Address	No. of Shares	
Dated:			
Signature:			
Dated:			
Witness:			

[Form of \$17.00 Warrant]

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT.

Warrant No	Number of Shares:	
	(subject to adjustme	nt)

Date of Issuance: August 10, 1992

EMCORE CORPORATION

Class III Preferred Stock Purchase Warrant

EMCORE CORPORATION, a New Jersey corporation (the "Company"), for value received, hereby certifies that ______, or his registered assigns (the "Registered Holder"), is entitled, subject to the terms set forth assigns (the "Registered Holder"), is entitled, subject to the terms set forth below, to purchase from the Company, at any time or from time to time on or after the date of issuance and on or before August 10, 1997 at not later than 5:00 p.m. (New York City time), 30,050 shares of Class III Senior Convertible Preferred Stock of the Company ("Class III Preferred Stock"), at a purchase price of \$0.50 per share. This Warrant is one of the warrants issued pursuant to the Unit Purchase Agreement, dated as of July 27, 1992, between the Company and certain investors named therein (the "Purchase Agreement"), and the Escrow Agreement, dated July 27, 1992, between Dillon, Bitar & Luther, the Company and certain investors named therein (the "Escrow Agreement"). The shares purchasable upon exercise of this Warrant, and the purchase price per share. purchasable upon exercise of this Warrant, and the purchase price per share, each as adjusted from time to time pursuant to the provisions of this Warrant, are hereinafter referred to as the "Warrant Shares" and the "Purchase Price, respectively.

1. Exercise.

(a) This Warrant may be exercised by the Registered Holder, in whole or in part, by surrendering this Warrant, with the purchase form appended hereto as Exhibit I duly executed by such Registered Holder or by such Registered Holder's duly authorized attorney, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by payment in full, in lawful money of the United States, of the Purchase Price payable in respect of the number of shares of Warrant Shares

purchased upon such exercise.

- (b) Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided in subsection 1(a) above. At such time, the person or persons in whose name or names any certificates for Warrant Shares shall be issuable upon such exercise as provided in subsection 1(c) below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates
- (c) As soon as practicable after the exercise of this Warrant in full or in part, and in any event within 10 days thereafter, the Company, at its expense, will cause to be issued in the name of, and delivered to, the Registered Holder, or as such Holder (upon payment by such Holder of any applicable transfer taxes) may direct:
 - a certificate or certificates for the number of full Warrant Shares to which such Registered Holder shall be entitled upon such exercise plus, in lieu of any fractional share to which such Registered Holder would otherwise be entitled, cash in an amount determined pursuant to Section 3 hereof; and
 - (ii) in case such exercise is in part only, a new warrant or warrants (dated the date hereof) of like tenor, calling in the aggregate on the face or faces thereof for the number of Warrant Shares equal (without giving effect to any adjustment therein) to the number of such shares called for on the face of this Warrant minus the number of such shares purchased by the Registered Holder upon such exercise as provided in subsection 1(a) above.
- 2. Adjustments.
 (a) If the Conversion Price (as defined in the Company's Certificate of Incorporation (the "Certificate")) of the Class III Preferred Stock is adjusted in accordance with the terms of the Certificate, then the Purchase Price in effect immediately prior to such adjustment shall simultaneously be adjusted proportionately with the adjustment of the Conversion Price.
- (b) The Company shall give the Registered Holder such notices as it may, from time to time, be required to give the holders of the Class III

Preferred Stock, as if the Registered Holder was a holder of Class III Preferred Stock at the time such notices are required to be given.

- (c) When any adjustment is required to be made in the Purchase Price, the Company shall promptly mail to the Registered Holder a certificate setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment. Such certificate shall also set forth the kind and amount of stock or other securities or property into which this Warrant shall be exercisable following the occurrence of any of the events specified in this Section 2.
- Fractional Shares. The Company shall not be required upon the exercise of this Warrant to issue any fractional shares, but shall round such fractional share to the nearest whole share.

 4. Requirements for Transfer.

 - (a) This Warrant and the Warrant Shares shall not be sold or

transferred or otherwise disposed of except in accordance with Sections 3 and 7 of the Purchase Agreement, and the Registration Rights Agreement.

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND WERE ACQUIRED BY THE REGISTERED HOLDER FOR SUCH HOLDER'S OWN ACCOUNT FOR INVESTMENT. THESE SECURITIES MAY NOT BE PLEDGED, HYPOTHECATED, SOLD OR TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THESE SECURITIES UNDER THE ACT, OR AN OPINION OF COUNSEL, WHICH OPINION IS SATISFACTORY IN FORM AND SUBSTANCE TO THE CORPORATION TO THE EFFECT THAT SUCH REGISTRATION IS NOT REQUIRED UNDER SAID ACT.

THIS CERTIFICATE AND THE SECURITIES REPRESENTED HEREBY ARE ALSO SUBJECT TO CERTAIN PROVISIONS OF THAT CERTAIN STOCKHOLDERS AGREEMENT DATED JANUARY 12, 1987, AMONG THE CORPORATION AND CERTAIN HOLDERS OF OUTSTANDING CAPITAL STOCK, THAT CERTAIN CONVERTIBLE PREFERRED STOCK AND COMMON STOCK PURCHASE AGREEMENT DATED JANUARY 12, 1987, AMONG THE CORPORATION AND CERTAIN HOLDERS OF OUTSTANDING CAPITAL STOCK OF THE CORPORATION, AND THAT CERTAIN UNIT PURCHASE AGREEMENT DATED JULY 27, 1992, AMONG THE CORPORATION AND CERTAIN HOLDERS OF OUTSTANDING NOTES OF THE CORPORATION, AND MAY NOT BE OFFERED FOR SALE, SOLD, BEQUEATHED, TRANSFERRED (INCLUDING BY WILL OR PURSUANT TO THE LAWS OF DESCENT AND DISTRIBUTION OR OTHERWISE), PLEDGED, HYPOTHECATED, ENCUMBERED OR OTHERWISE DISPOSED OF EXCEPT AS PROVIDED IN ACCORDANCE WITH THE ABOVE AGREEMENTS, COPIES OF WHICH AGREEMENTS ARE ON FILE AT THE CORPORATION AND MAY BE OBTAINED BY WRITTEN REQUEST MADE BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF THE CORPORATION."

Such certificates shall also bear such legend as may be required by the Stockholders' Agreement dated January 12, 1987, among the Company and certain holders of outstanding stock, if the holder of the certificates is a party to such agreement, and the laws of the State of New Jersey or any other state.

- 5. No Impairment. The Company will not, by amendment of its charter or through reorganization, consolidation, merger, dissolution, sale of assets 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 action as may be necessary or appropriate in order to protect the rights of the holder of this Warrant against impairment.
- 6. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery upon the exercise of this Warrant, such number of Warrant Shares and other stock, securities and property, as from time to time shall be issuable upon the exercise of this Warrant.
- 7. Exchange of Warrants. Upon the surrender by the Registered Holder of any Warrant or Warrants, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 4 hereof, issue and deliver to or upon the order of such Holder, at the Company's expense, a new Warrant or Warrants of like tenor, in the name of such Registered Holder or as such Registered Holder (upon payment by such

Registered Holder of any applicable transfer taxes) may direct, calling in the aggregate on the face or faces thereof for the number of shares of Class III Preferred Stock called for on the face or faces of the Warrant or Warrants so surrendered

- 8. Replacement of Warrants. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and (in the case of loss, theft or destruction) upon delivery of an indemnity agreement (with surety if reasonably required) in an amount reasonably satisfactory to the Company, or (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will issue, in lieu thereof, a new Warrant of like tenor.
 - 9. Transfers, etc.
- (a) The Company will maintain a register containing the names and addresses of the Registered Holders of this Warrant. Any Registered Holder may change its or his address as shown on the warrant register by written notice to the Company requesting such change.
- (b) Subject to the provisions of Section 4 hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant with a properly executed assignment (in the form of Exhibit II hereto) at the principal office of the Company.
- (c) Until any transfer of this Warrant is made in the warrant register, the Company may treat the Registered Holder of this Warrant as the absolute owner hereof for all purposes; provided, however, that if and when this Warrant is properly assigned in blank, the Company may (but shall not be obligated to) treat the bearer hereof as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.
- 10. Mailing of Notices, etc. All notices and other communications from the Company to the Registered Holder of this Warrant shall be mailed by first-class certified or registered mail, postage prepaid, to the address furnished to the Company in writing by the last Registered Holder of this Warrant who shall have furnished an address to the Company in writing. All notices and other communications from the Registered Holder of this Warrant or in connection herewith to the Company shall be mailed by first-class certified or registered mail, postage prepaid, to the Company at its principal office set forth below. If the Company should at any time change the location of its principal office to a place other than as set forth below, it shall give prompt written notice to the Registered Holder of this Warrant and thereafter all references in this Warrant to the location of its principal office at the particular time shall be as so specified in such notice.
- 11. No Rights as Stockholder. Until the exercise of this Warrant, the Registered Holder of this Warrant shall not have or exercise any rights by virtue hereof as a stockholder of the Company.
- 12. Change or Waiver. Any term of this Warrant may be changed or waived only by an instrument in writing signed by the party against which enforcement of the change or waiver is sought.
- $\,$ 13. Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

14. Governing Law. This Warrant will be governed by and construed in accordance with the laws of the State of New Jersey.

EMCORE CORPORATION, a New Jersey Corporation

By: Norman E. Schumaker Chief Executive Officer

[Corporate Seal]

ATTEST:

EXHIBIT I

PURCHASE FORM

To: Dated:

Signature:

Address:

EXHIBIT II

ASSIGNMENT FORM

FOR VALUE RECEIVED, hereby sells, assigns and transfers all of the rights of the undersigned under the attached Warrant (No.) with respect to the number of shares of Class III Preferred Stock covered thereby set forth below, unto:

Name of Assignee Address No. of Shares

Dated:

Signature:

Dated:

Witness:

[Form of \$10.20 warrant]

THE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGÈ OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, PROVIDED THAT THE CONDITIONS OF REGULATION S FOR RESALES HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION IN ACCORDANCE WITH RULE 144 (IF AVAILABLE) UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, (5) IN RELIANCE ON ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

Warrant No.

Number of Shares:

Price: \$10.20 per share (subject to adjustment)

Date of Issuance: September 1, 1996

EMCORE CORPORATION SOMERSET, NEW JERSEY ISSUE DATE: SEPTEMBER 1, 1996 WARRANT

EMCORE CORPORATION, a New Jersey corporation (the "Company"), for value received, hereby certifies that Jesup & Lamont Merchant Partners, L.L.C., or its registered assigns (the "Registered Holder"), is entitled, subject to the terms set forth below, to purchase from the Company, at any time or from time to time on or after March 1, 199_, and on or before September 1, 2001, at no later than 5:00 p.m. (New York City time), up to 833,333 shares of the common stock of the Company ("Common Stock"), at a purchase price of \$3.00 per share. The shares purchasable upon exercise of this Warrant, and the purchase price per share, each as adjusted from time to time pursuant to the provisions of this Warrant, are hereinafter referred to as the "Warrant Shares" and the "Purchase Price," respectively.

1. Exercise.

- (a) Subject to the requirements of Section 4, this Warrant may be exercised by the Registered Holder, in whole or in part, by surrendering this Warrant, with the purchase form appended hereto as Exhibit I duly executed by such Registered Holder or by such Registered Holder's duly authorized attorney, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by payment in full, in lawful money of the United States, or with an equal principal amount the Company's 6% Subordinated Notes due September 1, 2001, of the Purchase Price payable in respect of the number of shares of Warrant Shares purchased upon such exercise.
- (b) Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided in subsection 1(a) above. At such time, the person or persons in whose name or names any certificates for warrant shares shall be issuable upon such exercise as provided in subsection 1(c) below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates.
- (c) As soon as practicable after the exercise of this Warrant in full or in part, and in any event within 10 days thereafter, the Company, at its expense, will cause to be issued in the name of, and delivered to, the Registered Holder, or such Holder (upon payment by such Holder of any applicable transfer taxes) as the Holder may direct:
- (i) a certificate or certificates for the number of full Warrant Shares to which such Registered Holder shall be entitled upon such exercise plus, in lieu of any fractional share to which such Registered Holder would otherwise be entitled, cash in an amount determined pursuant to Section 2 hereof: and
- (ii) in case such exercise is in part only, a new warrant or warrants (dated the date hereof) of like tenor, calling in the aggregate on

the face or faces thereof for the number of Warrant Shares equal (without giving effect to any adjustment therein) to the number of such shares called for on the face or this Warrant minus the number of such shares purchased by the Registered Holder upon such exercise as provided in subsection 1(a) above.

2. Call provision.

This Warrant may be called in whole or in part by the Board of Directors of the Company upon 30 days written notice to the holder at any time after September 1, 1997. No call of this warrant shall be made unless the call is made pro-rata as to principal amount with respect to all then outstanding warrants of this class.

3. Adjustments.

- (a) Effect of stock changes. If, at any time or from time to time the Company, by stock dividend, stock split, subdivision, reverse split, consolidation, reclassification of shares, or other similar structural change, changes as a whole its outstanding Common Stock into a different number or class of shares, then, immediately upon the occurrence of the change:
- (i) the class of shares into which the Common Stock has been changed shall replace the Common Stock, for the purposes of this Warrant and the terms and conditions hereof, so that the registered owner or owners of this Warrant shall be entitled to receive, and shall receive upon exercise of this Warrant, shares of the class of stock into which the Common Stock had been changed;
- (ii) the number of shares purchasable upon exercise of this Warrant shall proportionately be adjusted. (For example, if the outstanding common Stock of the Corporation is converted into X stock at the rate of one (1) share of Common Stock into three (3) shares of X stock, and prior to the change the registered owner or owners of this Warrant were entitled, upon exercise of this Warrant, to purchase one hundred shares of Common Stock, then the registered owner or owners shall, after the change, be entitled to purchase three hundred shares of X stock for the total same exercise price that the owner or owners had to pay prior to the change to purchase the one hundred shares of Common Stock); and
- (iii) the purchase price per share shall be proportionately adjusted. (In the above example, the purchase price per share would be reduced by two-thirds).

Irrespective of any adjustment or change in the number or class of shares purchasable under this or any other Warrant of like tenor, or in the purchase price per share, this Warrant, as well as any other warrant of like tenor, may continue to express the purchase price per share and the number and class of shares purchasable upon exercise of this Warrant as the purchase price per share and the number and class of shares purchasable were expressed in this Warrant when it was initially issued.

(b) Effect of merger. If at any time while this Warrant is outstanding another corporation merges into the Company, the registered owner or owners of this Warrant shall be entitled, immediately after the merger becomes effective and upon exercise of this Warrant, to obtain the same number of shares of Common Stock of the Company (or shares into which the Common Stock has been changed as provided in the paragraph of this Warrant covering changes) to which the owner or owners were entitled upon the exercise hereof to obtain immediately before the merger became effective at the same exercise price. The Company shall take any and all steps necessary in connection with the merger to assure that sufficient shares of Common Stock to satisfy all conversion and purchase rights represented by outstanding convertible securities, options and warrants, including this Warrant, are available so that these convertible securities, options and warrants, including this

- (c) Effect of consolidation or sale. Notwithstanding any provision $% \left(1\right) =\left(1\right) \left(1\right)$ of this Warrant concerning the callability of this Warrant, if the Company consolidates with or merges into another corporation or other entity in a transaction in which the Company is not the surviving corporation, or receives an offer to purchase or lease all or substantially all of the assets of the Company or an offer to purchase forty-five percent (45%) or more of the issued and outstanding Common Stock of the Company, or if all or substantially all of the assets of the Company are sold or leased or forty-five percent (45%) or more of the issued and outstanding Common Stock of the Company is purchased by any person or group of persons acting in concert, then this Warrant shall be called by the Company on the Effective Date of such consolidation or merger or asset sale, or in the case of an offer to purchase forty-five percent (45%) of the Company's Common Stock, on the date such offer is accepted by the Company. The right to exercise this Warrant shall terminate when it is called. The call price shall be determined by the board of directors of the Company in accordance with the provisions of the second and third sentences of paragraph 3 hereof as of the time the event triggering the call occurs, or the value of the securities or the other consideration that shall be received in the transaction by the owner of a number of outstanding shares of Common Stock equal to the number of shares purchasable upon exercise of this Warrant. This call price shall be payable not later than sixty (60) days after the effective date of the call to the registered owner or owners of this Warrant upon its surrender for cancellation at the offices of the Company, together with the transfer or assignment form which forms a part hereof, duly completed and executed in blank.
- (d) Dissolution. In the event that a voluntary or involuntary dissolution, liquidation or winding up of the Company (other than in connection with a merger where the Company is the surviving corporation as covered in this Warrant, or a merger or consolidation with or into another corporation, a sale or lease of all or substantially all of the assets of the Company, or a sale of a specified portion or percentage of its stock as covered in this Warrant) is at any time proposed during the term of this Warrant, the Company shall give written notice to the registered owner or owners of this Warrant at least thirty (30) days prior to the record date of the proposed transaction. The notice must contain:
 - (i) the date on which the transaction is to take place;
- (ii) the record date (which must be at least thirty (30) days after the giving of the notice) as of which holders of the Common Stock entitled to receive distributions as a result of the transaction shall be determined;
 - (iii) a brief description of the transaction;
- (iv) a brief description of the distributions, if any, to be made to holders of the Common Stock as a result of the transaction; and
 - (v) an estimate of the fair market value of the distributions.

On the date of the transaction, if it actually occurs, this Warrant and all rights existing under this Warrant shall terminate.

4. Fractional Shares. The Company shall not be required upon the exercise of this Warrant to issue any fractional shares, but shall pay in cash

an amount determined by multiplying the fraction to which the Holder is entitled by the fair market value of the Common Stock on the date of exercise. Should the Common Stock then be traded on an Exchange or quoted on a quotation system for which a last sale reporting system is in effect, the reported last sale on the exercise date shall be deemed to be such fair market value. If the Common Stock is quoted on a quotation system without last sale reporting, the fair market value shall be deemed to be the highest bid price of any broker/dealer regularly making a market in the Common Stock on the exercise date. In all other cases fair market value shall be as determined in good faith by the Company.

- 5. Certain Requirements for Transfer and Exercise.
- (a) In the absence of an effective Registration Statement under the Securities Act of 1933, as amended (the "Act"), it shall be a condition to any transfer or any exercise of this Warrant that the Issuer shall have received, at the time of such transfer or exercise:
- (i) A representation in writing from the proposed transferee that the Warrant is being transferred or the Common Stock being purchased is being acquired for investment and not with a view to any sale or distribution thereof which would constitute or result in a violation of the Act;
- (ii) an opinion of counsel, which opinion is reasonably satisfactory to the Issuer, that the transaction shall not result in a violation of state or federal securities laws.
- (b) In such case, each certificate representing the Warrant or the Warrant Shares shall bear a legend substantially in the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF EMCORE CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY: (1) TO THE COMPANY (UPON REPURCHASE THEREOF OR OTHERWISE), (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT, PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, PROVIDED THAT THE CONDITIONS OF REGULATION S
FOR RESALES HAVE BEEN SATISFIED, (4) PURSUANT TO AN EXEMPTION FROM
REGISTRATION IN ACCORDANCE WITH RULE 144 AVAILABLE) UNDER THE SECURITIES
ACT, AS THE SAME MAY BE AMENDED FROM TIME TO TIME, (5) IN RELIANCE ON
ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, AND SUBJECT TO THE RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH TRANSFER DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT, OR (6) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED FOR 120 DAYS FOLLOWING AN INITIAL PUBLIC OFFERING OF SECURITIES OF THE COMPANY.

5. No Impairment. The Company will not, by amendment of its charter or through reorganization, consolidation, merger, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or perform-

ance 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 action as may be necessary or appropriate in order to protect the rights of the holder of this Warrant against impairment.

- 6. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery upon the exercise of this Warrant, such number of Warrant Shares and other stock securities and property as from time to time shall be issuable upon the exercise of this Warrant.
- 7. Exchange of Warrants. Upon the surrender by the Registered Holder of any Warrant or Warrants, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 4 hereof, issue and deliver to or upon the order of such Holder, at the Company's expense, a new Warrant or Warrants of like tenor, in the name of such Registered Holder or as such Registered Holder (upon payment by such Registered Holder of any applicable transfer taxes) may direct.
- 8. Replacement of Warrants. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and (in the case of loss, theft or destruction) upon delivery of an indemnity agreement (with surety if reasonably required in an amount reasonably satisfactory to the Company), or in the case of mutilation upon surrender and cancellation of this Warrant, the Company will issue, in lieu thereof, a new Warrant of like tenor.

9. Transfers, etc.

- (a) The Company will maintain a register containing the names and addresses of the Registered Holders of this Warrant. Any Registered Holder may change its or his address as shown on the warrant register by written notice to the Company requesting such change.
- (b) Subject to the provisions of Section 4 hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant with a properly executed assignment (in the form of Exhibit II hereto) at the principal office of the Company.
- (c) Until any transfer of this Warrant is made in the warrant register, the Company may treat the Registered Holder of this Warrant as the absolute owner hereof for all purposes; provided, however, that if and when this Warrant is properly assigned in blank the Company may (but shall not be obligated to) treat the bearer hereof as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.
- 10. Required Notices. The Company shall give the Registered Holder such notices as it may, from time to time, be required to give the holders of the Common Stock, as if the Registered Holder was a holder of Common Stock at the time such notices are required to be given. The Company shall also give Registered Holder written notice of: (i) each adjustment of the Purchase Price or other warrant item made pursuant to Section 2 hereof; and (ii) of each dividend and distribution payable with respect to any security which may be acquired by exercise of the Warrant, at least ten (10) business days prior to the record date for such dividend or distribution so that the Registered Holder may exercise the warrant and participate in the dividend or distribution.
- 11. Mailing of Notices, etc. All notices and other communications from the Company to the Registered Holder of this Warrant shall be mailed by first-

class certified or registered mail, postage prepaid, to the address furnished to the Company in writing by the last Registered Holder of this Warrant who shall have furnished an address to the Company in writing. All notices and other communications from the Registered Holder of this Warrant or in connection herewith to the Company shall be mailed by first-class certified or registered mail, postage prepaid, to the Company at its principal office set forth below. If the Company should at any time change the location of its principal office to a place other than as set forth below, it shall give prompt written notice to the Registered Holder of this Warrant and thereafter all references in this Warrant to the location of its principal office at the particular time shall be as so specified in such notice.

EMCORE Corporation Attention: Secretary 394 Elizabeth Avenue Somerset, New Jersey 08873-1214

- 12. No Rights as Stockholder. Until the exercise of this Warrant, the Registered Holder of this Warrant shall not have or exercise any rights by virtue hereof as a stockholder of the Company.
- 13. Change or Waiver. Any term of this Warrant may be changed or waived only by an instrument in writing signed by the party against which enforcement of the change or waiver is sought.
- 14. Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

[CORPORATE SEAL] By: Norman E. Schumaker,

President

ATTEST:

Thomas G. Werthan, Secretary

EXHIBIT I

PURCHASE FORM

To: EMCORE CORPORATION Dated:

The undersigned, pursuant to the provisions set forth in the attached Warrant (No. ___), hereby irrevocably elects to purchase _____ shares of the Common Stock of Emcore Corporation covered by such Warrant and herewith makes payment of \$____ representing the full purchase price for such shares at the price per share provided for in such Warrant either in cash or by delivery of an equal principal amount of the Company's 6% Subordinated Notes, due September 1, 2001, in an equal amount.

Holder: Address:

Phone:

Fax:

EXHIBIT II

ASSIGNMENT FORM

FOR VALUE RECEIVED, hereby sells, assigns and transfers all of the rights of the undersigned under the attached Warrant (No.) including the right to purchase the number of shares of EMCORE Corporation Common Stock covered thereby set forth below, unto:

Name of Assignee

Address

No. of Shares

Dated: Signature:

Dated: Witness:

[Demand Note Facility with First Union National Bank]

PROMISSORY NOTE

\$10,000,000.00

October 25, 1996

EMCORE Corporation 394 Elizabeth Avenue Somerset, New Jersey 08773 (Individually and collectively "Borrower")

First Union National Bank of Florida 214 North Hogan Street - FL0070 Jacksonville, Florida 32202 (Hereinafter referred to as the "Bank")

Borrower promises to pay to the order of Bank, in lawful money of the United States of America, at its office indicated above or wherever else Bank may specify, the sum of Ten Million and No/loo Dollars (\$10,000,000.00) or such sum as may be advanced from time to time with interest on the unpaid principal balance at the rate and on the terms provided in this Promissory Note (including all renewals, extensions or modifications hereof, this "Note"). SECURITY. Thomas J. Russell, Jr., has granted Bank a security interest in the collateral described in the Loan Documents, including, but not limited to, collateral described in that certain Assignment of Interest in a Custodian Account.

INTEREST RATE DEFINITIONS.

LIBOR RATE. 6-month LIBOR Rate plus .75% (75 basis points) ("LIBOR-Based Rate"). "LIBOR" is the rate (rounded to the next higher 1/100 of 1%) for U.S. dollar deposits of that many months maturity as reported on Telerate page 3750 as of 11:00 a.m., London time, on the second London business day before the relevant Interest Period begins (or if not so reported, then as determined by Bank from another recognized source of interbank quotation), adjusted for reserves by dividing that rate by 1.00 minus the LIBOR Reserve. "LIBOR Reserve" is the maximum percentage reserve requirement (rounded to the next higher 1/100 of 1% and expressed as a decimal) in effect for any day during the Interest Period under the Federal Reserve Board's Regulation D for Eurocurrency Liabilities as defined therein.

PRIME RATE. The rate of Bank's Prime Rate as that rate may change from time to time with changes to occur on the date Bank's Prime Rate changes ("Prime-Based Rate"). Bank's Prime Rate shall be that rate announced by Bank from time to time as its prime rate and is one of several interest rate bases used by Bank. Bank lends at rates both above and below Bank's Prime Rate, and Borrower acknowledges that Bank's Prime Rate is not represented or intended to be the lowest or most favorable rate of interest offered by Bank.

INTEREST RATE TO BE APPLIED. INTEREST RATE. Subject to the provisions hereof, the unpaid principal balance of this Note shall bear interest from the date hereof at the LIBOR-Based Rate, as determined by Bank prior to the commencement of each consecutive interest period of 6 month; (each an "Interest Period") during the term of the Note ("Interest Rate"). Upon determination by Bank of the Interest Rate for any Interest Period, such Interest Rate shall remain in effect, subject to the provisions hereof, for the entire Interest Period until redetermined as provided above for the next successive Interest Period.

DEFAULT RATE. In addition to all other rights contained in this Note, if a default in the payment of the Obligations occurs, all outstanding Obligations shall bear interest at the Prime-Based Rate plus 3% ("Default Rate"). The Default Rate shall also apply from acceleration until the Obligations or any judgment thereon is paid in full.

INDEMNIFICATION AND ADDITIONAL COSTS. INDEMNIFICATION. Borrower indemnifies Bank against Bank's loss or expense in employing deposits as a consequence (a) of Borrower's failure to make any payment when due under this Note or (b) any payment, prepayment or conversion of any loan on a date other than the last day of the Interest Period ("Indemnified Loss or Expense").

ADDITIONAL COSTS. If, at any time, a new, or a revision in any existing law or interpretation or administration (including reversals) thereof by any government authority, central bank or comparable agency imposes, increases or modifies any reserve or similar requirement against assets, deposits or credit extended by Bank, or subjects Bank to any tax, duty or other charge (except tax on Bank's net income), and any of the foregoing increase the cost to Bank of maintaining its commitment or reduce the amount of any sum received or receivables by Bank under this Note, within 15 days after demand by Bank, Borrower agrees to pay Bank such additional amounts as will compensate Bank for such increased costs or reductions ("Additional Costs").

MATCH FUNDING. The amount of such (a) Indemnified Loss or Expense or (b) Additional Costs outlined above shall be determined, in Bank's sole discretion, based upon the assumption that Bank funded 100% that portion of the loan to which the LIBOR-Based Rate or CD-Based Rate applies respectively in the applicable London interbank or domestic certificate of deposit market.

UNAVAILABILITY OF INTEREST RATE. If, at any time, (a) Bank shall determine that, by reasons of circumstances affecting foreign exchange and interbank

markets generally, LIBOR or CD deposits in the applicable amounts are not being offered to Bank; or (b) a new, or a revision in any existing law or interpretation or administration (including reversals) thereof by any government authority, central bank or comparable agency shall make it unlawful or impossible for Bank to honor its obligations under this Note, (i) Bank's obligation to make, maintain or convert into a LIBOR-Based Rate shall be suspended; and (ii) the applicable LIBOR-Based Rate shall immediately be converted to the Prime-Based Rate for the remainder of the Interest Period.

INTEREST COMPUTATION. (ACTUAL/360). Interest shall be computed on the basis of a 360-day year for the actual number of days in the interest period ("Actual/360 Computation"). The Actual/360 Computation determines the annual effective interest yield by taking the stated (nominal) interest rate for a year's period and then dividing said rate by 360 to determine the daily periodic rate to be applied for each day in the interest period. Application of the Actual/360 Computation produces an annualized effective interest rate exceeding that of the nominal rate.

REPAYMENT TERMS. This Note shall be due and payable in consecutive monthly payments of accrued interest only commencing on November 25, 1996, and on the same day of each month thereafter until fully paid. In any event, this Note shall be due and payable in full, including all principal and accrued interest. on demand.

APPLICATION OF PAYMENTS. Monies received by Bank from any source for application toward payment of the Obligations shall be applied to accrued interest and then to principal. Upon the occurrence of a default in the payment of the Obligations or a Default (as defined in the other Loan Documents) under any other Loan Document, monies may be applied to the Obligations in any manner or order deemed appropriate by Bank.

If any payment received by Bank under this Note or other Loan Documents is rescinded, avoided or for any reason returned by Bank because of any adverse claim or threatened action, the returned payment shall remain payable as an obligation of all persons liable under this Note or other Loan Documents as though such payment had not been made.

LOAN DOCUMENTS AND OBLIGATIONS. The term "Loan Documents" used in this Note and other Loan Documents refers to all documents executed in connection with the loan evidenced by this Note and may include, without limitation, a commitment letter that survives closing, a loan agreement, this Note, guaranty agreements, security agreements, security instruments, financing statements, mortgage instruments, letters of credit and any renewals or modifications, but however, does not include swap agreements as defined in 11 U.S.C. Section 101 whenever executed.

The term "Obligations" used in this Note refers to any and all indebtedness and other obligations under this Note, all other obligations as defined in the respective Loan Documents, and all obligations under any swap agreements as defined in 11 U.S.C. Section 101 between Borrower and Bank whenever executed.

LATE CHARGE. If any payments are not timely made, Borrower shall also pay to Bank a late charge equal to 5% of each payment past due for 10 or more days.

Acceptance by Bank of any late payment without an accompanying late charge shall not be deemed a waiver of Bank's right to collect such late charge or to collect a late charge for any subsequent late payment received.

If this Note is secured by owner-occupied residential real property located outside the state in which the office of Bank first shown above is located, the late charge laws of the state where the real property is located shall apply to this Note, or if permitted under the law of that state, 5% of each payment past due for 10 or more days.

ATTORNEYS' FEES AND OTHER COLLECTION COSTS. Borrower shall pay all of Bank's reasonable expenses incurred to enforce or collect any of the Obligations, including, without limitation, reasonable arbitration, paralegals', attorneys' and experts' fees and expenses, whether incurred without the commencement of a suit, in any trial, arbitration, or administrative proceeding, or in any appellate or bankruptcy proceeding.

USURY. Regardless of any other provision of this Note or other Loan Documents, if for any reason the effective interest should exceed the maximum lawful interest, the effective interest shall be deemed reduced to, and shall be, such maximum lawful interest, and (i) the amount which would be excessive interest shall be deemed applied to the reduction of the principal balance of this Note and not to the payment of interest, and (ii) if the loan evidenced

by this Note has been or is thereby paid in full, the excess shall be returned to the party paying same, such application to the principal balance of this Note or the refunding of excess to be a complete settlement and acquittance thereof.

BORROWER'S ACCOUNTS. Except as prohibited by law, Borrower grants Bank a security interest in all of Borrower's accounts with Bank and any of its affiliates.

DEMAND NOTE. This is a demand Note and all Obligations hereunder shall become immediately due and payable upon demand. In addition, the Obligations shall automatically become immediately due and payable if Borrower or any guarantor or endorser of this Note commences or has commenced against it a bankruptcy or insolvency proceeding.

REMEDIES. Upon the occurrence of a default in the payment of the Obligations or a Default (as defined in the other Loan Documents) under any other Loan Document, Bank may at any time thereafter, take the following actions: BANK LIEN AND SET-OFF. Exercise its right of set-off or to foreclose its security interest or lien against any account of any nature or maturity of Borrower with Bank without notice. CUMULATIVE. Exercise any rights and remedies as provided under the Note and other Loan Documents, or as provided by law or equity.

LINE OF CREDIT ADVANCES. Borrower may borrow, repay and reborrow, and Bank may advance and readvance under this Note respectively from time to time, so long as the total indebtedness outstanding at any one time does not exceed the principal amount stated on the face of this Note. Bank's obligation to advance or readvance under this Note shall terminate if a demand for payment is made under this Note or if a Default (as defined in the other Loan Documents) under any Loan Document occurs or in any event, on the first anniversary hereof unless renewed or extended by Bank in writing upon such terms then satisfactory to Bank.

WAIVERS AND AMENDMENTS. No waivers, amendments or modifications of this Note and other Loan Documents shall be valid unless in writing and signed by an officer of Bank. No waiver by Bank of any Default (as defined in the other Loan Documents) shall operate as a waiver of any other Default or the same Default on a future occasion. Neither the failure nor any delay on the part of Bank in exercising any right, power, or remedy under this Note and other Loan Documents shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

Each Borrower or any person liable under this Note waives presentment, protest, notice of dishonor, notice of intention to accelerate maturity, notice of acceleration of maturity, notice of sale and all other notices of any kind. Further, each agrees that Bank may extend, modify or renew this Note or make a novation of the loan evidenced by this Note for any period and grant any release, compromises or indulgences with respect to any collateral securing this Note, or with respect to any Borrower or any person liable under this Note or other Loan Documents, all without notice to or consent of any Borrower or any person who may be liable under this Note or other Loan Documents and without affecting the liability of Borrower or any person who may be liable under this Note or other Loan Documents.

MISCELLANEOUS PROVISIONS. ASSIGNMENT. This Note and other Loan Documents shall inure to the benefit of and be binding upon the parties and their respective heirs, legal representatives, successors and assigns. Bank's

interests in and rights under this Note and other Loan Documents are freely assignable, in whole or in part, by Bank. Borrower shall not assign its rights and interest hereunder without the prior written consent of Bank, and any attempt by Borrower to assign without Bank's prior written consent is null and void. Any assignment shall not release Borrower from the Obligations. APPLICABLE LAW; CONFLICT BETWEEN DOCUMENTS. This Note and other Loan Documents shall be governed by and construed under the laws of the state where Bank first shown above is located without regard to that state's conflict of laws principles. If the terms of this Note should conflict with the terms of the loan agreement or any commitment letter that survives closing, the terms of this Note shall control. JURISDICTION. Borrower irrevocably agrees to non-exclusive personal jurisdiction in the state in which the office of Bank first shown above is located. SEVERABILITY. If any provision of this Note or of the other Loan Documents shall be prohibited or invalid under applicable law, such provision shall be ineffective but only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Note or other such document. NOTICES. Any notices to Borrower shall be sufficiently given, if in writing and mailed or delivered to the Borrower's address shown above or such other address as provided hereunder, and to Bank, if in writing and mailed or delivered to Bank's office address shown above or such other address as Bank may specify in writing from time to time. In the event that Borrower changes Borrower's address at any time prior to the date the Obligations are paid in full, Borrower agrees to promptly give written notice of said change of address by registered or certified mail, return receipt requested, all charges prepaid. PLURAL; CAPTIONS. All references in the Loan Documents to Borrower, guarantor, person, document or other nouns of reference mean both the singular and plural form, as the case may be, and the term "person" shall mean any individual, person or entity. The captions contained in the Loan Documents are inserted for convenience only and shall not affect the meaning or interpretation of the Loan Documents. BINDING CONTRACT. Borrower by execution of and Bank by acceptance of this Note agree that each party is bound to all terms and provisions of this Note. ADVANCES. Bank in its sole discretion may make other advances and readvances under this Note pursuant hereto. POSTING OF PAYMENTS. All payments received during normal banking hours after 2:00 p.m. local time at the office of Bank first shown above shall be deemed received at the opening of the next banking day. JOINT AND SEVERAL OBLIGATIONS. Each Borrower is jointly and severally obligated under this Note. FEES AND TAXES. Borrower shall promptly pay all documentary, intangible recordation and/or similar taxes on this transaction whether assessed at closing or arising from time to time.

ARBITRATION. Upon demand of any party hereto, whether made before or after institution of any judicial proceeding, any dispute, claim or controversy arising out of, connected with or relating to this Note and other Loan Documents ("Disputes") between or among parties to this Note shall be resolved by binding arbitration as provided heroin. Institution of a judicial proceeding by a party does not waive the right of that party to demand arbitration hereunder. Disputes may include, without limitation, tort claims, counterclaims, disputes as to whether a matter is subject to arbitration, claims brought as class actions, claims arising from Loan Documents executed in the future, or claims arising out of or connected with the transaction reflected by this Note.

Arbitration shall be conducted under and governed by the Commercial Financial Disputes Arbitration Rules (the "Arbitration Rules") of the American Arbitration Association (the "AAA") and Title 9 of the U.S. Code. All arbitration hearings shall be conducted in the city in which the office of Bank first stated above is located. The expedited procedures set forth in

Rule 51 of et seq. of the Arbitration Rules shall be applicable to claims of less than \$1,000,000.00. All applicable statutes of limitation shall apply to any Dispute. A judgment upon the award may be entered in any court having jurisdiction. The panel from which all arbitrators are selected shall be comprised of licensed attorneys. The single arbitrator selected for expedited procedure shall be a retired judge from the highest court of general jurisdiction, state or federal, of the state where the hearing will be conducted or if such person is not available to serve, the single arbitrator may be a licensed attorney. Notwithstanding the foregoing, this arbitration provision does not apply to disputes under or related to swap agreements.

PRESERVATION AND LIMITATION OF REMEDIES. Notwithstanding the preceding binding arbitration provisions, Bank and Borrower agree to preserve, without diminution, certain remedies that any party hereto may employ or exercise freely, independently or in connection with an arbitration proceeding or after an arbitration action is brought. Bank and Borrower shall have the right to proceed in any court of proper jurisdiction or by self-help to exercise or prosecute the following remedies, as applicable: (i) all rights to foreclose against any real or personal property or other security by exercising a power of sale granted under Loan Documents or under applicable law or by judicial foreclosure and sale, including a proceeding to confirm the sale; (ii) all rights of self-help including peaceful occupation of real property and collection of rents, set-off, and peaceful possession of personal property; (iii) obtaining provisional or ancillary remedies including injunctive relief, sequestration, garnishment, attachment, appointment of receiver and filing an involuntary bankruptcy proceeding; and (iv) when applicable, a judgment by confession of judgment. Preservation of these remedies does not limit the power of an arbitrator to grant similar remedies that may be requested by a party in a Dispute.

Borrower and Bank agree that they shall not have a remedy of punitive or exemplary damages against the other in any Dispute and hereby waive any right or claim to punitive or exemplary damages they have now or which may arise in the future in connection with any Dispute whether the Dispute is resolved by arbitration or judicially.

IN WITNESS WHEREOF, Borrower, on the day and year first above written, has caused this Note to be executed under seal.

EMCORE Corporation
Taxpayer Identification Number: 22-2746503

CORPORATE By: Reuben F. Richards, Jr.

SEAL Reuben F. Richards, Jr., President

LOAN AGREEMENT

First Union National Bank of Florida 214 North Hogan Street - FL0070 Jacksonville, Florida 32202 (Hereinafter referred to as the "Bank")

EMCORE Corporation 394 Elizabeth Avenue Somerset, New Jersey 08773 (Individually and collectively "Borrower")

This Loan Agreement ("Agreement") is entered into October 25, 1996, by and between Bank and Borrower, a Corporation organized under the laws of New Jersey.

Borrower has applied to Bank for a loan or loans (individually and collectively, the "Loan") evidenced by one or more promissory notes (whether one or more, the "Note") as follows:

Line of Credit - in the principal amount of \$10,000,000.00 which is evidenced by the Promissory Note dated October 25, 1996 ("Line of Credit Note"), under which Borrower may borrow, repay, and reborrow, from time to time, so long as the total indebtedness outstanding at any one time does not exceed the principal amount. The Loan proceeds are to be used by Borrower solely to support working capital needs of the company. Bank's obligation to advance or readvance under the Line of Credit Note shall terminate if a default in the payment of the Obligations occurs or the Borrower is in Default (as defined in the Loan Documents) under any Loan Document, or in any event, on the first anniversary unless renewed or extended by Bank in writing upon such terms then satisfactory to Bank.

This Agreement applies to the Loan and all Loan Documents. The terms "Loan Documents" and "Obligations," as used in this Agreement, are defined in the Note. The term "Borrower" shall include its Subsidiaries and Affiliates. As used in this Agreement as to Borrower, "Subsidiary" shall mean any corporation of which more than 50% of the issued and outstanding voting stock is owned directly or indirectly by Borrower. As to Borrower, "Affiliate" shall have the meaning as defined in 11 U.S.C. Section 101, except that the term "debtor" therein shall be substituted by the term "Borrower" herein.

Relying upon the covenants, agreements, representations and warranties contained in this Agreement, Bank is willing to extend credit to Borrower upon the terms and subject to the conditions set forth herein, and Bank and Borrower agree as follows:

REPRESENTATIONS. Borrower represents that from the date of this Agreement and until final payment in full of the Obligations: ACCURATE INFORMATION. All information now and hereafter furnished to Bank is and will be true, correct and complete. Any such information relating to Borrower's financial condition will accurately reflect Borrower's financial condition as of the date(s) thereof (including all contingent liabilities of every type), and Borrower further represents that its financial condition has not changed materially or adversely since the date(s) of such documents. AUTHORIZATION; NON-CONTRAVENTION. The execution, delivery and performance by Borrower and any

it is a party are within its power, have been duly authorized by all necessary action taken by the duly authorized officers of Borrower and any guarantors and, if necessary, by making appropriate filings with any governmental agency or unit and are the legal, binding, valid and enforceable obligations of Borrower and any guarantors; and do not (i) contravene, or constitute (with or without the giving of notice or lapse of time or both) a violation of any provision of applicable law, a violation of the organizational documents of Borrower or any guarantor, or a default under any agreement, judgment, injunction, order, decree or other instrument binding upon or affecting Borrower or any guarantor, (ii) result in the creation or imposition of any lien (other than the lien(s) created by the Loan Documents) on any of Borrower's or guarantor's assets, or (iii) give cause for the acceleration of any obligations of Borrower or any guarantor to any other creditor. ASSET OWNERSHIP. Borrower has good and marketable title to all of the properties and assets reflected on the balance sheets and financial statements supplied Bank by Borrower, and all such properties and assets are free and clear of mortgages, security deeds, pledges, liens, charges, and all other encumbrances, except as otherwise disclosed to Bank by Borrower in writing ("Permitted Liens"). To Borrower's knowledge, no default has occurred under any Permitted Liens and no claims or interests adverse to Borrower's present rights in its properties and assets have arisen. DISCHARGE OF LIENS AND TAXES. Borrower has duly filed, paid and/or discharged all taxes or other claims which may become a lien on any of its property or assets, except to the extent that such items are being appropriately contested in good faith and an adequate reserve for the payment thereof is being maintained. SUFFICIENCY OF Borrower is not, and after consummation of this Agreement and after giving effect to all indebtedness incurred and liens created by Borrower in connection with the Loan, will not be, insolvent within the meaning of 11 U.S.C. Section 101(32). COMPLIANCE WITH LAWS. Borrower is in compliance in all respects with all federal, state and local laws, rules and regulations applicable to its properties, operations, business, and finances, including, without limitation, any federal or state laws relating to liquor (including 18 U.S.C. Section 3617, et seq.) or narcotics (including 21 U.S.C. Section 801, et seq.) and/or any commercial crimes; all applicable federal, state and local laws and regulations intended to protect the environment; and the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), if applicable. ORGANIZATION AND AUTHORITY. Each corporate or limited liability company Borrower and any guarantor, as applicable, is duly created, validly existing and in good standing under the laws of the state of its organization, and has all powers, governmental licenses, authorizations, consents and approvals required to operate its business as now conducted. Each corporate or limited liability company Borrower and any guarantor, if any, is duly qualified, licensed and in good standing in each jurisdiction where qualification or licensing is required by the nature of its business or the character and location of its property, business or customers, and in which the failure to so qualify or be licensed, as the case may be, in the aggregate, could have a material adverse effect on the business, financial position, results of operations, properties or prospects of Borrower or any such guarantor. NO There are no pending or threatened suits, claims or demands LITIGATION. against Borrower or any guarantor that have not been disclosed to Bank by Borrower in writing.

guarantor, as applicable, of this Agreement and other Loan Documents to which

AFFIRMATIVE COVENANTS. Borrower agrees that from the date of this Agreement and until final payment in full of the Obligations, unless Bank shall otherwise consent in writing, Borrower will: BUSINESS CONTINUITY. Conduct its business in substantially the same manner and locations as such business is now and has previously been conducted. MAINTAIN PROPERTIES. Maintain, preserve and keep its property in good repair, working order and condition,

making all needed replacements, additions and improvements thereto, to the extent allowed by this Agreement. ACCESS TO BOOKS & RECORDS. Allow Bank, or its agents, during normal business hours, access to the books, records and such other documents of Borrower as Bank shall reasonably require, and allow Bank to make copies thereof at Bank's expense. INSURANCE. Maintain adequate insurance coverage with respect to its properties and business against loss or damage of the kinds and in the amounts customarily insured against by companies of established reputation engaged in the same or similar businesses including, without limitation, commercial general liability insurance, workers compensation insurance, and business interruption insurance; all acquired in such amounts and from such companies as Bank may reasonably require. NOTICES. Promptly notify Bank in writing of (i) any material adverse change in its financial condition or its business; (ii) any default under any material agreement, contract or other instrument to which it is a party or by which any of its properties are bound, or any acceleration of the maturity of any indebtedness owing by Borrower; (iii) any material adverse claim against or affecting Borrower or any part of its properties; (iv) the commencement of, and any material determination in, any litigation with any third party or any proceeding before any governmental agency or unit affecting Borrower; and (v) at least 30 days prior thereto, any change in Borrower's name or address as shown above, and/or any change in Borrower's structure. COMPLIANCE WITH OTHER AGREEMENTS. Comply with all terms and conditions contained in this Agreement, and any other Loan Documents, and swap agreements, if applicable, as defined in the Note. PAYMENT OF DEBTS. Pay and discharge when due, and before subject to penalty or further charge, and otherwise satisfy before maturity or delinquency, all obligations, debts, taxes, and liabilities of whatever nature or amount, except those which Borrower in good faith disputes. REPORTS AND PROXIES. Deliver to Bank, promptly, a copy of all financial statements, reports, notices, and proxy statements, sent by Borrower to stockholders, and all regular or periodic reports required to be filed by Borrower with any governmental agency or authority. OTHER FINANCIAL INFORMATION. Deliver promptly such other information regarding the operation, business affairs, and financial condition of Borrower which Bank may reasonably request. ESTOPPEL CERTIFICATE. Furnish, within 15 days after request by Bank, a written statement duly acknowledged of the amount due under the Loan and whether offsets or defenses exist against the Obligations,

 $\label{thm:negative} \begin{tabular}{lll} \textbf{NEGATIVE COVENANTS.} & \textbf{Borrower agrees that from the date of this Agreement and until final payment in full of the Obligations, unless Bank shall otherwise \\ \end{tabular}$ consent in writing, Borrower will not: NONPAYMENT; NONPERFORMANCE. Fail to pay or perform the Obligations or Default (as defined in the Loan Documents) under any of the Loan Documents. CROSS DEFAULT. Default in payment or performance of any obligation under any other loans, contracts or agreements of Borrower, any Subsidiary or Affiliate of Borrower ("Affiliate" shall have the meaning as defined in 11 U.S.C. Section 101, except that the term "debtor" therein shall be substituted by the term "Borrower" herein; "Subsidiary" shall mean any corporation of which more than 50% of the issued and outstanding voting stock is owned directly or indirectly by Borrower), any general partner of or the holder(s) of the majority ownership interests of Borrower with Bank or its affiliates; MATERIAL CAPITAL STRUCTURE OR BUSINESS ALTERATION. Materially alter the type or kind of Borrower's business or that of its Subsidiaries or Affiliates, if any; or suffer or permit the acquisition of substantially all of Borrower's business or assets, or a material portion (10% $^{\circ}$ or more) of such business or assets if such a sale is outside Borrower's ordinary course of business, or more than 50% of its outstanding stock or voting power in a single transaction or a series of transactions; or acquire substantially all of the business or assets or more than 50% of the outstanding stock or voting power of any other entity; or enter into any merger or consolidation without prior written consent of Bank. DEFAULT ON

OTHER CONTRACTS OR OBLIGATIONS. Default on any material contract with or obligation when due to a third party or default in the performance of any obligation to a third party incurred for money borrowed. JUDGMENT ENTERED. Permit the entry of any monetary judgment or the assessment against, the filing of any tax lien against, or the issuance of any writ of garnishment or attachment against any property of or debts due Borrower. GOVERNMENT INTERVENTION. Permit the assertion or making of any seizure, vesting or intervention by or under authority of any government by which the management of Borrower or any guarantor is displaced of its authority in the conduct of its respective business or such business is curtailed or materially impaired. PREPAYMENT OF OTHER DEBT. Retire any long-term debt entered into prior to the date of this Agreement at a date in advance of its legal obligation to do so. RETIRE OR REPURCHASE CAPITAL STOCK. Retire or otherwise acquire any of its capital stock.

BORROWING BASE. As to the Line of Credit Note, the following provisions shall apply:

BORROWING LIMITATION. The aggregate outstanding balance at any time under the Line of Credit Note shall not exceed the lesser of (i) the maximum principal amount of the Note or (ii) the Aggregate Value of Custodian Account No. 4028302397, excluding assets held in tax exempt investments, which account, after exclusion of such tax exempt investments, serves as collateral for this loan (the "Account"). The "Aggregate Value" of the Account shall be calculated by first reducing the market value of the Account by the aggregate amount of any other indebtedness secured by the Account and by then adding the sum of the following:

- (a) eighty percent (80%) of the current market value of Corporate Bonds (Rating Aaa or Aa, Non-convertible, NYSE)
- (b) seventy percent (70%) of the current market value of actively traded stocks listed on NYSE or AMEX and selling for \$10/share or more
- (c) ninety percent (90%) of the current market value of U.S. Government Agency Obligations

REQUIRED REPORTS. Borrower shall certify to Bank by the tenth day of each month, the amount of Eligible Accounts as of the first day of each month, on forms required by Bank together with all detail and supporting documents requested by Bank. Bank may at any time and from time to time, during Bank's normal business hours, enter upon any business premises of Borrower and audit Borrower's accounts. Bank's determination of the amount of Eligible Accounts shall at all times be indisputable and deemed correct. The Borrower, at all times, shall cooperate with Bank without limitation by providing Bank information and access to Borrower's premises and business records and shall be courteous to Bank's agents.

CONTINUING REPRESENTATIONS. Borrower warrants and represents as a continuing warranty, that so long as principal is outstanding under the Line of Credit Note, the outstanding principal balance shall not exceed the lesser of the Maximum Principal Amount or the principal amount stated in the Line of Credit Note (the "Borrowing Limit"). Borrower agrees to pay any advances in excess of the Borrowing Limit immediately upon receipt by Borrower of written notice that the Borrowing Limit has been exceeded.

CONDITIONS PRECEDENT. The obligations of Bank to make the Loan and any

advances pursuant to this Agreement are subject to the following conditions precedent: ADDITIONAL DOCUMENTS. Receipt by Bank of such additional

supporting documents as Bank or its counsel may reasonably request.

IN WITNESS WHEREOF, Borrower and Bank, on the day and year first written above, have caused this Agreement to be executed under seal.

EMCORE Corporation

Taxpayer Identification Number: 22-2746503

CORPORATE

By: /s/ Reuben F. Richards, Jr. Reuben F. Richards, Jr., President SEAL

First Union National Bank of Florida

/s/ Douglas Zachariasen Douglas Zachariasen, Vice President

Consulting Agreement

This Consulting Agreement is entered into as of this 6th day of December, 1996 by and between EMCORE Corporation, a New Jersey corporation having its chief executive offices at 394 Elizabeth Avenue, Somerset, New Jersey 08873 ("Emcore"), and Norman E. Schumaker, residing at 20 Upper Warren Way, Warren, New Jersey 07059 ("Dr. Schumaker").

WHEREAS, Dr. Schumaker has served honorably as the Chief Executive Officer of Emcore from its formation until December 4, 1996, on which date he retired as its Chief Executive Officer, its Chairman of the Board of Directors and as a member of its Board of Directors;

WHEREAS, Emcore desires to maintain a continuing relationship with Dr. Schumaker and obtain the benefit of his consulting services on a regular basis, and Dr. Schumaker is willing to provide such services; and

WHEREAS, Emcore and Dr. Schumaker both desire to provide for appropriate retirement arrangements.

NOW, THEREFORE, in consideration of the foregoing, and of the agreements hereinafter set forth, the parties hereto agree as follows:
CONSULTING PROVISIONS: 1. Consulting. Dr. Schumaker agrees to provide
consulting services to Emcore in the area of compound semiconductor materials and devices for eight, eight hour workdays per month (approximately 2 days a week less vacation time) for a term of two years commencing January 1, 1997 and ending December 31, 1998 (the "Term"). Dr. Schumaker agrees that he will consult with no other person or entity during the Term in the subject area of compound semiconductor materials and devices without the prior written consent of Emcore, which consent shall not be unreasonably withheld. Dr. Schumaker shall be responsible to, and shall from time to time report to, the Chairman of the Board of Directors of Emcore and will consult with such personnel and take direction for such consulting assignments from either the Chairman of the Board of Directors or such other senior executive personnel as the Chairman shall from time to time designate. Dr. Schumaker agrees to review regularly the status of research and product development projects to which he has been assigned, discuss such projects with the Emcore's scientific and technical personnel and provide regular comments on and suggestions for improvement of these projects. Dr. Schumaker and the senior executive personnel of Emcore shall consult from time-to-time about other assignments which Dr. Schumaker may undertake, including the attendance at conferences, appearances at trade shows and discussion of scientific problems with customers (but no sales visits), provided that no such additional services shall be undertaken without the specific and voluntary agreement of both parties. Emcore agrees to reimburse Dr. Schumaker for all reasonable expenses incurred in connection with the performance of such additional assignments.

2. Renewal. This Agreement will automatically renew for one

successive two-year term if neither party gives notice to the other more than

sixty (60) days prior to the end of the Term (i.e., November 2, 1998) of his or its intention not to renew at the end of the Term. In the event of such renewal the Term shall be extended until December 31, 2000.

- 3. Consulting Fee. Dr. Schumaker shall receive a monthly fee of \$20,833.33 (an annual rate of \$250,000.00) payable for each month of the Term on the first day of that month. To secure the payment of the consulting fee, Emcore agrees to deposit, no later than December 24, 1996, \$500,000 in an interest-bearing account, said interest being for the benefit of Emcore, with the law firm of Dillon, Bitar and Luther as escrow agent. Emcore shall have the option of having the monthly consulting fee paid from the escrow or paying such sums directly. If sums are paid directly, then upon the written request of Emcore and upon written notice given to Dr. Schumaker and without objection by Dr. Schumaker within ten days, the escrow agent shall release to Emcore that portion of the consulting fee so paid by Emcore. Interest on the account shall be paid quarterly to Emcore without the requirement of notice. Emcore agrees that this is a Security agreement and all amounts in the escrow are pledged as security for payment of the consulting fee. In the event of default hereunder Dr. Schumaker shall have all of the rights and remedies of a secured party under the Uniform Commercial Code with respect to the balance of such escrow. Emcore and Dr. Schumaker shall enter into such further security documents as Dr. Schumaker shall reasonably request to perfect Dr. Schumaker's security interest in the escrow fund.
- Automotive Allowance. Emcore shall provide Dr. Schumaker an automobile allowance of \$750 per month through the Term of this Agreement which shall be paid on the first of the month.
- Forgiveness of Advances. Emcore has advanced to Dr. Schumaker \$58,000 and \$57,300. Emcore acknowledges that, as previously agreed, the \$58,000 advance has been forgiven as of the date of Dr. Schumaker's retirement. Emcore agrees to forgive the \$57,300 advance on January 1, 1997, as additional compensation for Dr. Schumaker's consulting activities.
- Notes and Warrants Issued May 1, 1996. On May 1, 1996, Emcore completed an offering to shareholders of Subordinated Notes and Warrants. Employees who were also shareholders were permitted to participate in the offering on the basis of delivery of their personal notes in lieu of cash as an employee benefit. Pursuant to this offering, Dr. Schumaker purchased in the aggregate \$566,432 principal amount of Emcore's Subordinated Notes and received Warrants to purchase 472,027 shares of Emcore Common Stock,

exercisable at \$1.20 per share, and paid for these securities with Dr. Schumaker's personal Note in the amount of \$566,432. Dr. Schumaker agrees to place said Subordinated Notes and said Warrants in escrow with the escrow agent until January 6, 1998. On such date such securities shall be released to Dr. Schumaker unless this Agreement has been terminated for reasons other than the death or disability of Dr. Schumaker or a material breach of this Agreement by Emcore. In such event the parties agree that the May 1, 1996 transaction shall be reversed and Dr. Schumaker, through the escrow agent, shall re-deliver to Emcore said Subordinated Notes and said Warrants and said personal Note of Dr. Schumaker shall be automatically canceled. Should any party dispute that such securities should be released or should be cancelled, such party shall give written or facsimile notice to the escrow agent no later than January 5, 1998 and the escrow agent shall advise the other party then shall hold such securities pending the written agreement of the parties or an order of court. Should such Warrants be called while in escrow, the escrow agent shall take instructions from Dr. Schumaker in responding to the call and Dr. Schumaker may direct that the Notes be delivered in payment, provided that if such warrants are exercised the shares of common stock

deliverable upon exercise shall be delivered into escrow. Should Dr. Schumaker desire to exercise the warrants during the escrow period, then the escrow agent shall exercise the warrants at Dr. Schumaker's written direction and using as payment such funds as Dr. Schumaker shall provide or the Subordinated Notes at Dr. Schumaker's direction.

- 7. Public Statements Concerning Emcore or its Tech nology. Dr. Schumaker agrees that during the Term of this Agreement that he will submit all public statements and literary works relating to Emcore or the subject area of this Consulting Agreement to Emcore for its review prior to publication or release to third parties to better assure the good name of Emcore and better protect its confidential information. Emcore will submit to Dr. Schumaker all public statements or literary works referring to Dr. Schumaker prior to publication to better assure his good name.
- 8. Termination. This Consulting Agreement shall terminate if Dr. Schumaker shall die or, within the meaning of the disability policy identified below, if Dr. Schumaker shall become disabled. This Consulting Agreement may be terminated by Emcore only for material breach of its provisions and after 30 days written notice to Dr. Schumaker identifying the breach and providing a reasonable opportunity (if at all possible) to cure. Upon termination all of Emcore's obligations under this Agreement to make payments shall cease and the Term shall come to an end.

9. Confidentiality Agreement.

- A. Records and Disclosure. During the Term, Dr. Schumaker shall maintain on a current basis complete and accurate records of all research or technical development work on which Dr. Schumaker consults hereunder, whether or not his involvement was during normal Emcore working hours or on Emcore premises. Such records shall be the property of Emcore. Dr. Schumaker shall disclose forthwith to Emcore any discovery, invention or literary work of any type that is used or usable by Emcore, and that is or was conceived or created by him during the Term and relating to the subject area of this Consulting Agreement or during the period of his prior employment by Emcore, whether or not patentable or copyrightable, whether affirmative or negative in nature, and whether made solely or jointly with others, unless such discovery, invention, or literary is conceived or created after December 4, 1996 in connection with a consulting agreement with another entity and such consulting is not in violation of this Agreement (collectively, "Developments").
- B. Assignment. Dr. Schumaker hereby assigns, and agrees to assign, to Emcore all of Dr. Schumaker's right, title and interest in all Developments, whether or not presently in exist- ence, and in all domestic and foreign intellectual property rights therein. Upon the filing by Emcore of any U.S. patent application naming Dr. Schumaker as an inventor or co-inventor, Emcore shall pay to Dr. Schumaker the sum of five hundred dollars (\$500).
- C. Cooperation. At Emcore's request and expense, during and after the Term Dr. Schumaker shall (i) execute and deliver to Emcore or its designee all documents that Emcore, in its sole discretion, deems proper and necessary in connection with the preparation, assignment, filing or prosecution of any domestic or foreign patent or copyright application for any Development; (ii) give and make any truthful oath to obtain, perfect, and enforce any patent or copyright relating to any Development; and (iii) assist in any other lawful way to obtain, perfect and enforce any patent or copyright or application for any Development.

- D. Confidentiality. During the Term and thereafter, Dr. Schumaker shall not use or disclose to any person, except as may be necessary in performing Dr. Schumaker's duties to Emcore, any confidential information of or concerning Emcore, its actual or anticipated business, research or development, its technology or the implementation or exploitation thereof, including without limitation information pertaining to customers, accounts, vendors, prices, costs, materials, processes, material results, materials technology, device results, system designs, system specifications, materials of construction, trade secrets, and equipment designs.
- E. Covenant. During the Term, Dr. Schumaker shall not become involved directly or indirectly, as a shareholder, director, officer, employee, agent or otherwise (except as the owner of less than one percent (1%) of the shares of a company whose annual gross revenues exceed one hundred million dollars), in any business activity which the Board of Directors of Emcore determines to be competitive with Emcore. For a period of two (2) years after the Term, Dr. Schumaker shall not: (1) Be employed by or become a principal of any domestic or foreign business competing with Emcore in the United States; (2) Accept employment with any customer of Emcore or any supplier of goods or services to Emcore without prior consultation with Emcore; (3) Solicit any employee of Emcore to leave such employee's position with Emcore; or (4) Solicit business from any customer of Emcore without the prior written consent of Emcore which written consent will not be unreasonably refused.
- F. Remedy. Breach by Dr. Schumaker of Subsection D ("Confidentiality") or E ("Covenant") would injure Emcore in a manner not adequately compensable by money damages. In the event of such an active or threatened breach, Emcore shall be entitled to an injunction, including a preliminary injunction and temporary restraining order, without posting a bond.

RETIREMENT PROVISIONS

- 10. Retirement. Dr. Schumaker retired from his positions as an employee, as an officer and as a member of the Board of Directors of Emcore on December 4, 1996.
- 11. Stock Options. Dr. Schumaker holds incentive stock options granted by Emcore under its 1995 Incentive Stock Option Plan to purchase 150,000 shares of Emcore's common stock, of which 90,000 shares are presently vested. The Board of Directors of Emcore has, by Resolution, extended the period for the exercise of these vested options for ninety (90) days from December 4, 1996 until March 4, 1997. Emcore acknowledges that Dr. Schumaker may exercise the 90,000 options up to, and including, that date. Dr. Schumaker acknowledges that the remaining 60,000 unvested options have lapsed pursuant to the terms of the options.
- 12. Medical, Disability and Life Insurance. Emcore agrees to provide Dr. Schumaker with participation, during the period ending on December 31, 2001, in Emcore's plan of medical benefits. Emcore agrees to assign to Dr. Schumaker the Disability Insurance policy under which he is presently covered and the two life insurance policies on his life payable to his selected beneficiary in the aggregate face amount of \$1,075,000, if these policies are by their terms assignable, and if not assignable to establish similar policies which are assignable and so assign them. Emcore agrees to reimburse Dr. Schumaker, until December 31, 2001, for all premiums due on these three policies. Emcore shall be free to continue or to cancel at its option any key-man insurance payable to Emcore it may have on the life of Dr.

Schumaker. In the event Emcore shall determine to cancel such insurance, it shall give thirty (30) days notice to Dr. Schumaker and afford Dr. Schumaker the opportunity to purchase such policy from Emcore upon payment to Emcore of its cash surrender value if such insurance shall then be assignable according to its terms.

- 13. Bonus, Vacation Time and Expense Reimbursement. Dr. Schumaker has or shall be paid within two days of the execution of this Agreement by Emcore \$103,055 in full satisfaction of all bonus and all vacation time obligations of Emcore to Dr. Schumaker. Dr. Schumaker agrees to submit to Emcore no later than January 15, 1997 all expense vouchers for expenses incurred during the period of his employment and Emcore shall reimburse Dr. Schumaker for all expenses reasonably incurred.
- 14. Employment Agreement and Confidentiality Agreement. The parties agree that the Employment Agreement dated January 1, 1996, which fully replaced all prior employment agreements, has been terminated and all benefits to which Dr. Schumaker is entitled thereunder have been replaced by the benefits provided hereunder. Notwithstanding such termination, Paragraph 8 thereof regarding the protection of Confidential Information of Emcore, as was originally intended, shall remain in effect. The Employment Agreement was supplemented by a Confidentiality Agreement dated October 14, 1996 which shall also remain in effect.
- 15. 401(k) Plan. Dr. Schumaker has made voluntary contributions to the 401(k) plan sponsored by Emcore. Emcore acknowledges that Dr. Schumaker, subject to terms of the plan, may withdraw such funds and will from time to time at Dr. Schumaker's request will so instruct the plan trustee.

GENERAL PROVISIONS

- 16. General Release. Emcore hereby generally releases Dr. Schumaker from all claims or causes of action it may hold against Dr. Schumaker as of the date of this Agreement, whether or not presently known to Emcore (except for fraud), except as provided for herein. Dr. Schumaker hereby generally releases Emcore, its officers, its directors, its controlling shareholders and its employees from all claims or causes of action which he may hold against them as of the date of this Agreement, whether or not presently known to Dr. Schumaker (except for fraud), except as provided for herein. In addition, Dr. Schumaker and Emcore each hereby generally release the other from any and all claims arising under the Securities Act of 1933, as amended, or the Securities Act of 1934, as amended, or any applicable state securities law whether such claims arise from facts and circumstances as of the date hereof or as of any date until December 31, 1997.
- 17. Indemnification. Should any action be brought against Dr. Schumaker arising out of his acts on behalf of Emcore as a consultant, employee, officer, director or shareholder of Emcore, Emcore agrees to indemnify and hold harmless Dr. Schumaker from any liability or costs (including attorneys fees) incurred in defending such actions, provided Dr. Schumaker shall give reasonably prompt notice to Emcore of all such actions, shall allow Emcore, at its option, to defend such actions and shall cooperate fully with Emcore in defense of such actions.
- 18. Public Offering. Emcore may undertake an initial public offering of its shares of common stock at some time in the future. In connection with any such initial public offering, Dr. Schumaker agrees that he will execute a restrictive letter as proposed by the underwriters acting in connection with such offering and which is signed by other executive officers

and major shareholders of Emcore. However, this restrictive letter shall not restrict the resale of the shares for a period greater than a period of six months from the date of any initial public offering of Emcore's common stock. Dr. Schumaker agrees not to exercise any piggy-back rights pursuant to any Registration Rights Agreement in connection with any such offering unless Emcore's principal shareholder, Jesup & Lamont Merchant Partners, L.L.C., its successors and assigns or its affiliates shall be selling shareholders in such offering. In the event such initial public offering is completed, Emcore agrees to assist Dr. Schumaker in preparing and filing any report he is required to file under the federal and state securities laws including Schedule 13D, Schedule 13G, Form 3, Form 4 or Form 5 as may from time to time be required to be filed by Dr. Schumaker which may arise from his beneficial ownership of shares of common stock of Emcore or otherwise.

- 19. Affiliation. Emcore acknowledges that as of December 4, 1996 Dr. Schumaker ceased to be an affiliate of Emcore. Emcore agrees to remove restrictive legends from Dr. Schumaker securities at such time or from time to time as Dr. Schumaker shall request in writing, but not before the expiration of six months from December 4, 1996, and not prior to the expiration of any restrictive period under any underwriters restrictive letter provided that at such time, as a matter of law, such restrictions may be remove in the opinion of counsel reasonably acceptable to the Emcore. Emcore acknowledges that Dr. Schumaker owns 1,251,351 shares of common stock, warrants to purchase 472,027 shares of common stock and holds options to purchase 90,000 shares of common stock.
- 20. Independent Contractor. Dr. Schumaker shall be an independent contractor, and not an employee, with respect to the consulting services.
- $\,$ 21. Legal Fee. $\,$ Emcore shall pay the reasonable legal expenses of Dr. Schumaker incurred in the negotiation and preparation of this Agreement.
- 22. Miscellaneous. This Consulting Agreement constitutes the entire agreement of the parties in connection with the subject matter hereof. This Agreement shall be interpreted in accordance with the substantive laws of the State of New Jersey. SHOULD ANY DISPUTE ARISE UNDER THIS AGREEMENT, THE PARTIES HERETO AGREE THAT IN ANY CIVIL ACTION EACH SHALL WAIVE THE RIGHT TO TRIAL BY JURY AND CONSENT TO THE EXCLUSIVE JURISDICTION OF THE FEDERAL OR STATE COURTS LOCATED IN THE STATE OF NEW JERSEY AND SHALL WAIVE ANY CLAIM OF IMPROPER VENUE OR FORUM NON CONVENIENS WITH RESPECT THERETO. This Agreement is a personal contract and Dr. Schumaker's rights and obligations herein may not be sold, transferred or assigned, pledged, hypothecated or otherwise alienated by Dr. Schumaker. Notwithstanding the foregoing, Dr. Schumaker may transfer his rights hereunder to an entity formed by him and principally owned by him and his family, so long as he shall remain personally responsible for the performance of all duties hereunder. The rights and obligations of the parties hereunder shall be binding upon and inure to the benefit of the successors and assigns of each. This Agreement may be amended only in writing signed by both parties to this Agreement. Notices to be given pursuant to this Agreement shall be given to the parties' address set forth at the head of this Agreement or at such other address as one party shall advise the other in writing in accordance with this notice procedure.

IN WITNESS WHEREOF, Dr. Schumaker and Emcore's duly authorized corporate officer, have executed this Agreement as of the date set forth above.

EMCORE CORPORATION

By: /s/ Thomas G. Werthan Thomas G. Werthan Vice President

> /s/ Norman E. Schumaker Norman E. Schumaker

Confidential treatment has been requested with respect to portions of this document. Such portions are indicated by [*]".

* * *

PURCHASE ORDER 111496 DRD 100610

Delphi Energy & Engine Management Systems SEE BELOW Delphi Automotive Systems Disbursement Analysis Dept. P.O. Box 438040 Pontiac, MI 48343-6040

DELPHI Energy & Engine Management Systems Anderson, Indiana 46018-9986 USA

Page 1

Pegasus Div. Of Emcore Corp. Attn.: Lou Koszi 394 Elizabeth Avenue Somerset, NJ 08873

The Seller agrees to sell and the Buyer agrees to purchase subject to the terms and conditions hereof, approximately the percentage indicated on Exhibit "A" attached hereto of the Buyer's requirements of the items shown on such Exhibit "A" effective 11/13/96.

This purchase order will expire on 12/31/97, except that, if buyer submits to seller a new and revised Exhibit "A" during May 1997, such submission shall constitute an offer of renewal by Buyer to continue to purchase from Seller those goods or services identified on Exhibit "A" pursuant to the terms and conditions of this purchase order, with a new expiration date of 12/31/98. Unless Seller notifies Buyer in writing of it's rejection of this offer within 15 days of Seller's receipt of the new or revised Exhibit "A", Seller will be deemed to have accepted the offer.

This same renewal mechanism will apply to the renewed purchase order, and any renewal periods thereafter.

Shipments are authorized only when released by our shipping schedule.

Please manually sign the purchase order acknowledgement and each page of the Exhibit "A" and return to the Buyer.

EFT/Manual check payments Seller agrees to payment in accord with its current EFT Payment Agreement or, where EFT is not in place. That GM may defer making payment by paper check during any recognized GM holiday until the next GM

business day without being in default or losing any cash discount privileges.

The following pertains to shipments to Indiana only. Direct payment permit #003280489 for Indiana sales and tax use.

In order to complete our records, it is necessary to have the acknowledgment copy of the purchase order and/or amendment signed and returned at once. Your prompt attention and reply will be appreciated.

Return the acknowledgement copy to: Delphi E Purchasing Department P.O. Box 2439 Anderson, IN 46018

Ship to plant specified on purchase order via Delphi Energy & Engine Management Systems Traffic Department Instruction Letter. If no letter on file call 1-800-436-6668. Note that Delphi Energy & Engine Management Systems has a consignee billing agreement with UPS. The toll free number for UPS is 800 354-7527. Pre-paid and add may not be used with UPS.

Deliver to Dept. must appear on all packing slips.

Seller represents that goods purchased under this order were not produced with forced labor (as defined in 19 U.S.C. 1307) either by Seller or Seller's suppliers. Seller shall indemnify Buyer against any liability Buyer may incur if this representation is incorrect.

* * *

These Numbers Must Appear on All Packing Slips and _____

A UNIQUE NUMBER IDENTIFIED AS A SHIPMENT NUMBER MUST APPEAR ON ALL PACKING SLIPS & CORRESPONDING INVOICES

SUBMIT INVOICE USING THIS
_____ UNIT OF MEASURE

IEA: 551 Terms: Net 25th PROX FOB: Collect S.P.

SHIP VIA:

DATE TO SHIP:

GENERAL LEDGER ACCT. SUB ACCOUNT:

CHG. DEPT.:

WORK ORDER:

PROJECT/JOB NO. OR PLANT ORDER NO.:

F/U: 76

DELIVER TO DEPT.:

NOTIFY:

TERMS AND CONDITIONS: This order including the terms and conditions on the face and reverse side hereof (and including additional Terms and Conditions attached herewith if the work and material is for use on a United States Government Contract), contains the complete and final agreement between Buyer and Seller and no other agreement in any way modifying any of said terms and conditions will be binding upon Buyer unless made in writing and signed by Buyer's authorized representative. To the extent that the goods ordered and/or shipped hereunder are by nature subject to Federal excise tax, the following exemption certificate of Registration No. 380572515-001-9, issued by the District Director, Internal Revenue Service, Detroit, Michigan, and that the article or articles specified in this order will be used by it as material in the manufacture of, or as a component part of another article to be manufactured by it. SEE REVERSE SIDE HEREOF FOR THE TERMS & CONDITIONS TO WHICH SELLER AGREES BY ACCEPTANCE OF THE ORDER. This order is not binding until accepted. Acceptance should be executed on acknowledgment copy which should be returned to buyer.

SEE REVERSE SIDE FOR SHIPPING AND BILLING INSTRUCTIONS.

AUTHORITY FOR DIRECT PAYMENT SALES AND USE TAX. The Indiana Department of Revenue under authority of Section 52 of the State Gross Retail Tax and Use Tax Act, authorizes the above operating Division of General Motors Corporation to make direct payment of such tax imposed on any purchase, use, storage or other consumption of tangible personal property or service.

DO NOT BILL INDIANA SALES TAX-REGISTERED RETAIL MERCHANTS CERTIFICATE No. 380572515-002-7.

Direct Payment Permits may not be used for the purchase of licensed vehicles or utilities, or for lump sum contracts for improvement of realty.

Purchase Order Amendment No.: 156813

PURCHASE ORDER AMENDMENT

Pegasus Div. Of Emcore Corp. Attn.: Lou Koszi 394 Elizabeth Avenue Somerset, N.J. 08873

IN ORDER TO COMPLETE OUR RECORDS, IT IS NECESSARY TO HAVE THE ACKNOWLEDGEMENT COPY OF THE PURCHASE ORDER AND/OR AMENDMENT SIGNED AND RETURNED AT ONCE. YOUR PROMPT ATTENTION AND REPLY WILL BE APPRECIATED.

WE ARE AMENDING PURCHASE ORDER AS NOTED BELOW AND AUTHORIZE YOU TO CHANGE YOUR RECORDS IN ACCORDANCE WITH THIS AMENDMENT. PLEASE SIGN AND RETURN THE ATTACHED ACKNOWLEDGMENT COPY WITHIN FIVE DAYS.

PURCHASE ORDER AMENDMENT

Supplier Code: 27551

Supplier Name: PEGASUS DIV. OF EMCORE CORP. REQUIREMENT CONTRACT

Page 1

EXHIBIT A 11/17/96

DELPHI-E Date

Division of General Motors Corporation

Anderson, Indiana 46018 Contract Number: 100610

All information below effective at once unless otherwise stated ADD PART TO CONTRACT $10493927\mathrm{N}$

MAGNETO RESISTOR DESCRIPTION:

METHOD OF MANUFACTURE:

DELIVERY PLANT: 57 ALPHATEC USA

DELIVERY DEPARTMENT: 5796 400 Industrial Park Dr. SPEC REVISION DATE: 05/13/96 Manteca, CA 95336

PERCENT OF BUSINESS: MINIMUM ORDER QUANTITY:

MAXIMUM ORDER QUANTITY:

24008010 ACCOUNT DISTRIBUTION: UNIT OF MEASURE: PIECE UNIT PRICE: [*] PAYMENT TERMS: NET 25TH PROX

FREIGHT ON BOARD CODE: COLLECT S.P.

END OF AMENDMENT

/s/ Reuben Richards President & CEO 11-22-96

> H. Kidd 317-646-3960

Buyer

DELPHI-E

Division of General Motors Corporation

Purchase Order Release and Shipping Schedule

Follow Up Code: 27551 A

Pegasus Div. Of Emcore Corp. Attn.: Lou Koszi

394 Elizabeth Avenue Somerset, N.J. 08873

In the event of questions, contact this person

M. Minks 915-783-4715

11/20/96

Unit of Measure:

10493927N

Part No.

Description: Magneto Resistor

Date of Order: 11/20/96

11/20/96

Purh. Ord. No.:

100610

This Release No.:

New Rel

New-Acum 113090

Amount of Order:

641000

641000

Balance Due Order: With Rel

641000

Last Receipt Considered

Date: P.O. Num: Amount:

Total Receipts

ACUM MDL YTD:

Totals:

291000 Fabrication: With Forecast: 466000

MONTHLY SCHEDULE SHIPPER SHIP CODE

Ship Code: Back Sched:

Nov: Fabrication

Dec: Fabrication

90000 201000 Jan: Fabrication Feb: Forecast 175000 175000 Mar: Forecast

PLEASE READ CAREFULLY

- The release supersedes all previous releases for this purchase order and this part number.
- Delphi Energy & Engine Management Systems assumes no obligations for materials fabricated in excess of the Total Fabrication shown on this schedule.
- 3. If a credit symbol (CR) appears after quantity in 1st monthly schedule space titled "Back Schedules" this indicates overshipment of past schedule and this quantity must be deducted from the first following monthly schedule. A plain quantity in this space indicates past due and must be shipped at once.
- 4. Material returned for credit has been reordered. Do not subtract returns from your total shipped records.
- All overshipments are subject to return, unless special arrangements are authorized by Delphi Energy & Engine Management Systems prior to shipment.
- Shipments must be routed and marked in accordance with Delphi Energy & Engine Management Systems' Traffic Department instructions.
- 7. In the event premium transportation is necessary because regular shipments have not been made in a timely manner in accordance with the release schedule, all excess charges must be assumed by the seller.
- Review cancellations promptly. Unless advised in writing within 15 days, we will assume cancellation is made without charge.
- If you are unable to maintain prices on our purchase orders due to this schedule, please advise at once.
 Sign and return the acknowledgment copy at once, listing definite
- Sign and return the acknowledgment copy at once, listing definite shipping promises. Unless advised within 10 days, records are assumed correct.
- 11. Shipments against this schedule are NOT authorized without production sample approval or the use of a Delphi Energy & Engine Management Systems Engineering Permit which allows the shipment of unapproved material. (Ref: Supplier Quantity Manual).

OUR SHIP CODE SPECIFIES THE TIME PARTS OR MATERIAL ARE TO LEAVE YOUR PLANT - NOT THE ARRIVAL TIME AT OUR PLANT.

DATE

/s/ K.E. Szymczak

WE HEREBY ACKNOWLEDGE RECEIPT OF THIS SCHEDULE.

Exhibit 11.1 Statement of Computation of Per Share Amounts

			For the year ended		For the three months ended	
		09/30/94	09/30/95	09/30/96	12/31/95	12/31/96
Primary	: Net loss for the period	\$ (169,809)	\$1,515,980	\$(3,176,314)	\$ (885,043)	\$(3,798,072)
	Weighted average number of shares of common stock outstanding Shares issuable upon exercise of outstanding options and warrants (1)	2,958,970 3,756,144	2,994,466 4,070,409	2,944,466 3,756,144	2,994,466 3,756,144	2,944,466 3,756,144
	Shares assumed to be acquired in accordance with the treasury stock method (1) Shares used in computing Earnings per share	2,312,208 4,402,907	2,415,227 4,649,648	2,312,208 4,438,403	2,312,208	2,312,208 4,438,403
Net (loss) income per share Fully Diluted:		\$ (0.04)	0.33	(0.72)	(0.20)	(0.86)
	Net Loss for the period Weighted average number of shares of common stock outstanding	\$(169,809) 2,958,970	1,515,980 2,994,466	(3,176,314) 2,994,466	(885,043) 2,994,466	(3,798,072) 2,994,466
	Shares issuable upon exercise of outstanding options and warrants (1) Shares assumed to be acquired in accordance with the treasury stock method (1)	3,756,144 2,312,208	4,070,409 2,415,227	3,756,144 2,312,208	3,756,144 2,312,208	3,756,144 2,312,208
	Shares used in computing Earnings per share Net (loss) income per share	4,402,907 \$ (0.04)	4,649,648 \$ 0.33	4,438,403 \$ (0.72)	4,438,403 \$ (0.20)	4,438,403 \$ (0.86)

⁽¹⁾ Under the provisions of Securities and Exchange Commission Staff Accounting Bulletin No. 64 ("SAB No. 64"), common stock and common stock equivalents issued by the company within one year or in contemplation of the Company's offering are treated as if they were outstanding for all periods presented. Accordingly, the shares issuable upon exercise of

outstanding options and warrants have been increased by 3,756,144 and the shares assumed to be acquired in accordance with the treasury stock method has been increased by 2,312,208 for each year presented.

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the inclusion in this registration statement on Form S-1 of our report dated November 1, 1996, except for Notes 13 and 15 as to which the date is December 6, 1996, and Note 16, as to which the date is February 3, 1997, on our audits of the financial statements and financial statement schedule of EMCORE Corporation. We also consent to the reference to our Firm under the caption "Experts."

Parsippany, New Jersey

February 5, 1997

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-1 of EMCORE Corporation for the registration of its Common Stock.

Lerner David Littenberg Krumholz & Mentlik

Westfield, New Jersey February 3, 1997

Consent of Robert Louis-Dreyfus

I hereby consent to the reference to me as a nominee to be elected to the Board of Directors of EMCORE Corporation, and I hereby approve the description of my professional biography included under the caption "Management" in the Registration Statement on Form S-1 of EMCORE Corporation.

Robert Louis-Dreyfus

February 5, 1997