

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-4

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)

3674
(Primary Standard Industrial Classification
Code Number)

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

145 Belmont Drive
Somerset, New Jersey 08873
(732) 271-9090

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Howard W. Brodie, Esq.
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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, 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, check the following box and list the Securities Act 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(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee
5% Convertible Senior Subordinated Notes due May 15, 2011	88,962,500	100%	\$145,575,000(1)	\$11,777.02 (2)
Common Stock, no par value	(3)	(4)	(4)	(4)

- (1) Pursuant to Rule 457(f)(1) under the Securities Act of 1933, this amount is the market value as of December 24, 2003 of the maximum amount of the 5% Convertible Subordinated Notes due May 15, 2006 that may be received by the Registrant from tendering holders in the exchange offer described herein.
- (2) The registration fee has been calculated pursuant to Rule 457(f) under the Securities Act of 1933.
- (3) We are registering an indeterminate number of shares of common stock issuable upon conversion of the 5% Convertible Senior Subordinated Notes due 2011, and, if we exercise our right to provisionally redeem the new notes, at our option in payment of the early call premium, and that will be issued in combination with the 5% Convertible Senior Subordinated Notes due 2011 in exchange for the 5% Convertible Subordinated Notes due 2006.
- (4) No consideration in addition to the market value of the 5% Convertible Subordinated Notes due 2006 will be received for the shares of common stock and, therefore, no registration fee is required pursuant to Rule 457(i).

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.

The information in this prospectus may change. We may not complete the exchange offer and issue these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities in any state where the offer is not permitted.

SUBJECT TO COMPLETION DATED DECEMBER 24, 2003

PROSPECTUS

EMCORE Corporation

Exchange Offer

5% Convertible Senior Subordinated Notes due May 15, 2011 and Shares of our Common
Stock for our 5% Convertible Subordinated Notes due May 15, 2006

We are offering to exchange up to \$88,962,500 principal amount of our new 5% Convertible Senior Subordinated Notes due May 15, 2011 and \$56,612,500 payable in our common stock, up to a maximum of 10,542,365 shares, for up to \$161,750,000 principal amount of our existing 5% Convertible Subordinated Notes due May 15, 2006. If you elect to tender your existing notes in our exchange offer, for each \$1,000 principal amount of our existing notes that you tender, you will receive from us \$550 principal amount of our new notes and \$350 payable in our common stock if our stock price is greater than \$5.37 per share, or 65.18 shares of our common stock if our stock price is at or below \$5.37 per share. The stock price is based on the average of the closing bid prices of our common stock for the five consecutive trading days ending on and including the third trading day prior to the expiration date. Our new notes will be issued in denominations of \$1,000 or integral multiples thereof. We will pay cash for any fractional portion of a new note that is less than \$1,000 principal amount, and for any fractional portion of a share of common stock issuable pursuant to our exchange offer.

Our exchange offer will expire at 11:59 p.m., New York City time, on January , 2004, unless we extend the exchange offer.

Our new notes will not be listed on any national securities exchange or included in any automated quotation system, but we expect they will be eligible for trading in the PORTAL Market of the National Association of Securities Dealers, Inc. Our common stock is quoted on The Nasdaq National Market under the symbol "EMKR." On December 24, 2003, the last reported sale price of our common stock on The Nasdaq National Market was \$5.37 per share.

The exchange offer is subject to important conditions, including that no investor acquires 20 percent or more of our common stock as a result of the exchange offer and that at least 85% in principal amount of the existing notes are properly tendered, accepted and not withdrawn by the expiration of the exchange offer.

We mailed this prospectus and the related letter of transmittal for our exchange offer on _____, 200__.

Please read the "Risk Factors" section beginning on page 14 of this prospectus for information that you should consider before you decide whether to tender your existing notes in our exchange offer.

We have retained DF King & Co., Inc. as the information agent for our exchange offer to assist you in connection with our exchange offer. Banks and brokers may call (212) 269-5550 to ask questions about our exchange offer, to request additional copies of our exchange offer materials, or to otherwise request assistance in connection with our exchange offer.

We have retained Wilmington Trust Company as the exchange agent for our exchange offer. Wilmington Trust Company can answer your questions regarding how to tender your existing notes. Their telephone number is (302) 636-6469.

Neither we nor our directors or officers make any recommendation to you as to whether you should tender or refrain from tendering all or any portion of your existing notes in our exchange offer. You should consult your own advisors and must make your own decision as to whether to tender your existing notes and, if so, the amount of your existing notes to tender.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The Dealer Manager for the Exchange Offer is:

CIBC World Markets

This Prospectus is dated _____, 200__.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information that is different from what is contained in this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities in any jurisdiction where it is unlawful to do so. You should not assume that the information contained in this prospectus is accurate as of any date other than its date, and neither the delivery of this prospectus nor the sale of securities hereunder shall create any implication to the contrary.

Each trademark, trade name or service mark of any other company appearing in this prospectus belongs to its holder.

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This prospectus incorporates important business and financial information about us from documents that we have filed with the Securities and Exchange Commission but have not included in or delivered with this prospectus. For a listing of documents that we have incorporated by reference into this prospectus, please see the section of this prospectus entitled "Where You Can Find Additional Information" on page 73.

We will provide you with copies of this information, without charge, upon written or oral request to:

EMCORE Corporation
145 Belmont Drive
Somerset, New Jersey 08873
Attn: Chief Financial Officer
Telephone (732) 271-9090

In order to obtain timely delivery, security holders must request the information no later than five business days prior to the expiration date, or January __, 2004.

In addition, you may obtain copies of this information by making a request through the investor relations section on our website, <http://www.emcore.com>, or by sending an email to Investor@emcore.com.

Summary

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus carefully, including the documents that we have attached to or enclosed with this prospectus and that we have incorporated by reference into this prospectus, before deciding whether to tender your existing notes in our exchange offer. Unless otherwise indicated, the "Company," "EMCORE," "we," "us," "our" and similar terms refer to EMCORE Corporation and its subsidiaries.

Our Company

Company Overview

We offer a broad portfolio of compound semiconductor-based components and subsystems for the rapidly expanding broadband and wireless communication markets and the solid-state lighting industry. We continue to expand our comprehensive product portfolio to enable the transport of voice, data and video over copper, hybrid fiber/coax (HFC), fiber, satellite and wireless communication networks. We are building upon our leading-edge compound semiconductor materials and device expertise to provide cost-effective components and subsystems for the cable television (CATV), telecommunications, data and storage, satellite and wireless communications markets. We support these end markets through our EMCORE Fiber Optics, EMCORE Photovoltaics and EMCORE Electronic Materials and Devices product lines. Through our 49% ownership participation in GELcore, LLC, we play a vital role in developing and commercializing next-generation LED technology for use in the general illumination market. Our target markets and main products that support these markets include:

CATV

- Optical components and subsystems for cable television (CATV) signal transmission over HFC, including hub transmitters based on linear 1310 nanometer (nm) and 1550 nm Distributed Feedback (DFB) and Fabry-Perot (FP) laser technologies, head-end transmitters based on 1550 nm DFB laser and external modulator technologies, and HFC node video detectors and receivers based on PIN (the "P", "I", "N" represent P-type, intrinsic and N-type semiconductor materials, respectively) photodiode technology.

Telecommunications

- Optical components and subsystems for telecommunications and fiber-to-the-premise, business, curb or home (in general, FTTx), including high-speed long-wavelength edge emitting lasers and transmit optical subassemblies (TOSA) based on 1310 nm and 1550 nm DFB or FP technologies, head-end transmitters for FTTx applications based on 1550nm laser technology, passive optical network (PON) receivers for FTTx applications, high speed receivers and detectors based on avalanche photodetectors (APD) and PIN detector technologies, and 4- and 12-channel parallel optical transceiver modules for telecommunication switch applications based on 850 nm vertical cavity surface emitting laser (VCSEL) and PIN photodiode array technology.

Data and Storage

- Optical components and subsystems for data communications and storage applications, including high-speed VCSELs and PIN photodiode components, 12-channel parallel optical transceiver modules for High Performance Computing (HPC) or "Super Computing" markets, LX4 and CX4 products for short reach 10 Gigabit per second (Gb/s) data communications and Ethernet networks, and 10 Gb/s TOSA and receive optical subassemblies (ROSA) for storage area networks (SAN).

Satellite Communications

- Solar cells and solar panels for global satellite communications, featuring world-leading conversion efficiencies and satellite communication (Satcom) products, including transmitters, receivers, subsystems and systems to transport wideband microwave signals between satellite base stations and antenna dishes.

Wireless Communications

- Electronic materials for the wireless handset and base station markets, which materials include 4-inch and 6-inch InGaP Hetero-junction Bipolar Transistor (HBT) and AlGaAs pseudomorphic high electron mobility transistors (pHEMT) and E-mode epi wafers that are used for power amplifiers and switches in GSM, TDMA and CDMA multiband wireless handsets.

Solid-State Lighting

- High Brightness Light Emitting Diodes (HB-LEDs) for lighting applications. Through our 49% ownership participation in GELcore, LLC (GELcore), we play a vital role in developing and commercializing next-generation LED technology for use in the general illumination market. GELcore's products include traffic lights, channel letters, flashlights and other signage and display products incorporating HB-LEDs. In the near term, GELcore expects to be deploying its HB-LED products in the automotive and general appliance markets.

Acquisitions and Divestitures

Over the past twelve months, we have refocused our market and product strategy to address high growth opportunities for our compound semiconductor based components and subsystems in the CATV, telecom, data and storage, satellite and wireless communications markets. In addition to developing our internal capability to develop and manufacture products for these markets, we have expanded our portfolio of communications products and technologies through a series of strategic acquisitions:

- In December 2002, we acquired certain assets of privately held Alvesta Corporation (Alvesta) of Sunnyvale, California for \$250,000 in cash. The transaction included the acquisition of intellectual property and inventory including several Alvesta product designers. Alvesta, which operates under our fiber optics group, was an industry leader in the research and development of parallel optic transceivers for fiber optic communication networks. Alvesta pioneered four channel parallel optic transceivers for the Optical Internetworking Forum and 10 Gigabit (10G) Fibre Channel, Ethernet and Infiniband applications. The newly formed design center in Santa Clara, CA, designs low-cost parallel optical module solutions used in Fibre Channel, Ethernet and Infiniband networks. The new products include media converter modules, copper XENPAK transceivers and active optical cables to address the short reach requirements of central offices and data centers. These components form the optical subsystem of the recently announced SmartLink product.
- In January 2003, we purchased Agere Systems, Inc.'s CATV transmission systems, telecom access and Satcom components business, formerly Ortel Corporation (Ortel), for \$26.2 million in cash. This business, now operating as the Ortel division within our fiber optics group, designs and manufactures high performance optoelectronic solutions that enable voice, video and data networks. Ortel's product offerings include 1310 nm and 1550 nm analog and digital lasers, dense wavelength division multiplexing (DWDM) lasers, transmitter engines, photodiodes, FTTx components, wideband lasers and receivers, and optical links for long-haul antenna remoting. These products will enable us to have a broad presence in the CATV and Radio Frequency (RF) transport markets as well as the telecom access and emerging FTTx market.
- On October 9, 2003, we announced that we had acquired Molex Inc.'s 10G Ethernet transceiver business (Molex) for an initial \$1.0 million in cash and an additional \$1.5 million in progress payments expected to be paid during fiscal 2004. This transaction included assets, products and intellectual property including several Molex product designers. Management believes that Molex, which operates under our fiber optics group, gives us a significant competitive advantage and the most

complete 10G Ethernet transceiver product portfolio in the industry. Molex specializes in coarse-wavelength-division-multiplexing (CWDM) products. The newly formed design center in Downers Grove, IL, designs and manufactures serial 10 Gb/s and CWDM optical transceivers for the growing 10G Ethernet market.

- On November 3, 2003, we sold our TurboDisc systems business to a subsidiary of Veeco Instruments Inc. (Veeco) in a transaction that could be valued at up to \$80.0 million. The purchase price was \$60.0 million in cash at closing with an additional aggregate maximum payout of \$20.0 million over the next two years. We will receive in cash 50% of all revenues from this business that exceed \$40.0 million in each of the next two years, beginning January 1, 2004. Revenues for the systems business in fiscal 2003 were approximately \$52.7 million, down from a peak of \$131.1 million in fiscal 2001. This transaction included the assets, products, product warranty liabilities, hardware-related technology and intellectual property used primarily in the operation of this business, including its facilities located in Somerset, New Jersey. Approximately 150 employees of EMCORE were involved in the TurboDisc business of which approximately 120 became employees of Veeco.

Management believes that the sale of the TurboDisc systems business was a critical step in reorienting our market and product focus. The capital equipment business enabled us to develop the critical materials science expertise that has become the cornerstone of our compound semiconductor based communications products and our sole business focus. We retained a license to all systems related intellectual property and ownership of all our process and device technology. Moreover, the sale of TurboDisc business strengthened our balance sheet and helped provide the resources necessary to implement our communications strategy.

The Exchange Offer

The following is a summary of the material terms of our exchange offer. Before you decide whether to tender your existing notes in our exchange offer, you should read the detailed description of our exchange offer in the section of this prospectus entitled "The Exchange Offer" beginning on page 30, of our new notes in the section of this prospectus entitled "Description of New Notes" beginning on page 39 and of our common stock in the section of this prospectus entitled "Description of Our Capital Stock" beginning on page 65 for further information.

Our Reasons for the Exchange Offer

We believe our exchange offer will strengthen our financial position, improve our capital structure and reduce our cash expenditure, without adversely affecting our product development programs, by:

- eliminating up to \$161,750,000 million principal amount of existing notes;
- deferring the maturity of our long-term debt from May 15, 2006 to May 15, 2011;
- reducing our interest expense by up to \$3,639,375 per year, although we will continue to incur interest expense for a longer period of time;
- increasing the likelihood that current holders of our existing notes will elect to convert their new notes into shares of our common stock due to the lower conversion price per share; and
- offering our bondholders the opportunity to participate in the equity value of the Company.

Terms of our Exchange Offer

We are offering up to \$88,962,500 aggregate principal amount of our new 5% Convertible Senior Subordinated Notes due May 15, 2011 and \$56,612,500 payable in our common stock, up to a maximum of 10,542,365 shares, for up to \$161,750,000 aggregate principal amount of our existing 5% Convertible Subordinated Notes due May 15, 2006. If you elect to tender your existing notes, for each \$1,000 principal amount of our existing notes that you tender in our exchange offer, you will receive from us \$550 principal amount of our new notes and \$350 payable in our common stock if our stock price is greater than \$5.37 per share, or 65.18 shares of our common stock if our stock price is at or below \$5.37 per share. In no event will the total of the number of shares underlying the new notes and the number of shares issued in the exchange offer exceed 21,579,896 shares. The stock price is based on the average of the closing bid prices of our common stock for the five consecutive trading days ending on and including the third trading day prior to the expiration date. Our new notes will be issued in denominations of \$1,000 or integral multiples thereof. We will pay cash for any fractional portion of a new note that is less than \$1,000 principal amount and for any fractional portion of a share of common stock issuable pursuant to our exchange offer.

You may tender all, some or none of your existing notes.

Please read the section of this prospectus entitled "The Exchange Offer — Terms of the Exchange Offer" beginning on page 30 for more information.

Conversion Price

The new notes will be convertible at any time prior to maturity at a conversion price of \$8.06 per share, subject to adjustment under customary anti-dilution provisions.

Please read the section of this prospectus entitled "Description of New Notes — Conversion of New Notes" beginning on page 39 for more information.

Provisional Redemption

We may redeem our new notes, in whole or in part, at any time prior to maturity, at a redemption price equal to 100% of the principal amount of the existing notes to be redeemed plus accrued and unpaid interest, if any, to, but excluding, the date of redemption if the closing price of our common stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on and including the third trading day before the date of mailing the provisional redemption notice.

Early Call Premium

If the market conditions are met and we provide notice to holders of a provisional redemption on or before May 15, 2007, we will pay each redeemed holder an early call premium, payable, at our option, in cash, common stock or

any combination thereof, equal to \$150 per \$1,000 principal amount of new notes redeemed less any interest actually paid or provided for on the new notes prior to the provisional redemption date. The early call premium will also be paid to holders who elect to convert new notes after we deliver notice of our intent to provisionally redeem but before the date set for redemption.

Expiration Date; Extension

Our exchange offer and the associated withdrawal rights will expire at 11:59 p.m., New York City time, on January 1, 2004, or any subsequent date to which we extend it. We may extend the expiration date of our exchange offer for any reason. If we extend the expiration date of our exchange offer, we will issue a press release or other public announcement no later than 9:00 a.m., Eastern time, on the next business day after the previously scheduled expiration date or an earlier date if appropriate. You must tender your existing notes prior to the expiration of our exchange offer if you wish to participate in our exchange offer.

Please read the sections of this prospectus entitled "The Exchange Offer — Expiration Date" beginning on page 30 and "The Exchange Offer — Extensions; Amendments; Termination" beginning on page 31 for more information.

Conditions to Our Exchange Offer; Termination

Our exchange offer is subject to the condition that no investor or group of investors acquires, or obtains the right to acquire, 20 percent or more of our common stock (or securities convertible into our common stock) or our voting power, on a post-transaction basis, as a result of the exchange offer. Our exchange offer is also subject to the registration statement covering our new notes and common stock and any post-effective amendment thereto being declared effective under the Securities Act of 1933. In addition, our exchange offer is subject to the condition that at least 85% in principal amount of the existing notes are properly tendered and not withdrawn by the expiration of the exchange offer and to other customary conditions, any of which we may waive prior to the expiration of our exchange offer. We reserve the right to extend, amend or terminate our exchange offer prior to our acceptance of any previously tendered existing notes if any of these conditions is not satisfied, in our reasonable judgment, prior to the expiration of our exchange offer.

Please read the section of this prospectus entitled "The Exchange Offer — Conditions for Completion of the Exchange Offer" beginning on page 35 for more information.

Withdrawal Rights

If you hold your existing notes directly through the Depository Trust Company, or DTC, or through a broker, dealer, commercial bank, trust company or other nominee and you tendered your existing notes through DTC's Automatic Tender Offer Program (commonly known as "ATOP"), you may, at any time before the expiration of our exchange offer, withdraw any or all of our existing notes that you previously tendered in our exchange offer. Any such withdrawal must be done through ATOP. In the event you hold your existing notes in certificated form and you tendered your existing notes by physical delivery to the exchange agent, you may withdraw any or all of the certificated existing notes that you previously tendered in our exchange offer, at any time before the expiration of our exchange offer, by delivering a written notice of withdrawal to Wilmington Trust Company, the exchange agent for our exchange offer. As of the date of this prospectus, we believe there are no certificated existing notes. Please read the section of this prospectus entitled "The Exchange Offer — Withdrawal Rights" beginning on page 34 for more information.

Procedures for Tendering Existing Notes

All existing notes that are held in book-entry form ultimately must be tendered through DTC's ATOP system.

If you hold your notes directly through DTC and you wish to tender any or all of your existing notes, you must do so through ATOP. If you hold any of our existing notes through

a broker, dealer, commercial bank, trust company or other nominee, you should contact that person promptly if you wish to tender any or all of your existing notes in our exchange offer and direct them to tender your existing notes through ATOP. If you hold any of our existing notes through a broker, dealer, commercial bank, trust company or other nominee and that intermediary is unable to timely tender your notes through ATOP, you may also be required to comply with the procedures for guaranteed delivery.

Please do not send letters of transmittal to us. You should send the letters of transmittal for our exchange offer to Wilmington Trust Company, the exchange agent for our exchange offer, at its office listed in the section of this prospectus entitled "The Exchange Offer — Exchange Agent" beginning on page 37, or on the back cover of this prospectus. The exchange agent can answer your questions regarding how to tender your existing notes in our exchange offer.

Please read the section of this prospectus entitled "The Exchange Offer — Procedures for Tendering Existing Notes" beginning on page 31 for more information.

Accrued Interest on Existing Notes	<p>Upon completion of our exchange offer, we will pay holders of our existing notes accrued and unpaid interest, if any, on any of our existing notes that are properly tendered, accepted and not withdrawn in our exchange offer. The amount of accrued interest will be calculated from the last interest payment date to, but excluding, the closing date of our exchange offer.</p>
Interest on New Notes	<p>We will pay interest on our new notes in cash at a rate of 5% per year, payable semi-annually on May 15 and November 15 of each year, commencing May 15, 2004. Interest on the new notes will begin to accrue as of the closing date of the exchange offer.</p> <p>Our new notes may be issued with original issue discount, referred to as OID, because their stated principal amount may exceed their fair market value issue price by more than the statutory de minimis amount. A holder of new notes, other than a holder whose new notes have amortizable bond premium or offsetting acquisition premium, will be required to include any OID on the notes in gross income as it accrues, in accordance with a constant yield to maturity method, over the period the new notes are held, and regardless of whether such holder is a cash or accrual basis taxpayer. Please see the section of this prospectus entitled "United States Federal Income Tax Considerations — U.S. HOLDERS" beginning on page 68 for more information.</p>
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	<p>Please read the section of this prospectus entitled "Description of New Notes — General" beginning on page 39 for more information.</p>
Exchange Agent	<p>Wilmington Trust Company.</p> <p>For information regarding how to tender your existing notes, please contact Wilmington Trust Company at (302) 636-6469.</p> <p>Please read the section of this prospectus entitled "The Exchange Offer — Exchange Agent" beginning on page 37 for more information.</p>
Information Agent	<p>DF King & Co., Inc.</p> <p>For information regarding our exchange offer:</p> <ul style="list-style-type: none"> • Banks and brokers call collect: (212) 269-5550. • All others call toll free: (800) 431-9621.
Dealer Manager	CIBC World Markets Corp.
Risk Factors	<p>You should consider carefully the matters described under the caption "Risk Factors" beginning on page 14, as well as other information in this prospectus and in the related letter of transmittal for our exchange offer, including the information that we have incorporated by reference into this prospectus as listed or described in the section of this prospectus entitled "Where You Can Find Additional Information" on page 73.</p>
Deciding Whether to Tender Your Existing Notes in Our Exchange Offer	<p>Neither we nor our directors or officers make any recommendation as to whether you should tender or refrain from tendering all or any portion of your existing notes in our exchange offer. Further, we have not authorized anyone to make any such recommendation. You must make your own decision whether to tender your existing notes in our exchange offer based on your own financial position and requirements, and, if so, the aggregate amount of your existing notes that you wish to tender, after reading this prospectus and the related letter of transmittal for our exchange offer, as well as consulting with your advisors, if any.</p>
Consequences of Not Exchanging Existing Notes	<p>If you do not exchange all of your existing notes in our exchange offer, any of our existing notes that you retain will be subordinate to our new notes following our exchange offer. If the minimum 85% in principal amount of the existing notes are tendered, \$75,618,125 principal amount of new notes would be outstanding and would be senior to the remaining existing notes. Further, the liquidity and trading</p>
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	<p>market for any of our existing notes that are not tendered in our exchange offer is likely to be adversely affected if and to the extent that any of our existing notes are tendered and accepted for exchange in our exchange offer.</p> <p>Please read the section of this prospectus entitled "The Exchange Offer — Consequences of Exchanging or Failing to Exchange Existing Notes" beginning on page 38 for more information.</p>
Tax Consequences	<p>You are urged to consult your tax advisor regarding the specific tax consequences to you of our exchange offer.</p> <p>Please read the section of this prospectus entitled "United States Federal Income Tax Considerations" beginning on page 68 for more information.</p>
Insufficiency of Earnings to Cover Fixed Charges	<p>Our earnings were insufficient to cover our fixed charges in the following amounts (in thousands): \$16,358, \$12,220, \$127,055 and \$37,297 for fiscal years 1999, 2000, 2002 and 2003, respectively. For fiscal year 2001, our ratio of earnings to fixed charges was 1.97.</p>

Comparison of Our New Notes and Our Existing Notes

The following is a brief summary of the terms of our new notes and our existing notes. For a more complete description of our new notes, see the section of this prospectus entitled "Description of New Notes" beginning on page 39. For a more complete description of our existing notes, see the section of this prospectus entitled "Description of Existing Notes" beginning on page 52.

	New Notes	Existing Notes
Securities	\$88,962,500 principal amount of 5% Convertible Senior Subordinated Notes due May 15, 2011.	\$161,750,000 principal amount of 5% Convertible Subordinated Notes due May 15, 2006.
Issuer	EMCORE Corporation	EMCORE Corporation
Maturity	May 15, 2011	May 15, 2006
Interest	Interest is payable on our new notes at a rate of 5% per year, payable in cash semi-annually on May 15 and November 15 of each year. Interest will accrue on the new notes from and including the closing date of the exchange offer.	Interest is payable on our existing notes at a rate of 5% per year, payable in cash semi-annually on May 15 and November 15 of each year.
Conversion:	<p>You have the option to convert our new notes into shares of our common stock at a conversion rate of 124.0695 shares of common stock per \$1,000 principal amount of our new notes, which is equivalent to a conversion rate of \$8.06 per share. The conversion rate is subject to adjustment under customary anti-dilution provisions. Upon conversion, you will not receive any cash representing accrued interest.</p> <p>You may convert our new notes at any time before the close of business on the business day immediately preceding the maturity date, unless we have previously redeemed or repurchased our new notes; provided, however, that if a new note is called for redemption or repurchase, you will be entitled to convert the new note at any time before the close of business on the date immediately preceding the date fixed for redemption or repurchase, as the case may be.</p>	<p>You have the option to convert our existing notes into shares of our common stock at a conversion rate of 20.5074 shares of common stock per \$1,000 principal amount of existing notes, which is equivalent to a conversion price of approximately \$48.7629 per share. The conversion rate is subject to adjustment under customary anti-dilution provisions. Upon conversion, you will not receive any cash representing accrued interest.</p> <p>You may convert our existing notes at any time before the close of business on the business day immediately preceding the maturity date, unless we have previously redeemed or repurchased our existing notes; provided, however, that if an existing note is called for redemption or repurchase, you will be entitled to convert the existing note at any time before the close of business on the date immediately preceding the date fixed for redemption or repurchase, as the case may be.</p>

	New Notes	Existing Notes
Ranking	The new notes will be our unsecured obligations. Our new notes are senior to our existing notes, but subordinated in right of payment to all of our other present and future senior indebtedness. As of December 24, 2003, we had \$93,000 of debt outstanding that was senior to, and no debt outstanding that was on par with, the new notes. Our new notes are also structurally subordinated in right of payment to all existing and future indebtedness and other liabilities of our subsidiaries. As of December 24, 2003, our subsidiaries had no indebtedness or other liabilities outstanding. The indenture governing our new notes does not restrict our incurrence of indebtedness, including senior debt, or our subsidiaries' incurrence of indebtedness.	The existing notes are our unsecured obligations. Our existing notes are subordinated in right of payment to all of our present and future senior indebtedness and will be subordinated to our new notes. As of December 24, 2003, we had \$93,000 of debt outstanding that was senior to, and no debt outstanding that was on par with, our existing notes. Upon consummation of the exchange offer, the full amount of new notes issued in the exchange offer will be senior to the existing notes. Our existing notes are also structurally subordinated to all existing and future indebtedness and other liabilities of our subsidiaries. As of December 24, 2003, our subsidiaries had no indebtedness or other liabilities. The indenture governing our existing notes does not restrict our incurrence of indebtedness, including senior debt, or our subsidiaries' incurrence of indebtedness.
Optional Redemption	We may only redeem our new notes as described below under the caption "— Provisional Redemption."	We may redeem our existing notes on or after May 20, 2004 upon payment of the premium set forth in this prospectus in the section of this prospectus entitled "Description of Existing Notes — Optional Redemption by EMCORE."
Provisional Redemption	We may redeem our new notes, in whole or in part, at any time prior to maturity, at a redemption price equal to 100% of the principal amount of the existing notes to be redeemed plus accrued and unpaid interest, if any, to, but excluding, the date of redemption if the closing price of our common stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice. See "Description of New Notes — Provisional Redemption."	We may redeem our existing notes, in whole or in part, at any time before May 20, 2004, at a redemption price equal to 100% of the principal amount of the existing notes to be redeemed plus accrued and unpaid interest, if any, to, but excluding, the date of redemption if the closing price of our common stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice.

	New Notes	Existing Notes
Early Call Premium	If the market conditions are met and we provide notice to holders of a provisional redemption on or before May 15, 2007, we will pay each redeemed holder an early call premium in cash or stock or any combination thereof, equal to \$150 per \$1,000 principal amount of new notes less any interest actually paid thereon prior to the provisional redemption date. Any such payment in common	Upon any provisional redemption, we will make an additional payment in cash or common stock, or in a combination of cash and common stock, with respect to the existing notes called for redemption in an amount equal to \$150 per \$1,000 principal amount of the existing notes, less the amount of any interest actually paid on the existing notes before the date of redemption. We

	stock will be made assuming a valuation of 95% of the closing sales prices of our common stock for the five trading days ending on and including the third trading day prior to the conversion date. The early call premium will also be paid to holders who elect to convert new notes after notice of our intent to provisionally redeem but before the date set for redemption. See "Description of New Notes — Early Call Premium."	are obligated to make this additional payment on all existing notes called for provisional redemption, including any existing notes converted after the notice date and before the provisional redemption date.
Repurchase at Option of Holders Upon a Change of Control	Upon a change of control, we may be required to make an offer to purchase your new notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date of purchase.	Upon a change of control, we may be required to make an offer to purchase your existing notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date of purchase.

Special Note Regarding Forward Looking Statements

This prospectus includes forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements are based largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. These forward looking statements may be identified by the use of words such as "expects", "anticipates", "intends", "plans", "believes", "estimate", "target", "may", "will" and variations of these words and similar expressions. These forward-looking statements are subject to business, economic and other risks and uncertainties, and actual results may differ materially from those discussed in these forward-looking statements. Factors that could contribute to these differences include, but are not limited to, those discussed under "Risk Factors", "Forward-Looking Statements" and elsewhere in this report. The cautionary statements made in this prospectus should be read as being applicable to all forward-looking statements wherever they appear in this report. This discussion should be read in conjunction with the Consolidated Financial Statements, including the related footnotes. These forward-looking statements include, without limitation, any and all statements or implications regarding:

- The ability of EMCORE Corporation (EMCORE) to remain competitive and a leader in its industry and the future growth of EMCORE, the industry and the economy in general;
- difficulties arising from the separation of the TurboDisc business from EMCORE's ongoing business lines;
- difficulties in integrating recent or future acquisitions into EMCORE's operations;
- the expected level and timing of benefits to EMCORE from its restructuring and realignment efforts, including:
 - expected cost reductions and its impact on EMCORE's financial performance,
 - expected improvement to EMCORE's product and technology development programs,
- the belief that restructuring and realignment efforts will position EMCORE better in its current business environment and prepare it for future growth with increasingly competitive new product offerings and improved long-term cost structure; and
- guidance provided by EMCORE regarding its expected financial performance in current or future periods, including, without limitation, with respect to anticipated revenues for any period in fiscal 2004 and subsequent periods.

These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected, including without limitation, the following:

- The disposition of our TurboDisc business may result in decreased revenues going forward as well as additional difficulties arising from the separation of its operations from our ongoing operations; and
- other risks and uncertainties described in EMCORE's filings with the Securities and Exchange Commission (SEC) (including under the heading "Risk Factors" beginning on page 14 of this prospectus), such as:
 - cancellations, rescheduling or delays in product shipments;
 - manufacturing capacity constraints;
 - lengthy sales and qualification cycles;
 - difficulties in the production process;
 - changes in semiconductor industry growth;
 - increased competition; and
 - delays in developing and commercializing new products.

Risk Factors

You should carefully consider the risks described below before you decide whether to tender your existing notes in our exchange offer. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also impair our business, financial condition, operating results and prospects.

If any of the following risks actually occur, they could materially adversely affect our business, financial condition, operating results or prospects. In that case, the trading price of our existing notes, our new notes and our common stock could decline, and you could lose all or part of your investment.

Risks Relating to Our New Notes and Common Stock

We may be unable to generate sufficient cash flow from which to make payments on our new notes, and our earnings have been insufficient to cover fixed charges.

We started operations in 1984 and as of September 30, 2003, we had an accumulated deficit of \$289.4 million. We incurred net losses of \$38.5 million in fiscal 2003, \$129.8 million in fiscal 2002 and \$12.3 million in fiscal 2001. In addition, as a result of the sale of our TurboDisc division, we expect that overall revenues will decrease

in fiscal 2004 compared to fiscal 2003. While we have reduced our cost structure substantially, we may continue to lose money. Many of our expenses, particularly those relating to capital equipment, debt service and manufacturing overhead, are fixed. Accordingly, lower revenue causes our fixed production costs to be allocated across reduced production volumes, which adversely affects our gross margin and profitability. Therefore, we expect to continue to incur operating losses until revenues increase. We cannot currently predict whether or when demand will strengthen across our product lines or how quickly our customers will consume their inventories of our products. In addition, our earnings have been insufficient to cover fixed charges. We may not become profitable or sustain profitability in the future. Accordingly, we may not have sufficient funds to make payments on our new notes.

Our new notes will be subordinated to all of our existing and future senior debt, other than our existing notes.

Our new notes will be unsecured and subordinated in right of payment to all of our existing and future senior debt other than the existing notes. As of December 24, 2003 we had \$93,000 of senior debt outstanding. As a result of such subordination, in the event of our bankruptcy, liquidation or reorganization, or upon acceleration of our new notes due to an event of default and in other specific circumstances, our assets will be available to pay obligations on our new notes only after all senior debt has been paid in full. There may not be sufficient assets remaining to pay amounts due on any of our new notes that are then outstanding. Our new notes also will be effectively subordinated to all indebtedness and other liabilities, including trade payables and lease obligations, of our subsidiaries. As of December 24, 2003, our subsidiaries had no indebtedness or other liabilities outstanding to which our existing notes were effectively subordinated. The indenture governing our new notes will not prohibit or limit the incurrence of senior debt or the incurrence of other debt and other liabilities by us or our subsidiaries. The incurrence of additional senior debt and other liabilities by us or our subsidiaries could impede our ability to pay obligations on our new notes.

In addition, although the existing notes will be subordinated to the new notes, the maturity date of the existing notes is prior to the maturity date of the new notes. Assuming that 85% of the existing notes are exchanged for new notes, we will be required to repay \$24,262,500 aggregate principal amount of existing notes on May 15, 2006. In addition, we must pay interest at the current annual rate of 5% on any existing notes that are not exchanged for new notes. These payments in respect of existing notes could materially and adversely affect our business, financial condition, results of operations and cash flows.

We anticipate that from time to time we will incur additional debt, including senior

indebtedness. See "Description of New Notes—Subordination of New Notes" beginning on page 41.

You may experience significant adverse tax consequences by participating in the exchange offer.

Contingent payment debt instrument rules.

We intend to take the position that the new notes do not constitute "contingent payment debt instruments" for federal income tax purposes and, as such, are not subject to Treasury regulations dealing with such instruments. However, the Internal Revenue Service ("IRS") may assert a contrary position, and our position is not binding on the IRS or a court. If the new notes are treated as contingent payment debt instruments subject to those regulations, potential significant adverse consequences may result, including: (i) you could be required to include amounts in taxable income each year as "original issue discount" (OID), at a rate that may be significantly higher than the stated rate of interest on the new notes and which is taxed as ordinary income similar to interest whether or not actual payments of stated interest are received; (ii) the value of any stock received upon conversion of the new notes could be treated as a payment on the new notes and gain recognized could be taxable as ordinary income; and (iii) gain recognized upon a sale, exchange, redemption, or retirement of the new notes could also be treated as ordinary income. These consequences may be materially different from the consequences generally expected by investors in considering convertible debt investments. Because the governing law is unsettled, counsel is unable to render an opinion on the basis of controlling legal authorities as to the likelihood of the occurrence of potential adverse tax consequences.

The exchange of existing notes for new notes and common stock may be partially or fully taxable at the time of the exchange.

We intend to take the position that the exchange of existing notes for new notes and common stock pursuant to the exchange offer constitutes a tax-free recapitalization for exchanging holders for federal income tax purposes. No assurance can be made that the IRS will not assert a contrary position and our position is not binding on the IRS or a court. If the existing notes, new notes or both are, contrary to our belief, treated as not being "securities" for tax purposes, the exchange could be partially or fully taxable to holders.

For a summary of potential adverse tax consequences, see "United States Federal Income Tax Considerations" beginning on page 68.

The new notes may not be rated or may receive a lower rating than anticipated.

We believe it is unlikely that the new notes will be rated. However, if one or more rating agencies rate the new notes and assign the new notes a rating lower than the rating expected by investors, or reduce the rating of the new notes in the future, the market price of the new notes and our common stock may be adversely affected.

We expect the trading price of our new notes and the common stock to be highly volatile.

Since our common stock has been publicly traded, its market price has fluctuated significantly and may continue to do so in the future. Significant fluctuations in the market price of our new notes and our common stock may occur in response to various factors and events, including, among other things:

- the depth and liquidity of the trading market for our new notes or our common stock;
- quarterly variations in our actual or anticipated operating results;
- changes in estimates of our financial results and prospects by securities analysts;
- market conditions in our industry;
- announcements and performance by our competitors;
- regulatory actions; and
- general economic conditions.

In addition, stock markets have experienced extreme price volatility in recent years. In the past, our common stock has experienced volatility not necessarily related to announcements of our financial performance. Broad market fluctuations may also adversely affect the market price of our new notes and common stock. A volatile market for our common stock may also make it more difficult for us to raise capital in the future.

We may incur additional indebtedness, including secured indebtedness, which may have rights to payment superior to the new notes.

The existing notes and the new notes are unsecured obligations. The terms of the existing notes and the new notes do not limit the amount of additional indebtedness, including secured indebtedness, that we can create, incur, assume or guarantee. Upon any distribution of our assets upon any insolvency, dissolution or reorganization, the payment of the principal of and interest on our secured indebtedness will be distributed out of our assets, which represent the security for such indebtedness. There may not be sufficient assets remaining to pay amounts due on any or all of the new notes or any existing notes then outstanding once payment of the principal and interest on our secured indebtedness has been made.

The new notes are senior to the existing notes. The existing notes and the new notes are effectively subordinated to all existing and future liabilities of our subsidiaries. Any right of ours to receive assets of any subsidiary upon its liquidation or reorganization, and the consequent right of the holders of the new notes to participate in the assets, will be subject to the claims of that subsidiary's creditors.

We may be unable to repurchase our new notes.

At maturity, the entire outstanding principal amount of our new notes will become due and payable. In addition, if we experience a change of control, each holder of our new notes may require us to repurchase all or a portion of that holder's new notes. At maturity or if we experience a change of control, we may not have sufficient funds or may be unable to arrange for additional financing to pay the principal amount or repurchase price due on our new notes then outstanding. Our borrowing arrangements or agreements relating to senior debt to which we may become a party may contain restrictions on, or prohibitions against, our repurchases of our new notes. If the maturity date or change of control occurs at a time when our other arrangements prohibit us from repurchasing our new notes, we could try to obtain the consent of the lenders under those arrangements to purchase our new notes, or we could attempt to refinance the borrowings that contain the restrictions. If we do not obtain the necessary consents or refinance these borrowings, we will be unable to repurchase our new notes. In that case, our failure to repurchase any tendered new notes or pay new notes upon maturity would constitute an event of default under the indenture governing our new notes. Any such default, in turn, may cause a default under the terms of our senior debt. As a result, in those circumstances, the subordination provisions of the indenture governing our new notes would, absent a waiver, prohibit any repurchase of our new notes until we pay the senior debt in full.

There is no public market for our new notes.

While we expect that our new notes will be eligible for trading in the PORTAL market, there is no public market for our new notes. Accordingly, we cannot assure you as to:

- the liquidity of any such market that may develop;
- your ability to sell our new notes; or
- the price at which you would be able to sell our new notes.

If such a market were to exist, our new notes could trade at prices that may be higher or lower than the principal amount or purchase price, depending on many factors, including prevailing interest rates, the market for similar notes, and our financial performance. Purchasers of our new notes are not obligated to make a market in our new notes, and any such market-making activities that occur could be discontinued at any time. In addition, any market-making activities will be subject to the limits imposed by the Securities Act of 1933 and the Securities Exchange Act of 1934. Accordingly, no assurance can be given as to the development or liquidity of any market for our new notes. We do not presently intend to apply for the listing of our new notes on any securities exchange or for inclusion of our new notes in the automated quotation system of the National Association of Securities Dealers, Inc.

The exchange offer may have an impact on our income or loss for tax purposes.

Cancellation of Indebtedness Income.

We expect to recognize taxable income from discharge of indebtedness in connection with the issuance of the new notes and common stock in exchange for the existing notes. We have net operating loss carryovers and expect to have current operating losses, which we believe should

be sufficient in amount to offset any cancellation of indebtedness income recognized in the exchange for federal income tax purposes. State and local limitations on the use of net operating loss carryovers to offset current taxable income could cause us to incur a current tax liability for state or local income taxes as a result of cancellation of indebtedness income recognized in the exchange. To the extent that available net operating loss carryovers and current operating losses are used to offset the cancellation of indebtedness income, such losses will be unavailable as a potential offset to future income.

Net Operating Losses.

The exchange of new notes and common stock for existing notes and the conversion of new notes into common stock, if combined with other shifts of ownership by significant holders of our common stock during a three-year period, may result in an "ownership change" for federal income tax purposes. If we undergo an "ownership change," our ability to utilize any of our accumulated net operating losses ("NOLs") remaining after the ownership change to offset future taxable income will be subject to an annual limitation.

Fluctuations in our quarterly operating results may negatively impact our stock price.

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

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

These factors may cause our operating results for future periods to be below the expectations of analysts and investors. This may cause a decline in the price of our common stock.

The price of our common stock has fluctuated widely in the last year and may fluctuate widely in the future.

Our common stock is traded on the Nasdaq National Market, which has experienced and may continue to experience significant price and volume fluctuations that could adversely affect the market price of our common stock without regard to our operating performance. In addition, we believe that factors such as quarterly fluctuations in financial results, earnings below analysts' estimates, and financial performance and other activities of other publicly traded companies in the semiconductor industry could cause the price of our common stock to fluctuate substantially. In addition, in recent periods, our common stock, the stock market in general, and the market for shares of small capitalization and semiconductor industry-related stocks in particular, have

experienced extreme price fluctuations; which have often been unrelated to the operating performance of affected companies. Any similar fluctuations in the future could adversely affect the market price of our common stock.

Our stock price has fluctuated widely in the last year and may fluctuate widely in the future. In fiscal 2003, our stock price has been as high as \$3.98 per share and as low as \$0.98 per share. Volatility in the price of our common stock may be caused by other factors outside of our control and may be unrelated or disproportionate to our operating results.

Risks Related To Our Business

We may continue to incur operating losses.

We started operations in 1984 and as of September 30, 2003, we had an accumulated deficit of \$289.4 million. We incurred net losses of \$38.5 million in fiscal 2003, \$129.8 million in fiscal 2002 and \$12.3 million in fiscal 2001. While we have reduced our cost structure substantially, we may continue to lose money. Many of our expenses, particularly those relating to capital equipment, debt service and manufacturing overhead, are fixed. Accordingly, lower revenue causes our fixed production costs to be allocated across reduced production volumes, which adversely affects our gross margin and

profitability. Therefore, we expect to continue to incur operating losses until revenues significantly increase. We cannot currently predict whether or when demand will strengthen across our product lines or how quickly our customers will consume their inventories of our products.

We may be unable to replace the revenues from our capital equipment business.

On November 3, 2003, EMCORE sold its TurboDisc systems business to Veeco. In fiscal 2003, systems segment sales contributed \$52.7 million in revenues, approximately 46.5% of EMCORE's total revenues. If sales from our component and subsystem product lines do not increase to replace those lost revenues, we will not be able to absorb our fixed costs, invest in new technologies or implement our strategy.

Our cost reduction programs may be insufficient to achieve long-term profitability.

We are undertaking cost reduction measures intended to reduce our expense structure at both the cost of goods sold and the operating expense levels. We believe these measures are a necessary response to, among other things, declining average sales prices across our product lines. These measures may be unsuccessful in creating profit margins sufficient to sustain our current operating structure and business.

Reduced customer lead times means we are less able to forecast revenues and, as a result, may be unable to accurately predict growth and manage our cost structure.

Several of our customers have reduced the lead times they give us when ordering product from us. While this trend has enabled us to reduce inventory, it also restricts our ability to forecast revenues. If our sales and profit margins do not increase to support the higher levels of operating expenses and if our new product offerings are not successful, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

Even if we complete our exchange offer, we will have substantial debt which we may be unable to repay if we cannot generate sufficient funds to do so.

Even if we complete our exchange offer, we will have significant amounts of debt outstanding, including new notes, existing notes (if their holders do not or cannot participate in the exchange offer), and approximately \$0.7 million of guarantee obligations in respect of the GELcore joint venture. In addition, we may incur additional debt in the future. This significant amount of debt could, among other things:

- make it difficult for us to make payments on any debt we may have;
- make it difficult for us to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;
- require us to dedicate a substantial portion of our cash flow from operations to service our debt, which would reduce the amount of our cash flow available for other purposes, including working capital and capital expenditures;
- limit our flexibility in planning for, or reacting to, changes in our business; and
- make us more vulnerable in the event of a further or continued downturn in our business.

If our cash flow is inadequate to meet our obligations or we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments on any of our indebtedness, we would be in default under the terms thereof, which could also cause defaults under our other indebtedness. Any such default would have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. In addition, we cannot assure you that we would be able to repay amounts due in respect of any of our indebtedness if payment thereon were to be accelerated following the occurrence of an event of default.

Our success depends on our ability to introduce new products on a timely basis.

We compete in markets characterized by rapid technological change, evolving industry standards and continuous improvements in products. Due to constant changes in these markets, our future success depends on our ability to improve our manufacturing processes, systems and products. To remain competitive we must continually introduce new and improved products. Our business, financial condition, results of operations and cash flows may be materially and adversely affected if:

- we are unable to improve our existing products on a timely basis;
- our new products are not introduced on a timely basis or do not achieve sufficient market penetration; or
- our new products experience reliability or quality problems.

If the internet does not continue to grow as expected and demand does not increase for our communications products, our business will suffer.

Our future success as a manufacturer of optical components, modules and subsystems ultimately depends on the continued growth of the communications industry, and, in particular, the growth of the Internet as a global communications system. As part of that growth, we are relying on increasing demand for high-content voice, text and other data delivered over high-speed connections (*i.e.*, high bandwidth communications). As Internet usage and bandwidth demand increase, so does the need for advanced optical networks to provide the required bandwidth. Without Internet and bandwidth growth, the need for our advanced communications products, and hence our future growth as a manufacturer of these products, is jeopardized. Currently, while generally increasing demand for Internet access is apparent, less evident is when order capacity will be absorbed. Moreover, multiple service providers compete to supply the existing demand. Also, currently, fiberoptic networks have significant excess capacity. The combination of a large number of service providers and excess network capacity has resulted

in severely depressed prices for bandwidth. Until pricing recovers, service providers have less incentive to install equipment and, thus, little need for many of our communications products.

Ultimately, should long-term expectations for Internet growth and bandwidth demand not be realized, our business would be significantly harmed.

Shifts in industry-wide demands and inventories could result in significant inventory write-downs.

The life cycles of some of our products depend heavily upon the life cycles of the end products into which our products are designed. Products with short life cycles require us to manage production and inventory levels closely. We evaluate our ending inventories on a quarterly basis for excess quantities, impairment of value and obsolescence. This evaluation includes analysis of sales levels by product and projections of future demand based upon input received from our customers, sales team and management estimates. We reserve for inventories on hand that are greater than 12-months old, unless there is an identified need for the inventory. In addition, we write off inventories that are considered obsolete based upon changes in customer demand, manufacturing process changes that result in existing inventory obsolescence or new product introductions, which eliminate demand for existing products. Remaining inventory balances are adjusted to approximate the lower of our manufacturing cost or market value. If future demand or market conditions are less favorable than our estimates, additional inventory write-downs may be required. In fiscal 2002, we recorded a \$11.9 million inventory charge for excess raw material and finished goods inventory that we believed we were carrying as a result of market conditions. In fiscal 2003, we recorded a \$2.0 million inventory charge related to certain transceiver devices that were later determined to be non-saleable because of design modifications. We cannot assure investors that obsolete or excess inventories, which may result from unanticipated changes in the estimated total demand for our products and/or the estimated life cycles of the end products into which our products are designed, will not affect us beyond the inventory charges that we have already taken.

The time and costs of developing new products may exceed our budget and our products may not be commercially successful.

We have recently introduced a number of new products and expect to be introducing additional new products in the near future. The commercialization of new products involves substantial expenditures in research and development, production and marketing. We may be unable to successfully design or manufacture these new products and may have difficulty penetrating new markets.

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

operations and cash flows could suffer if we incur budget overruns or delays in our research and development efforts.

We may engage in acquisitions that may harm our operating results, dilute our shareholders and cause us to incur debt.

We may pursue acquisitions to acquire new technologies, products or service offerings. Future acquisitions by us may involve the following:

- use of significant amounts of cash;
- potentially dilutive issuances of equity securities on potentially unfavorable items; and
- incurrence of debt on potentially unfavorable terms, as well as amortization expenses related to other intangible assets.

In addition, acquisitions involve numerous risks, including:

- inability to achieve anticipated synergies;
- difficulties in the integration of the operations, technologies, products and personnel of the acquired company;
- diversion of management's attention from other business concerns;
- risks of entering markets in which we have no or limited prior experience; and
- potential loss of key employees of the acquired company or of EMCORE.

From time to time, we have engaged in discussions with acquisition candidates regarding potential acquisitions of product lines, technologies and businesses. If acquisitions occur, we cannot be certain that our business, operating results and financial condition will not be materially and adversely affected.

In the past two years we have completed several major acquisitions which have reoriented EMCORE's strategy and broadened our product lines within our target markets. However, if customer demand in these markets does not meet current expectations, our revenues could be significantly reduced, and we could suffer a material adverse effect on our financial condition, results of operations and cash flows.

Our recent acquisitions place a strain on our resources.

We are in a dynamic business and our recent acquisitions have presented many challenges. These acquisitions have placed and will continue to place a significant strain on our management, financial, sales and other employees and on our internal systems and controls. If we are unable to effectively manage multiple facilities and a joint venture in geographically distant locations, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

Our industry is rapidly changing.

The compound semiconductor industry is changing rapidly due to, among other things, continuous technological improvements in products and evolving industry standards. This industry is marked by the continuous introduction of new products and increased capacity for services similar to those provided by us. Future technological advances in the compound semiconductor industry may result in the availability of new products or increase the efficiency of existing products. If a technology becomes available that is more cost effective or creates a superior product, we may be unable to access such technology or its use may involve substantial capital expenditures, which we may be unable to finance. There can be no assurance that existing, proposed or as yet undeveloped technologies will not render our technology less profitable or that we will have available the financial and other resources necessary to compete effectively against companies possessing such technologies. There can be no assurance that we will be able to adapt to technological changes or offer competitive products on a timely or cost effective basis.

The markets in which we compete are highly competitive. An increase in competition would limit our ability to maintain or increase our market share.

We face substantial competition from a number of companies, many of which have greater financial, marketing, manufacturing and technical resources. Larger competitors could spend more on research and development, which could give those competitors an advantage in meeting customer demand. We expect that existing and new competitors will improve the design of their existing products and will introduce new products with enhanced performance characteristics. The introduction of new products or more efficient production of existing products by our

competitors could result in price reductions and increases in expenses, and reduce market acceptance of our products, which could diminish our market share and gross margins.

General Electric Lighting, our joint venture partner, who has majority ownership and control of GELcore, may make decisions that we do not agree with and that adversely affect our net income.

We have a 49% minority interest in our GELcore joint venture with General Electric Lighting. A board of managers governs GELcore with representatives from both General Electric Lighting and EMCORE. Many fundamental decisions must be approved by both parties, which means we will be unable to direct the operation and direction of GELcore without the agreement of General Electric Lighting. If we are unable to agree on important issues with General Electric Lighting, GELcore's business may be delayed or interrupted, which may, in turn, materially and adversely affect our business, financial condition, results of operations and cash flows.

We have devoted and will be required to continue to devote significant funds and technologies to GELcore to develop and enhance its products. In addition, GELcore requires that some of our employees devote much of their time to its projects. This places a strain on our management, scientific, financial and sales employees. If GELcore is unsuccessful in developing and marketing their products, our business, financial condition, results of operations and cash flows may be materially and adversely affected.

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

Since a large percentage of our revenues are from foreign sales, certain export risks may disproportionately affect our revenues.

Sales to customers located outside the U.S. accounted for approximately 43% of our revenues in fiscal 2003, 33% of our revenues in fiscal 2002 and 48% of our revenues in fiscal 2001. Sales to customers in Asia represent the majority of our international sales. We believe that international sales will continue to account for a significant percentage of our revenues. Because of this, the following export risks may disproportionately affect our revenues:

- political and economic instability may inhibit export of our devices and limit potential customers' access to U.S. dollars in a country or region in which our customers are located;
- we may experience difficulties in the timeliness of collection of foreign accounts receivable and be forced to write off receivables from foreign customers;
- tariffs and other barriers may make our devices less cost competitive;
- we may have difficulty in staffing and managing our international operations;
- the laws of certain foreign countries may not adequately protect our trade secrets and intellectual property and may be burdensome to comply with; and
- potentially adverse tax consequences to our customers may make our devices not cost competitive.

We will lose sales if we are unable to obtain government authorization to export our products.

Exports of our products to certain destinations, such as the People's Republic of China, Argentina, Brazil, India, Russia, 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. Failure to receive these authorizations may materially and adversely affect our revenues and in turn our business, financial condition, results of operations and cash flows from international sales.

Our photovoltaics business is particularly sensitive to export control issues. All of our

commercially available photovoltaic products are export-controlled and are currently subject to the jurisdiction of the U.S. Department of Commerce. Many of our customers are located in countries, like Russia, India, Argentina and Brazil, for which export licenses are required. Moreover, given the current global political climate, obtaining export licenses may be more difficult and time-consuming than in the past. Failure to obtain export licenses for photovoltaic shipments could significantly reduce revenues of our materials-related segment and could have a material adverse effect on our financial condition, results of operations and cash flows.

Our operating results could be harmed if we lose access to sole or limited sources of materials or services.

We currently obtain some components and services for our products from limited or single sources. We generally do not carry significant inventories of any raw materials. Because we often do not account for a significant part of our vendors' business, we may not have access to sufficient capacity from these vendors in periods of high demand. In addition, we risk having important suppliers terminate product lines, change business focus or even go out of business. If we were to change any of our limited or sole source vendors, we would be required to re-qualify each new vendor. Re-qualification could prevent or delay product shipments that could negatively affect our results of operations. In addition, our reliance on these vendors may negatively affect our production if the components vary in quality or quantity. If we are unable to obtain timely deliveries of sufficient components of acceptable quality or if the prices of components for which we do not have alternative sources increase, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

Our products are difficult to manufacture and our production could be disrupted if we are unable to avoid manufacturing difficulties.

We manufacture all of our wafers and devices in our manufacturing facilities. Minute impurities, difficulties in the production process, defects in the layering of the devices' constituent compounds, wafer breakage or other factors can cause a substantial percentage of wafers and devices to be rejected or numerous devices on each wafer to be non-functional. These factors can result in lower than expected production yields, which would delay product shipments and may materially and adversely affect our operating results. We have experienced difficulties in achieving planned yields in the past, particularly in pre-production and upon initial commencement of full production volumes, which have adversely affected our gross margins. Because the majority of our costs of manufacture are relatively fixed, the number of shippable devices per wafer for a given product is critical to our financial results. Therefore, it is critical for us to improve the number of shippable product per wafer and increase the production volume of wafers in order to maintain and improve our results of operations. Additionally, because we manufacture products internally, any interruption in manufacturing resulting from fire, natural disaster, equipment failures or otherwise could materially and adversely affect our business, financial condition, results of operations and cash flows.

We face lengthy sales and qualifications cycles for our products and, in many cases, must invest a substantial amount of time and funds before we receive orders.

Several of our products are currently being tested to determine whether they meet customer or industry specifications. During this qualification period, we invest significant resources and dedicate substantial

production capacity to the manufacture of these new products, prior to any commitment to purchase by the prospective customer and without generating significant revenues from the qualification process. If we are unable to meet these specifications or do not receive sufficient orders to profitably use the dedicated production capacity, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

Our historical and future budgets for operating expenses, capital expenditures, operating leases and service contracts are based upon our assumptions as to the anticipated market acceptance of our products. Because of the lengthy lead time required for our product development and the changes in technology that typically occur during such period, it is difficult to estimate customer demand for a product accurately. If our products do not achieve expected customer demand, our business,

financial condition, results of operation and cash flows could be materially and adversely affected.

If our contract manufacturers fail to deliver quality products at reasonable prices and on a timely basis, our results of operations and financial condition could be materially affected.

We are increasing our use of contract manufacturers as an alternative to our own manufacturing of products. If these contract manufacturers do not fulfill their obligations to us, or if we do not properly manage these relationships and the transition of production to these contract manufacturers, our existing customer relationships may suffer. In addition, by undertaking these activities, we run the risk that the reputation and competitiveness of our products and services may deteriorate as a result of the reduction of our control over quality and delivery schedules. We also may experience supply interruptions, cost escalations and competitive disadvantages if our contract manufacturers fail to develop, implement or maintain manufacturing methods appropriate for our products and customers.

Our supply chain and manufacturing process relies on accurate forecasting to provide us with optimal margins and profitability. Because of market uncertainties, forecasting is becoming much more difficult. In addition, as we come to rely more heavily on contract manufacturers, we may have fewer personnel resources with expertise to manage these third-party arrangements.

Industry demand for skilled employees, particularly scientific and technical personnel with compound semiconductor experience, exceeds the number of skilled personnel available.

Our future success depends, in part, on our ability to attract and retain certain key personnel, including scientific, operational and management personnel. The competition for attracting and retaining these employees, especially scientists and technical personnel, is intense. Because of the intense competition for these skilled employees, we may be unable to retain our existing personnel or attract additional qualified employees in the future. If we are unable to retain our skilled employees and attract additional qualified employees to the extent necessary to keep up with our business demands and changes, our financial condition, results of operations and cash flows may be materially and adversely affected.

Protecting our trade secrets and obtaining patent protection is critical to our ability to effectively compete for business.

Our success and competitive position depend on protecting our trade secrets and other intellectual property. Our strategy is to rely both on trade secrets and patents to protect our manufacturing and sales processes and products. Reliance on trade secrets is only an effective business practice insofar as trade secrets remain undisclosed and a proprietary product or process is not reverse engineered or independently developed. We take certain measures to protect our trade secrets, including executing non-disclosure agreements with our employees, our joint venture partner, customers and suppliers. If parties breach these agreements or the measures we take are not properly implemented, we may not have an adequate remedy. Disclosure of our trade secrets or reverse engineering of our proprietary products, processes or devices could materially and adversely affect our business, financial condition, results of operations and cash flows.

There is also no assurance that any patents will afford us commercially significant protection of our technologies or that we will have adequate resources to enforce our patents. We are actively pursuing patents on some of our recent inventions. In addition, the laws of certain other countries may not protect our intellectual property to the same extent as U.S. laws.

Our failure to obtain or maintain the right to use certain intellectual property may adversely affect our financial results.

The compound semiconductor, optoelectronics, and fiber optic communications industries are characterized by frequent litigation regarding patent and other intellectual property rights. From time to time we have received and may receive in the future, notice of claims of infringement of other parties' proprietary rights and licensing offers to commercialize third party patent rights. Although we are not currently involved in any litigation relating to our intellectual property, there can be no assurance that:

- infringement claims (or claims for indemnification resulting from infringement claims) will not be asserted against us or that such claims will not be successful;

- future assertions will not result in an injunction against the sale of infringing products or otherwise significantly impair our business and results of operations;
- any patent owned by us will not be invalidated, circumvented or challenged; or
- we will not be required to obtain licenses, the expense of which may adversely affect our results of operations and profitability.

In addition, effective copyright and trade secret protection may be unavailable or limited in certain foreign countries. Litigation, which could result in substantial cost to us and diversion of our resources, may be necessary to defend our rights or defend us against claimed infringement of the rights of others.

Our management's stock ownership gives them the power to control business affairs and prevent a takeover that could be beneficial to unaffiliated shareholders.

Certain members of our management, specifically Thomas J. Russell, Chairman of our Board, Reuben F. Richards, Jr., President, Chief Executive Officer and a director, and Robert Louis-Dreyfus, a director, are former members of Jesup & Lamont Merchant Partners, L.L.C. They collectively beneficially own more than 20% of our common stock. Accordingly, such persons will continue to hold sufficient voting power to control our business and affairs for the foreseeable future. This concentration of ownership may also have the effect of delaying, deferring or preventing a change in control of our company, which could have a material adverse effect on our stock price.

Unsuccessful control of the hazardous raw materials used in our manufacturing process could result in costly remediation fees, penalties or damages under environmental and safety regulations.

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

Recently enacted and proposed regulatory changes may cause us to incur increased costs.

Recently enacted and proposed changes in the laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, will increase our expenses as we evaluate the implications of new rules and devote resources to respond to the new requirements. In particular, we expect to incur additional SG&A expense as we implement Section 404 of the Sarbanes-Oxley Act, which requires management to report on, and our independent auditors to attest to, our internal controls. Compliance with these new rules will require management to devote substantial time and attention, which could prove to be disruptive to product development, marketing and other business activities. Further, the impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or as executive officers, which could harm our business.

We may have difficulty obtaining director and officer liability insurance in acceptable amounts for acceptable rates which could impair our ability to recruit and retain qualified officers and directors.

Like most other public companies, we carry insurance protecting our officers and directors against claims relating to the conduct of our business. Historically, this insurance covered, among other things, the costs incurred by companies and their management to defend against and resolve claims relating to management conduct and results of operations, such as securities class action claims. These claims typically are extremely expensive to defend against and resolve. Hence, as is customary, we purchase and maintain insurance to cover some of these costs. We pay significant premiums to acquire and maintain this insurance, which is provided by third-party insurers, and we agree to underwrite a portion of such exposures under the terms of the insurance coverage. Over the last several years, the premiums we have paid for this insurance have increased substantially. One consequence of the current economic environment and decline in stock prices has been

a substantial increase in the number of securities class actions and similar claims brought against public corporations and their management. Consequently, insurers providing director and officer liability insurance have in recent periods sharply increased the premiums they charge for this insurance, raised retentions (that is, the amount of liability that a company is required to pay to defend and resolve a claim before any applicable insurance is provided), and limited the amount of insurance they will provide. Moreover, insurers typically provide only one-year policies.

Each year we negotiate with insurers to renew our director and officer insurance. Particularly in the current economic environment, we cannot assure you that in the future we will be able to obtain sufficient director and officer liability insurance coverage at acceptable rates and with acceptable deductibles and other limitations. Failure to obtain such insurance could materially harm our financial condition in the event that we are required to defend against and resolve any future securities class actions or other claims made against us or our management arising from the conduct of our operations. Further, the inability to obtain such insurance in adequate amounts may impair our future ability to retain and recruit qualified officers and directors.

Our business or our stock price could be adversely affected by issuance of preferred stock.

Our board of directors is authorized to issue up to 5,882,352 shares of preferred stock with such dividend rates, liquidation preferences, voting rights, redemption and conversion terms and privileges as our board of directors, in its sole discretion, may determine. The issuance of shares of preferred stock may result in a decrease in the value or market price of our common stock, or our board of directors could use the preferred stock to delay or discourage hostile bids for control of us in which shareholders may receive premiums for their common stock or to make the possible sale of EMCORE or the removal of our management more difficult. The issuance of shares of preferred stock could adversely affect the voting and other rights of the holders of common stock and may depress the price of our common stock.

Certain provisions of New Jersey law and our charter may make a takeover of our company difficult even if such takeover could be beneficial to some of our shareholders.

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

Price Range of Common Stock

Our common stock is traded on The Nasdaq National Market under the symbol "EMKR." The following table sets forth, for the periods indicated, the high and low reported sales prices per share of our common stock as reported on The Nasdaq National Market.

	High	Low
Fiscal year ended September 30, 2002		
First Quarter	\$17.04	\$7.67
Second Quarter	16.97	7.59
Third Quarter	10.48	3.60
Fourth Quarter	6.00	1.42
Fiscal year ended September 30, 2003		
First Quarter	\$ 3.38	\$0.98
Second Quarter	2.50	1.65
Third Quarter	3.98	1.66
Fourth Quarter	3.90	2.40

On December 24, 2003, the last reported sale price of our common stock was \$5.37 per share. As of December 12, 2003, there were approximately 5,371 holders of record of our common stock.

Our new notes will not be listed on any national securities exchange or included in any automated quotation system, but we expect they will be eligible for trading in the PORTAL market of the National Association of Securities Dealers, Inc.

Dividend Policy

We have not declared or paid any cash dividends on our capital stock since inception. We currently intend to retain all of our cash and any future earnings to finance the growth and development of our business and therefore do not expect to pay cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our board of directors and will be dependent upon our financial condition, results of operations, capital requirements and such other factors as our board of directors deems relevant.

Unaudited Pro Forma Information

The unaudited information below is presented pro forma to reflect the effects of the exchange offer, as if it occurred on October 1, 2002 (except with respect to Pro Forma Book Value Per Share, in which case the exchange offer is assumed to have occurred on September 30, 2003), under two scenarios. Under alternative (1) below, we have assumed that the minimum \$137,487,500 principal amount of the existing notes are validly tendered in the exchange offer, and under alternative (2) that the entire \$161,750,000 outstanding principal amount of the existing notes are validly tendered in the exchange offer.

Pro Forma Ratio of Earnings to Fixed Charges

For the fiscal year ended September 30, 2003, earnings would have been insufficient to cover fixed charges by:

under alternative (1) \$33,526 million, and

under alternative (2) \$32,794 million.

Pro Forma Book Value Per Share

As of September 30, 2003, the book value per common share would have been \$2.30, assuming alternative (1) and \$2.46 assuming alternative (2).

Capitalization

The following table sets forth our consolidated audited capitalization as adjusted to give effect to the issuance of the new notes and shares of common stock in the exchange offer under two scenarios. In the second column below, we have assumed that the minimum \$137,487,500 principal amount of the existing notes are validly tendered and accepted for exchange in the exchange offer, and in the third column that the entire \$161,750,000 outstanding principal amount of the existing notes are validly tendered and accepted for exchange at September 30, 2003.

	September 30, 2003		
	Actual	As Adjusted, Assuming 85% Participation (in thousands)	As Adjusted, Assuming 100% Participation
Long-term debt, less current portion:			
5% convertible senior subordinated notes due 2011 (new notes)	\$ —	\$ 75,618	\$ 88,963
5% convertible subordinated notes due 2006 (existing notes)	161,750	24,263	—
Other long-term debt.	41	41	41
Total long-term debt	161,791	99,922	89,004
Total shareholders' equity	44,772	106,641	117,559
Total capitalization	<u>\$206,563</u>	<u>\$206,563</u>	<u>\$206,563</u>

Selected Consolidated Financial Data

The selected consolidated operating data for the fiscal years ended September 30, 2003, 2002 and 2001 and the consolidated balance sheet data as of September 30, 2003 and 2002 are derived from our audited consolidated financial statements audited by Deloitte & Touche LLP, independent auditors, which are incorporated by reference in this prospectus. Please refer to the complete consolidated financial statements and related existing notes for more information. The selected consolidated operating data for the fiscal years ended September 30, 2000 and 1999 and the selected balance sheet data as of September 30, 2001, 2000 and 1999 have been derived from our consolidated financial statements audited by Deloitte & Touche LLP that are not included or incorporated by reference in this prospectus. These results are not necessarily indicative of the results that may be expected for future periods.

Statements of Operations Data	For the fiscal years ended September 30,				
	2003	2002	2001	2000	1999
	(in thousands, except per share amounts)				
Revenues	\$ 113,106	\$ 87,772	\$ 184,614	\$ 104,506	\$ 58,341
Cost of revenues	98,589	88,414	114,509	61,301	33,158
Gross profit (loss)	14,517	(642)	70,105	43,205	25,183
Operating expenses:					
Selling, general and administrative	28,990	28,227	29,851	21,993	14,433
Goodwill amortization	—	—	1,147	4,392	4,393
Research and development	22,181	40,970	53,391	32,689	20,713
Impairment and restructuring	—	36,721	—	—	—
(Gain) loss from debt extinguishment(1)	(6,614)	—	—	—	1,334
Total operating expenses	44,557	105,918	84,389	59,074	40,873
Operating loss	(30,040)	(106,560)	(14,284)	(15,869)	(15,690)
Other (income) expense:					
Interest (income) expense, net	7,257	6,107	(2,048)	(4,492)	866
Imputed warrant interest expense	—	—	—	843	1,136
Other (income) expense	—	14,388	(15,920)	—	—
Equity in net loss of unconsolidated affiliates	1,228	2,706	12,326	13,265	4,997
Total other (income) expense	8,485	23,201	(5,642)	9,616	6,999
Loss before cumulative effect of a change in accounting principle	(38,525)	(129,761)	(8,642)	(25,485)	(26,689)
Cumulative effect of change in accounting principle	—	—	(3,646)	—	—
Net loss	<u>(\$38,525)</u>	<u>(\$129,761)</u>	<u>(\$12,288)</u>	<u>(\$25,485)</u>	<u>(\$22,689)</u>
Per Share Data					
Weighted average shares used in calculating per share data	36,999	36,539	34,438	31,156	21,180
Loss per basic and diluted share before cumulative effect of change in accounting	<u>(\$1.04)</u>	<u>(\$3.55)</u>	<u>(\$0.25)</u>	<u>(\$0.82)</u>	<u>(\$1.09)</u>

principle					
Net loss per basic and diluted share	<u>(\$1.04)</u>	<u>(\$3.55)</u>	<u>(\$0.36)</u>	<u>(\$0.82)</u>	<u>(\$1.09)</u>

(1) In accordance with Statement of Financial Accounting Standards No. 145, Recission of FASB Statements 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections, EMCORE has reclassified the loss on the early extinguishment of debt recorded in fiscal 1999 from extraordinary item to a component of operating expenses.

The Exchange Offer

This prospectus and the related letter of transmittal for the exchange offer set forth the terms and conditions of the exchange offer.

We are making this exchange offer because we believe the exchange offer will strengthen our financial position, improve our capital structure and reduce our cash expenditure, without adversely affecting our product development programs, by:

- eliminating up to \$161,750,000 principal amount of existing notes;
- deferring the maturity of our long-term debt from May 15, 2006 to May 15, 2011;
- reducing our interest expense by up to \$3,639,375 per year, although we will continue to incur interest expense for a longer period of time;
- increasing the likelihood that current holders of existing notes will elect to convert their new notes into shares of our common stock, due to the lower conversion rate; and
- offering our bondholders the opportunity to participate in the equity value of the Company.

Terms of the Exchange Offer

We are offering to exchange \$550 principal amount of our new notes and \$350 payable in our common stock, based on the average of the closing bid prices of our common stock for the five consecutive trading days ending on and including the third trading day prior to the expiration date, up to a maximum of 65.18 shares, for each \$1,000 principal amount of any and all of our existing notes that are validly tendered on the terms and subject to the conditions set forth in this prospectus and in the related letter of transmittal for the exchange offer. As of the date of this prospectus, \$161,750,000 aggregate principal amount of our existing notes were outstanding. At the time the new notes are issued on the closing date of the exchange offer, we will pay to holders of existing notes tendered in the exchange offer all interest that is due and payable on such existing notes up to, but excluding, the closing date for the exchange offer. Interest on the new notes will begin to accrue as of the closing date of the exchange offer.

You may tender all, some or none of your existing notes. Holders must tender existing notes in a minimum principal amount of \$1,000 or integral multiples thereof. The new notes will be issued in denominations of \$1,000 principal amount or integral multiples thereof. We will pay cash for any fractional portion of new notes and shares of common stock. We will pay accrued and unpaid interest on the existing notes tendered in the exchange offer in cash. The exchange offer is not being made to, and we will not accept tenders of existing notes from, holders of existing notes in any jurisdiction in which the exchange offer, or the acceptance of the exchange offer, would not be in compliance with the securities or "blue sky" laws of that jurisdiction.

Our board of directors and officers do not make any recommendation to the holders of existing notes as to whether or not to tender all or any portion of their existing notes in the exchange offer. In addition, we have not authorized anyone to make any recommendation. You must make your own decision whether to tender your existing notes in the exchange offer and, if so, the amount of your existing notes to tender.

Expiration Date

The expiration date for the exchange offer is 11:59 p.m., New York City time, on January , 2004, unless we extend the offer. We may, at any time and from time to time, extend the expiration date for the exchange offer for any reason, subject to applicable law. The last date on which tenders of existing notes will be accepted, whether on January , 2004 or any later date to which the exchange offer may be extended, is referred to in this prospectus as the expiration date. Subject to the conditions described below, and assuming that we have not previously elected to amend the exchange offer in any respect, we will accept for exchange all existing notes that are properly tendered on or prior to the expiration of the exchange offer and not withdrawn in the manner described below. See the

section of this prospectus entitled "Exchange Offer — Conditions for Completion of the Exchange Offer" beginning on page 35. The form and terms of the new notes are described in the section of this prospectus entitled "Description of New Notes" beginning on page 39.

Extensions; Amendments; Termination

If any condition to the exchange offer is not satisfied, in our reasonable judgment, prior to the expiration of the exchange offer, we expressly reserve the right to:

- extend the time period during which the exchange offer is open, by giving oral or written notice of an extension to the holders of existing notes in the manner described below;
- amend the terms of the exchange offer, other than the condition that the registration statement be effective under the Securities Act of 1933; or
- terminate the exchange offer.

If we consider an amendment to the exchange offer to be material, or if we waive a material condition of the exchange offer, we will promptly disclose the amendment in a prospectus supplement, and if required by law, we will extend the exchange offer for the required applicable period of five to ten business days.

We will give oral or written notice of any (1) extension, (2) amendment, (3) non-acceptance or (4) termination to the holders of the existing notes as promptly as practicable. In the case of any extension, we will issue a press release or other public announcement no later than 9:00 a.m., Eastern time, on the next business day after the previously scheduled expiration date or an earlier date if appropriate.

Procedures for Tendering Existing Notes

Your tender to us of existing notes and our acceptance of your tender will constitute a binding agreement between you and us upon the terms and subject to the conditions set forth in this prospectus and in the related letter of transmittal for the exchange offer, subject to the withdrawal rights set forth below under the caption "— Withdrawal Rights" beginning on page 34. By signing the letter of transmittal or delivering an agent's message pursuant to DTC's Automated Tender Offer Program (commonly known as "ATOP") procedures, as described below, you will be deemed to have made the representations and warranties contained in the letter of transmittal for the exchange offer in connection with your decision to tender existing notes in the exchange offer.

All of the existing notes are evidenced by one or more global notes that have been deposited with the trustee for the existing notes as custodian for DTC and registered in the name of Cede & Co., as nominee of DTC.

Therefore, to validly tender existing notes in the exchange offer, you must comply with the procedures described below.

Tender of Existing Notes Held Through a Custodian

If you are a beneficial holder of existing notes that are held of record by a custodian bank, depository institution, broker, dealer, trust company or other nominee and you wish to tender your existing notes in the exchange offer, you must contact such registered holder promptly and instruct the custodian to tender your existing notes on your behalf. Your custodian will provide you with their instruction letter, which you must use to give these instructions. If you are a beneficial owner of existing notes that are held of record by DTC or its nominee, through authority granted by DTC, you must direct the DTC participant through which your existing notes are held to tender your existing notes on your behalf in accordance with the procedures described below.

Tender of Existing Notes Held Through DTC

To effectively tender existing notes that are held through DTC, DTC participants should electronically transmit their acceptance through ATOP, for which the transaction will be eligible, and DTC will then credit the exchange agent's account and verify the acceptance and send an agent's message to the exchange agent for its acceptance.

Delivery of tendered existing notes must be made to the exchange agent pursuant to the book-entry delivery procedures described below or the tendering DTC participant must comply with the guaranteed delivery procedures described below. No letters of transmittal will be required if participants tender existing notes through ATOP.

In addition, the exchange agent for the exchange offer must receive:

- either a completed and signed letter of transmittal for the exchange offer, or an electronic confirmation pursuant to DTC's ATOP system indicating the principal amount of existing notes to be tendered in the exchange offer and any other documents, if any, required by the letter of transmittal; and
- prior to the expiration date of the exchange offer, a confirmation of book-entry transfer of such existing notes, into the exchange agent's account at DTC, in accordance with the procedures for book-entry transfer described below; or
- the holder of such existing notes must comply with the guaranteed delivery procedures described below.

Book-Entry Delivery Procedures

Your existing notes must be tendered by book-entry transfer. The exchange agent for the exchange offer will establish an account with respect to the existing notes at DTC for purposes of the exchange offer within two business days after the date of this prospectus. Any financial institution that is a participant in DTC may make book-entry delivery of existing notes by having DTC transfer such existing notes into the exchange agent's account at DTC in accordance with DTC's procedures for transfer. Although your existing notes may be tendered through book-entry transfer at the DTC facility, the letter of transmittal (or a facsimile of it) or an electronic confirmation pursuant to DTC's ATOP system, with any required signature guarantees and any other required documents, if any, must be transmitted to and received or confirmed by the exchange agent at its address listed below under the caption "— Exchange Agent" beginning on page 37 and on the back cover of this prospectus prior to the expiration of the exchange offer. You or your broker must ensure that the exchange agent receives an agent's message from DTC confirming the book-entry transfer of your existing notes. An agent's message is a message transmitted by DTC and received by the exchange agent that forms a part of the book-entry confirmation, which states that DTC has received an express acknowledgement from the participant in DTC tendering the notes that such participant agrees to be bound by the terms of the letter of transmittal. Delivery of documents to DTC in accordance with its procedures does not constitute delivery to the exchange agent.

If you are an institution that is a participant in DTC's book-entry transfer facility, you should follow the same procedures that are applicable to persons holding existing notes through a financial institution.

Do not send letters of transmittal for the exchange offer or other required documents to us, CIBC World Markets Corp. or the information agent.

It is your responsibility that all necessary materials are received by the exchange agent before the expiration of the exchange offer. If the exchange agent does not receive all of the required materials before the expiration of the exchange offer, your existing notes will not be validly tendered in the exchange offer.

Any existing notes that are not accepted for exchange pursuant to the exchange offer for any reason will be returned without expense to the tendering holder as promptly as practicable after the expiration or termination of the exchange offer.

We will have accepted the validity of existing notes tendered in the exchange offer if and when we give oral or written notice to the exchange agent. The exchange agent will act as the tendering holders' agent for purposes of receiving the new notes from us. If we do not accept any existing notes tendered in the exchange offer for exchange because of an invalid tender or the occurrence of any other event, the exchange agent will return those existing notes tendered in the exchange offer to the holder thereof, without expense, promptly after the expiration or termination of the exchange offer via book-entry transfer through DTC.

Our Interpretations Are Binding

We will determine in our sole and absolute discretion, all questions as to the validity, form, eligibility, time of receipt, acceptance and withdrawal of existing notes tendered in the exchange offer. Our determination will be final and binding on all parties. We reserve the absolute right to reject any and all particular existing notes that are not properly tendered in the exchange offer or to not accept any particular existing note if the acceptance might, in our judgment or our counsel's judgment, be unlawful. We reserve the absolute right to waive any defects or irregularities with respect to the tender of any particular existing notes, either before or after the expiration of the exchange offer, including the right to waive the ineligibility of any holder who seeks to tender existing notes in the exchange offer. Tenders of existing notes will not be deemed to have been made until such defects or irregularities have been cured or waived. Our interpretation of the terms and conditions of the exchange offer with respect to the tender of any particular existing note, either before or after the expiration of the exchange offer, including the related letter of transmittal and the instructions to such letter of transmittal, will be final and binding on all parties. Unless waived, any defects or irregularities with respect to tenders of existing notes in the exchange offer must be cured within such reasonable period of time as we shall determine. Neither we, the exchange agent nor any other person shall be under any duty to give notification of any defect or irregularity with respect to any tender of existing notes in the exchange offer, nor shall we or any of them incur any liability for failure to give such notification.

Guaranteed Delivery Procedures

If you desire to tender your existing notes and you cannot complete the procedures for book-entry transfer described above on a timely basis, you may still tender your existing notes if:

- you tender your existing notes through an eligible institution;
- prior to the expiration of the exchange offer, the exchange agent receives from the eligible institution a properly completed and duly executed letter of transmittal (or a facsimile copy of it)

or an electronic confirmation pursuant to DTC's ATOP system, and notice of guaranteed delivery, substantially in the form provided by us, by facsimile transmission, mail or hand delivery; that:

- sets forth the name and address of the holder of existing notes and the amount of existing notes being tendered;
- states that the tender is being made thereby; and
- guarantees that within three trading days after the expiration date of the exchange offer, a book-entry confirmation of delivery and any other documents required by the letter of transmittal, if any, will be deposited by the eligible institution with the exchange agent; and
- book-entry confirmation of delivery and all other documents, if any, required by the letter of transmittal are received by the exchange agent within three trading days after the expiration date of the exchange offer.

The notice of guaranteed delivery relating to the exchange offer must be sent by hand delivery or by facsimile to the exchange agent and must include a guaranty by an eligible institution in the form set forth in the notice of guaranteed delivery relating to the exchange offer.

Acceptance of Existing Notes for Exchange; Delivery of New Notes and Common Stock

Subject to our right to amend the exchange offer at any time prior to the expiration of the exchange offer, and upon satisfaction or waiver of all of the conditions to the exchange offer, promptly after the expiration of the exchange offer, we will accept all existing notes properly tendered and not withdrawn and issue the new notes and shares of our common stock offered in exchange for such existing notes. The section of this prospectus entitled "The Exchange Offer — Conditions for

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Completion of the Exchange Offer," beginning on page 35, provides further information regarding the conditions to the exchange offer. For purposes of the exchange offer, we shall be deemed to have accepted properly tendered existing notes for exchange when, as and if we have given oral or written notice to the exchange agent for the exchange offer, with written confirmation of any oral notice to be given promptly after giving such notice.

Any existing notes we acquire pursuant to the exchange offer will be retired. The new notes will be issued only in denominations of \$1,000 and integral multiples thereof, and we will pay cash in the exchange offer for any fractional portion of a new note or share of common stock issuable as a result of the exchange, after aggregating all notes tendered in the exchange offer by each holder. For each \$1,000 principal amount of existing notes accepted for exchange pursuant to the exchange offer, the holder of such existing note will receive a new note having a principal amount of \$550 and \$350 payable in shares of our common stock if our stock price is greater than \$5.37 per share, or 65.18 shares of our common stock if our stock price is at or below \$5.37 per share. The stock price is based on the average of the closing bid prices of our common stock for the five consecutive trading days ending on and including the third trading day prior to the expiration date. The new notes will bear interest from the closing date of the exchange offer. Existing notes accepted for exchange pursuant to the exchange offer will cease to accrue interest from and after the date of consummation of the exchange offer. At the time the new notes are issued upon consummation of the exchange offer, we will pay to holders of the existing notes tendered for exchange all interest that is due and payable on such existing notes to, but excluding, the closing date for the exchange offer. Interest on the new notes will begin to accrue as of the closing date of the exchange offer.

In all cases, issuance of new notes and shares of common stock for existing notes that are accepted for exchange pursuant to the exchange offer will be made only after timely receipt by the exchange agent for the exchange offer of:

- a timely book-entry confirmation of such existing notes into the exchange agent's account at the book-entry transfer facility;
- a properly completed and duly executed letter of transmittal or an electronic confirmation of the submitting holder's acceptance through DTC's ATOP system; and
- all other required documents, if any.

If we do not accept any of your existing notes tendered in the exchange offer for any reason, your unaccepted existing notes tendered by book-entry transfer into the exchange agent's account at the book-entry transfer facility will be returned to you in accordance with the book-entry procedures described above promptly after the expiration or termination of the exchange offer. If you tender into the exchange offer existing notes with a principal amount that is less than the aggregate principal amount of all existing notes that you hold, the balance of your existing notes that you do not tender for exchange will be credited to an account maintained with DTC promptly after the expiration or termination of the exchange offer.

Withdrawal Rights

You may withdraw any existing notes that you previously tendered in the exchange offer at any time prior to the expiration of the exchange offer.

In addition, you may withdraw any existing notes that were previously tendered in the exchange offer after January 1, 2004, unless we have accepted your existing notes for exchange pursuant to the exchange offer.

If you hold your existing notes directly through the Depository Trust Company, or DTC, or through a broker, dealer, commercial bank, trust company or other nominee and you tendered your existing notes through DTC's Automatic Tender Offer Program (commonly known as "ATOP"), you may, at any time before the expiration of our exchange offer, withdraw any or all of our existing notes that you previously tendered in our exchange offer. Any such withdrawal must be done through ATOP. In the event you hold your existing notes in certificated form and you tendered your existing notes by

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physical delivery to the exchange agent, you may withdraw any or all of the certificated existing notes that you previously tendered in our exchange offer, at any time before the expiration of our exchange offer, by delivering a written notice of withdrawal to Wilmington Trust Company, the exchange agent for our exchange offer. As of the date of this prospectus, we believe there are no certificated existing notes.

Any existing notes so withdrawn will be deemed not to have been validly tendered in the exchange offer and no new notes or shares of our common stock will be issued in exchange for any withdrawn existing notes unless they have been validly retendered in the exchange offer. Any existing notes that have been tendered in the exchange offer, but which are not exchanged for any reason, will be credited to an account maintained with the book-entry transfer facility for the existing notes (or, if the tendered existing notes were certificated notes, returned to the tendering holder thereof) promptly after withdrawal, rejection of tender or termination of the exchange offer. Properly withdrawn existing notes may be retendered in the exchange offer by following the procedures described under the section of this prospectus entitled "The Exchange Offer — Procedures for Tendering Existing Notes," beginning on page 31 above, at any time on or prior to the expiration of the exchange offer.

Conditions for Completion of the Exchange Offer

We will not accept existing notes in exchange for new notes pursuant to the exchange offer, and we may terminate or not complete the exchange offer if:

- any investor or group of investors acquires, or obtains the right to acquire, 20% or more of our common stock (or securities convertible into our common stock) or our voting power, on a post-transaction basis, as a result of the exchange offer;
- less than 85% in principal amount of the existing notes are properly tendered and not withdrawn prior to the expiration of the exchange offer;
- the registration statement covering the issuance of new notes pursuant to the exchange offer is not declared effective under the Securities Act of 1933 prior to the expiration of the exchange offer; or
- the Form T-1 with respect to the indenture governing the new notes is not declared effective under the Trust Indenture Act of 1939 prior to the expiration of the exchange offer.

For purposes of the first condition above, a "group" will constitute two or more persons that have identified themselves as a group in a public filing made with the Securities and Exchange Commission. Whether an investor acquires 20% or more of our common stock is calculated based on the assumption that the investor has exercised all of its rights to obtain our common stock and that no other parties have exercised rights to obtain our common stock.

In addition, we may not accept existing notes for exchange, and may terminate or not complete the exchange offer if:

- any action, proceeding or litigation seeking to enjoin, make illegal or delay completion of the exchange offer or otherwise relating in any manner to the exchange offer is instituted or threatened;
- any order, stay, judgment or decree is issued by any court, government, governmental authority or other regulatory or administrative authority and is in effect, or any statute, rule, regulation, governmental order or injunction is proposed, enacted, enforced or deemed applicable to the exchange offer, any of which would or might restrain, prohibit or delay completion of the exchange offer or impair our ability to realize the contemplated benefits of the exchange offer described in the section of this prospectus entitled "The Exchange Offer — Terms of the Exchange Offer" beginning on page 30 above;
- any of the following occurs and the adverse effect of such occurrence is, in our reasonable judgment, continuing:
 - any general suspension of trading in, or limitation on prices for, securities on any national securities exchange or in the over-the-counter market in the United States;

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- any extraordinary or material adverse change in United States financial markets generally, including, without limitation, a decline of at least twenty percent (20%) in either the Dow Jones Average of Industrial stocks or the Standard & Poor's 500 Index from the date of the commencement of the exchange offer;
 - a declaration of a banking moratorium or any suspension of payments in respect of banks in the United States;
 - any limitation, whether or not mandatory, by any governmental entity on, or any other event that would reasonably be expected to materially adversely affect, the extension of credit by banks or other lending institutions;
 - a commencement of a war or other national or international calamity directly or indirectly involving the United States, which would reasonably be expected to affect materially and adversely, or to delay materially, the completion of the exchange offer; or
 - if any of the situations described above existed at the time of commencement of the exchange offer and that situation deteriorates materially after commencement of the exchange offer;
 - any tender or exchange offer, other than the exchange offer described in this prospectus by us, with respect to some or all of our outstanding common stock, or any merger, acquisition or other business combination proposal involving us is proposed, announced or made by any person or entity;
 - any event or events occur that have resulted or may result, in our reasonable judgment, in an actual or threatened adverse change in our or our subsidiaries' business condition, income, operations, stock ownership or prospects, or any event or condition occurs that, in our reasonable judgment, makes it otherwise inadvisable to proceed with the exchange offer;
 - as the term group is used in Section 13(d)(3) of the Securities Exchange Act of 1934,
 - any person, entity or group acquires more than five percent (5%) of the outstanding shares of our common stock, other than a person, entity or group that had publicly disclosed such ownership with the Securities and Exchange Commission prior to the date of commencement of the exchange offer;
 - any such person, entity or group which had publicly disclosed such ownership prior to such date of commencement of the exchange offer acquires additional shares of our common stock constituting more than two percent (2%) of our outstanding shares of common stock; or
 - any new group is formed that beneficially owns more than five percent (5%) of the outstanding shares of our common stock and that, in our judgment in any such case, and regardless of the circumstances, makes it inadvisable to proceed with the exchange offer or otherwise accept any existing notes for exchange pursuant to the exchange offer.

If any of the above events occurs, we may:

- extend the time period during which the exchange offer is open and, subject to your withdrawal rights described above under the caption "—Withdrawal Rights" beginning on page 34 above, retain all existing notes tendered in the exchange offer until the extended exchange offer expires;
- amend the terms of the exchange offer; or
- terminate the exchange offer and promptly return all existing notes tendered in the exchange offer to tendering holders of such existing notes.

The above conditions are for our sole benefit. We may assert these conditions, regardless of the circumstances giving rise to them, prior to the expiration of the exchange offer. We may also waive

any of these conditions (other than the conditions relating to the acquisition of 20% or more of our common stock or voting power, the effectiveness of the registration statement and the qualification of the new notes indenture) in whole or in part at any time in our sole discretion prior to the expiration of the exchange offer and, subject to any requirement to extend the time period during which the exchange offer is open, complete the exchange offer. All conditions to the exchange offer must be satisfied or waived prior to the expiration of the exchange offer. If we waive any condition to the exchange offer, we will do so with respect to all holders of existing notes. Our failure at any time to exercise any of our rights under any of the conditions described above will not be deemed a waiver of any such rights. Each right is an ongoing right which may be asserted at any time prior to the expiration of the exchange offer. Any determination by us concerning the conditions described above will be final and binding upon all parties.

In addition, we will not accept for exchange any existing notes tendered in the exchange offer, and no new notes will be issued in exchange for any such existing notes pursuant to the exchange offer, if at such time any stop order shall be threatened or in effect with respect to the registration statement of which this prospectus constitutes a part.

Fees and Expenses

CIBC World Markets Corp. is acting as the dealer manager in connection with the exchange offer. CIBC World Markets Corp. will receive a fee in the manner described below for its services as dealer manager, payable if and when the exchange offer is completed. In addition, we will reimburse CIBC World Markets Corp. for all of its reasonable expenses, including reasonable fees and expenses of its counsel up to \$50,000, whether or not the exchange offer is consummated.

We will pay CIBC World Markets Corp., for its services as the dealer manager for the exchange offer, a fee, in cash, equal to 1% of the aggregate principal amount of all existing notes tendered and accepted by EMCORE in the exchange offer.

We have agreed to indemnify CIBC World Markets Corp. against specified liabilities relating to or arising out of the exchange offer, including civil liabilities under the federal securities laws, and to contribute to payments that CIBC World Markets Corp. may be required to make in respect thereof. However, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 and, therefore, may be unenforceable. CIBC World Markets Corp. may from time to time hold existing notes, new notes and our common stock in its proprietary accounts, and to the extent it owns existing notes in these accounts at the time of the exchange offer, CIBC World Markets Corp. may tender these existing notes in the exchange offer.

We have retained DF King & Co., Inc. to act as the information agent for the exchange offer and Wilmington Trust Company to act as the exchange agent for the exchange offer. The information agent may contact holders of existing notes by mail, telephone, facsimile transmission and personal interviews and may request brokers, dealers and other nominee shareholders to forward materials relating to the exchange offer to beneficial owners. The information agent and the exchange agent each will receive reasonable compensation for their respective services, will be reimbursed for reasonable out-of-pocket expenses and will be indemnified against liabilities in connection with their services, including liabilities under the federal securities laws.

Neither the information agent nor the exchange agent has been retained to make solicitations or recommendations. The fees they receive will not be based on the principal amount of existing notes tendered pursuant to the exchange offer.

We will not pay any fees or commissions to any broker or dealer or any other person, other than CIBC World Markets Corp., for soliciting tenders of existing notes in the exchange offer. Brokers, dealers, commercial banks and trust companies will, upon request, be reimbursed by us for reasonable and necessary costs and expenses incurred by them in forwarding materials to their customers.

The estimated cash expenses to be incurred in connection with the exchange offer will be paid by us. We estimate these expenses to be approximately \$2.75 million in the aggregate, assuming all of the existing notes are tendered into the exchange offer.

Exchange Agent

Wilmington Trust Company has been appointed as the exchange agent for the exchange offer. All executed letters of transmittal for the exchange offer should be directed to the exchange agent at the address listed below. Questions about the exchange offer, requests for assistance in connection with the exchange offer, requests for additional copies of this prospectus or of the letter of transmittal and requests for notices of guaranteed delivery should be directed to the exchange agent addressed as follows:

Wilmington Trust Company, Exchange Agent

By registered and certified mail:	By regular mail or overnight courier:
Christine Kushto, CCTS Financial Services Officer Wilmington Trust Company 1100 North Market Street Rodney Square North Wilmington, DE 19890-1615	Christine Kushto, CCTS Financial Services Officer Wilmington Trust Company 1100 North Market Street Rodney Square North Wilmington, DE 19890-1615

In person by hand only:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

For information call:
(302) 636-6469

By facsimile transmission (for eligible institutions only): (302) 636-4145
Attention: Christine Kushto

Confirm by Telephone:
(302) 636-6469

If you deliver the letter of transmittal for the exchange offer to an address other than as listed above or transmission of instructions via facsimile other than as listed above, then such delivery or transmission does not constitute a valid delivery of such letter of transmittal or transmission of instructions.

No Recommendation

We are not making any recommendation regarding whether you should tender your existing notes in the exchange offer, and, accordingly, you must make your own determination as to whether to tender your existing notes for exchange in the exchange offer after reading this prospectus and consulting with your own advisors, if any, based on your own financial position and requirements.

Consequences of Exchanging or Failing to Exchange Existing Notes

The existing notes that are not tendered in the exchange offer will be subordinate in right of payment to the new notes. Further, the liquidity and trading market of the existing notes that are not tendered in the exchange offer are likely to be adversely affected to the extent that any existing notes are tendered and accepted for exchange in the exchange offer.

Description of New Notes

We will issue the new notes under an indenture between us and Deutsche Bank Trust Company Americas, as trustee (the "new notes indenture"). The following is a summary of the material terms of the new notes and the new notes indenture. We urge you to read the new notes indenture because it, and not this description, defines your rights as a holder of the new notes.

General

The new notes will be unsecured general obligations of EMCORE. The new notes will be subordinate in right of payment to our present and future senior debt, except that they will be senior in right of payment to our existing notes, as described below under the caption "— Subordination of New Notes" beginning on page 41. The new notes will be convertible into common stock as described below under the caption "— Conversion of New Notes" beginning on page 39. The new notes will be issued only in denominations of \$1,000 or in integral multiples thereof. The new notes will mature on May 15, 2011, unless earlier converted by you, redeemed at our option or purchased by us at your option upon a change of control, as described below under the captions "— Provisional Redemption" and "— Purchase of New Notes at Your Option Upon a Change of Control" beginning on page 44.

The new notes indenture will not limit our or our subsidiaries' ability to pay dividends, incur debt or issue or repurchase securities. In addition, there will be no financial covenants in the new notes indenture. You will not be protected under the new notes indenture in the event of a highly leveraged transaction or a change of control of EMCORE, except to the extent described below under the caption "— Purchase of New Notes at Your Option Upon a Change of Control" beginning on page 44.

The new notes will bear interest at an annual rate of 5%. Interest will be payable on May 15 and November 15 of each year, beginning May 15, 2004, subject to limited exceptions if the new notes are converted, redeemed or purchased prior to the next scheduled interest payment date. The record dates for the payment of interest will be May 1 and November 1. We may, at our option, pay interest on the new notes by check mailed to the holders. However, a holder with an aggregate principal amount of new notes in excess of \$2 million will be paid by wire transfer in immediately available funds at its election. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. We will not be required to make any payment on the new notes due on any day that is not a business day until the next succeeding business day. The payment made on the next succeeding business day will be treated as though it were paid on the original due date and no interest will accrue on the payment for the additional period of time. Interest on the new notes will begin to accrue as of the closing date of the exchange offer.

We will maintain, through the trustee, an office in The City of New York where the new notes may be presented for registration, transfer, exchange or conversion. Except under the limited circumstances described below, the new notes will be issued only in fully-registered book-entry form, without coupons, and will be represented by one or more global notes. There will be no service charge for any registration of transfer or exchange of new notes. We may, however, require holders to pay a sum sufficient to cover any tax or other governmental charge payable in connection with certain transfers or exchanges.

Conversion of New Notes

You will have the right, at your option, to convert your new notes into shares of our common stock at any time prior to maturity, unless previously redeemed or purchased, at the conversion price of \$8.06 per share, subject to adjustment as described below.

Except as described below, we will not make any payment or other adjustment for accrued interest or dividends on any common stock issued upon conversion of the new notes. New notes surrendered for conversion from the close of business on any regular record date to the date immediately preceding any interest payment date, must be accompanied by payment of an amount equal to the interest on the new notes that the holder is about to surrender, except if such new notes or portions thereof have

been called for redemption or are subject to purchase following a change of control on a date during the period from the close of business on a record date and ending on the opening of business on the first business day after the next interest payment date, or if this interest payment date is not a business day, the second business day after the interest payment date. As a result of the foregoing provisions, if the exception described in the preceding sentence does not apply and you surrender new notes for conversion on a date that is not an interest payment date, you will not receive any interest for the period from the interest payment date next preceding the date of conversion to the date of conversion or for any later period.

We will not issue fractional shares of common stock upon conversion of new notes. Instead, we will pay cash equal to such fraction multiplied by the closing market price of the common stock on the last trading day prior to the conversion date.

If the new notes are called for redemption or are subject to repurchase following a change of control, your conversion rights on the new notes called for redemption or subject to repurchase will expire at the close of business on the last business day before the redemption date or repurchase date, as the case may be, unless we default in the payment of the redemption price or repurchase price, in which case your conversion rights will terminate at the close of business on the date the default is cured and we redeem or repurchase the new notes. If you have submitted your new notes for repurchase upon a change of control, you may only convert your new notes if you withdraw your election in accordance with the new notes indenture.

Conversion Rate Adjustments

We will adjust the conversion price if any of the following events occurs:

- (1) we issue shares of our common stock as a dividend or distribution on our common stock;
- (2) we subdivide or combine our outstanding common stock;
- (3) we issue to all or substantially all holders of our common stock rights or warrants entitling them for a period of not more than 60 days to subscribe for or purchase our common stock, or securities convertible into our common stock, at a price per share or a conversion price per share less than the then current market price per share, provided that the conversion price will be readjusted to the extent that such rights or warrants are not exercised prior to the expiration;
- (4) we distribute to all or substantially all holders of our common stock of shares of our capital stock, evidences of indebtedness or other non-cash assets, or rights or warrants, excluding:
 - dividends, distributions and rights or warrants referred to in clause (1) or (3) above;
 - dividends or distributions exclusively in cash referred to in clause (5) below; and

- distribution of rights to all holders of common stock pursuant to an adoption of a shareholder rights plan;
- (5) we pay a dividend or make an all-cash distribution to all or substantially all holders of our common stock in an aggregate amount that together with (A) any cash and the fair market value of any other consideration payable in respect of any tender offer by us or any of our subsidiaries for our common stock consummated within the preceding 12 months not triggering a conversion price adjustment and (B) all other all-cash distributions to all or substantially all holders of our common stock made within the preceding 12 months not triggering a conversion price adjustment, exceeds an amount equal to 10% of our market capitalization on the business day immediately preceding the day on which we declare such distribution; and

- (6) we purchase our common stock pursuant to a tender offer (within the meaning of the U.S. federal securities laws) made by us or any of our subsidiaries to the extent that the same involves aggregate consideration that, together with (A) any cash and the fair market value of any other consideration payable in respect of any tender offer by us or any of our subsidiaries for our common stock consummated within the 12 months preceding the triggering of a conversion price adjustment and (B) all-cash distributions to all or substantially all holders of our common stock made within the 12 months preceding the triggering of a conversion price adjustment, exceeds an amount equal to 10% of our market capitalization on the expiration date of such tender offer.

In the event of:

- any reclassification of our common stock,
- a consolidation, merger or combination involving EMCORE, or
- a sale or conveyance to another person of the property and assets of EMCORE as an entirety or substantially as an entirety,

in which holders of our outstanding common stock would be entitled to receive stock, other securities, other property, assets or cash for their common stock, holders of new notes will generally be entitled to convert their new notes into the same type of consideration received by common stockholders immediately prior to one of these types of events.

We are permitted to reduce the conversion price of the new notes by any amount for a period of at least 20 days if our board of directors determines that such reduction would be in the best interest of EMCORE. We are required to give at least 15 days prior notice of any reduction in the conversion price. We may also reduce the conversion price to avoid or diminish income tax consequences to holders of our common stock in connection with a dividend or distribution of stock or similar event.

You may, in some circumstances, be deemed to have received a distribution or dividend subject to United States federal income taxation as a result of an adjustment or the non-occurrence of an adjustment to the conversion price.

No adjustment in the conversion price will be required unless it would result in a change in the conversion price of at least one percent. Any adjustment not made will be taken into account in subsequent adjustments. Except as stated above, we will not adjust the conversion price for the issuance of our common stock or any securities convertible into or exchangeable for our common stock or the right to purchase our common stock or such convertible or exchangeable securities.

Subordination of New Notes

The payment of the principal of, premium, if any, and interest on the new notes is subordinated to the extent provided in the new notes indenture to the prior payment in full, in cash or other payment satisfactory to the holders thereof, of all senior indebtedness.

The new notes issued pursuant to this exchange offer will, however, be senior in right of payment to any of the existing notes that remain outstanding after the exchange offer.

Upon any distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, or in bankruptcy, insolvency, receivership or similar proceedings, payment of the principal of, premium, if any, and interest on the new notes will be subordinated in right of payment to the prior payment in full, in cash or other payment satisfactory to the holders of senior indebtedness, of all senior indebtedness.

In the event of any acceleration of the new notes because of an event of default, the holders of any senior indebtedness then outstanding would be entitled to payment in full, in cash or other payment satisfactory to the holders of senior indebtedness, of all obligations with respect to such senior indebtedness before the holders of new notes are entitled to receive any payment or other distribution. We are required to promptly notify holders of senior indebtedness if payment of the new notes is accelerated because of an event of default.

We may not make any payment on the new notes if:

- a default in the payment of designated senior indebtedness occurs and is continuing beyond any applicable period of grace; or
- any other default occurs and is continuing with respect to designated senior indebtedness that permits holders of the designated senior indebtedness to accelerate its maturity and the trustee receives a notice of such default, which we refer to as a payment blockage notice, from any person permitted to give this notice under the new notes indenture.

We may resume making payments on the new notes:

- in the case of a payment default, when the default is cured or waived or ceases to exist; and
- in the case of a nonpayment default, the earlier of (1) when the default is cured or waived or ceases to exist and (2) 179 days after receipt of the payment blockage notice.

No new period of payment blockage may be commenced pursuant to a payment blockage notice unless and until 365 days have elapsed since our receipt of the prior payment blockage notice.

No default that existed on the date of delivery of any payment blockage notice to the trustee shall be the basis for a subsequent payment blockage notice.

By reason of the subordination provisions described above, in the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, than the other creditors of EMCORE and holders of the new notes may receive less, ratably, than other creditors of EMCORE, except for holders of our existing notes. These subordination provisions will not prevent the occurrence of any event of default under the new notes indenture. The new notes indenture does not limit our ability to incur additional indebtedness, including senior indebtedness. The incurrence of significant amounts of additional debt could adversely affect our ability to service our debt, including the new notes.

A portion of our operations are, and may in the future be, conducted through our subsidiaries. As a result, our cash flow and our ability to service our debt, including the new notes, depend, in part, upon the earnings of our

subsidiaries. In addition, we are, and may in the future be, dependent, in part, on the distribution of earnings, loans or other payments by our subsidiaries to us.

Our subsidiaries are separate and distinct legal entities. Our subsidiaries have no obligation to pay any amounts due on the new notes or to provide us with funds for our payment obligations, whether by dividends, distributions, loans or other payments. In addition, any payment of dividends, distributions, loans or advances by our subsidiaries to us could be subject to statutory or contractual restrictions. Payments to us by our subsidiaries will also be contingent upon our subsidiaries' earnings.

Our right to receive any assets of any of our subsidiaries upon their liquidation or reorganization, and therefore the right of the holders of the new notes to participate in those assets, will be structurally subordinated to the claims of that subsidiary's creditors, including trade creditors. In addition, even if we were a creditor of any of our subsidiaries, our rights as a creditor would be subordinate to any security interest in the assets of our subsidiaries and any indebtedness of our subsidiaries senior to that held by us. As of December 24, 2003, we had approximately \$93,000 of indebtedness outstanding that would constitute senior indebtedness. The new notes indenture does not limit our ability or the ability of our subsidiaries to incur senior indebtedness or any other indebtedness.

Certain Definitions

"Designated senior indebtedness" means any particular senior indebtedness that expressly provides that such senior indebtedness is "designated senior indebtedness" for purposes of the new notes indenture.

"Indebtedness" means, without duplication:

- (1) all of our indebtedness, obligations and other liabilities, contingent or otherwise, for borrowed money, including:

- overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments; or
- evidenced by a credit or loan agreement, bonds, debentures, notes or other written obligations, whether or not the recourse of the lender is to all of our assets or to only a portion thereof, other than any account payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services;

- (2) all of our reimbursement obligations and other liabilities, contingent or otherwise, with respect to letters of credit, bank guarantees or bankers' acceptances;
- (3) all of our obligations and liabilities, contingent or otherwise, in respect of leases required, in conformity with generally accepted accounting principles, to be accounted for as capitalized lease obligations on our balance sheet;
- (4) all of our obligations evidenced by a note or similar instrument given in connection with the acquisition of any businesses, properties or assets of any kind;
- (5) all of our obligations issued or assumed as the deferred purchase price of property or services, but excluding trade accounts payable and accrued liabilities arising in the ordinary course of business;
- (6) all of our obligations and other liabilities, contingent or otherwise, under any lease or related document, including a purchase agreement, in connection with the lease of real property or improvements (or any personal property included as part of any such lease) which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property and thereby guarantee a residual value of leased property to the lessor and all of our obligations under such lease or related document to purchase or to cause a third party to purchase the leased property (whether or not such lease transaction is characterized as an operating lease or a capitalized lease in accordance with generally accepted accounting principles);
- (7) all of our obligations, contingent or otherwise, with respect to an interest rate currency or other swap, cap, floor or collar agreement, hedge agreement, forward contract, or other similar instrument or agreement or foreign currency hedge, exchange, purchase or similar instrument or agreement;
- (8) all of our direct or indirect guarantees or similar agreements to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of indebtedness, obligations or liabilities of another person of the kind described in clauses (1) through (7); and
- (9) any and all deferrals, renewals, extensions and refundings of, or amendments, modifications, supplements to, any indebtedness, obligation or liability of the kind described in clauses (1) through (8).

"Senior indebtedness" means the principal of, premium, if any, interest, including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding, and rent payable on or in connection with, and all fees, costs, expenses and other amounts accrued or due on or in connection with, indebtedness of EMCORE, other than our existing notes, whether secured or unsecured, absolute or contingent, due or to become due, outstanding on the date of the new notes indenture or thereafter created, incurred, assumed, guaranteed or in effect guaranteed by EMCORE, including all deferrals, renewals, extensions or refundings of, or amendments, modifications or supplements to, the foregoing, unless in the case of any particular indebtedness the instrument creating or evidencing the same or the assumption or guarantee thereof expressly provides that such indebtedness shall not be senior in right of payment to the new notes or expressly provides that such indebtedness is on the same basis or junior to the new notes. Senior indebtedness does not include any indebtedness of EMCORE to any subsidiary of EMCORE, any obligation for federal, state, local or other taxes or trade payables.

Provisional Redemption

We may redeem any portion of the new notes at any time prior to maturity upon at least 20 and not more than 60 days' notice by mail to the holders of the new notes, at a redemption price equal to \$1,000 per note plus accrued and unpaid interest, if any, to, but excluding, the redemption date if the closing sale price of our common stock has exceeded 150% of the conversion price for at least 20 trading days in any consecutive 30-day trading period ending on the trading day prior to the mailing of the notice of redemption.

Early Call Premium

If we give notice of a provisional redemption of the new notes on or before May 15, 2007, we will pay each redeemed holder an "early call premium" equal to \$150.00 per \$1,000 new note, minus the amount of any interest actually paid or provided for on the new note prior to the scheduled provisional redemption date. We must pay this "early call premium" on all new notes redeemed pursuant to a provisional redemption notice delivered on or before May 15, 2007 and on all new notes converted between the date we mailed the notice and the date set for provisional redemption. We may make this "early call premium" at our election in cash, common stock or a combination of cash and common stock. We will specify the type of consideration for the "early call premium" in

the provisional redemption notice; provided, that in no event will we issue common stock to the extent such issuance would require shareholder approval. Payments made in our common stock will be valued at 95% of the average of the closing sales prices of our common stock for the five trading days ending on and including the third trading day prior to the provisional redemption date.

Purchase of New Notes at Your Option Upon a Change of Control

If a change of control occurs, you will have the right to require us to purchase all or any part of your new notes 30 business days after the occurrence of a change of control at a purchase price equal to 100% of the principal amount of the new notes plus accrued and unpaid interest, if any, to, but excluding, the purchase date. New notes submitted for purchase must be in a principal amount of \$1,000 or integral multiples thereof.

We will mail to the trustee and to each record holder of a new note a written notice of the change of control within 10 business days after the occurrence of a change of control. This notice will state:

- the terms and conditions of the change of control;
- the procedures required for exercise of the change of control purchase feature; and
- the holder's right to require EMCORE to purchase the new notes.

You must deliver written notice of your exercise of this purchase directly to the paying agent at any time prior to the close of business on the business day prior to the change of control purchase date. The written notice must specify the new notes for which the purchase right is being exercised. If you wish to withdraw this election, you must provide a written notice of withdrawal to the paying agent at any time prior to the close of business on the business day prior to the change of control purchase date.

A change of control will be deemed to have occurred if any of the following occurs:

- any "person" or "group" is or becomes the "beneficial owner," directly or indirectly (other than as a direct result of repurchases of stock by EMCORE or its subsidiaries), of shares of voting stock of EMCORE representing 50% or more of the total voting power of all outstanding classes of voting stock of EMCORE or such person or group (other than the management group) has the power, directly or indirectly, to elect a majority of the members of the board of directors of EMCORE; provided, that voting stock acquired in an exempt transaction shall not constitute an acquisition that would cause a change of control;
- EMCORE consolidates with, or merges with or into, another person or EMCORE sells, assigns, conveys, transfers, leases or otherwise disposes of all or substantially all of the assets

- of EMCORE or any person consolidates with, or merges with or into, EMCORE, in any such event other than pursuant to a transaction in which (a) the persons that "beneficially owned," directly or indirectly, the shares of voting stock of EMCORE immediately prior to such transaction "beneficially own," directly or indirectly, shares of voting stock of EMCORE, representing at least a majority of the total voting power of all outstanding classes of voting stock of the surviving or transferee person, or (b) an exempt transaction occurs; or
- EMCORE is dissolved or liquidated.

However, a change of control will not be deemed to have occurred if either:

- the last sale price of our common stock for any five trading days during the ten trading days immediately preceding the change of control is at least equal to 105% of the conversion price in effect on such day; or
- in the case of a merger or consolidation, all of the consideration excluding cash payments for fractional shares in the merger or consolidation constituting the change of control consists of common stock traded on a United States national securities exchange or quoted on The Nasdaq National Market (or which will be so traded or quoted when issued or exchanged in connection with such change of control) and as a result of such transaction or transactions the new notes become convertible solely into such common stock.

For purposes of this change of control definition:

- "person" or "group" have the meanings given to them for purposes of Sections 13(d) and 14(d) of the Exchange Act or any successor provisions, and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act, or any successor provision;
- a "beneficial owner" will be determined in accordance with Rule 13d-3 under the Exchange Act, as in effect on the date of the new notes indenture, except that the number of shares of voting stock of EMCORE will be deemed to include, in addition to all outstanding shares of voting stock of EMCORE and unissued shares deemed to be held by the "person" or "group" or other person with respect to which the change of control determination is being made, all unissued shares deemed to be held by all other persons;
- "beneficially owned" has a meaning correlative to that of beneficial owner;
- "exempt transaction" means any purchase from EMCORE of equity interests in EMCORE by any of Thomas Russell, The AER 1997 Trust, Robert Louis-Dreyfus, Gallium Enterprises, Inc. and Reuben Richards (the "management group"); provided that the management group does not collectively beneficially own more than 65% of the total voting power of all outstanding classes of voting stock of EMCORE following such purchase;
- "unissued shares" means shares of voting stock not outstanding that are subject to options, warrants, rights to purchase or conversion privileges exercisable within 60 days of the date of determination of a change of control; and
- "voting stock" means any class or classes of capital stock pursuant to which the holders of capital stock under ordinary circumstances have the power to vote in the election of the board of directors, managers or trustees of any person or other persons performing similar functions irrespective of whether or not, at the time capital stock of any other class or classes shall have, or might have, voting power by reason of the happening of any contingency.

The term "all or substantially all" as used in the definition of change of control will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. There may be a degree of uncertainty in interpreting this phrase. As a result, we cannot assure you how a court would interpret this phrase under applicable law if you elect to exercise your rights following the occurrence of a transaction which you believe constitutes a transfer of "all or substantially all" of our assets.

We will:

- comply with the provisions of Rule 13e-4 and Rule 14e-1, if applicable, under the Exchange Act;
- file a Schedule TO or any successor or similar schedule if required under the Exchange Act; and
- otherwise comply with all federal and state securities laws in connection with any offer by us to purchase the new notes upon a change of control.

This change of control purchase feature may make more difficult or discourage a takeover of EMCORE and the removal of incumbent management. However, we are not aware of any specific effort to accumulate shares of our common stock or to obtain control of us by means of a merger, tender offer, solicitation or otherwise. In addition, the change of control purchase feature is not part of a plan by management to adopt a series of anti-takeover provisions. The change of control purchase feature is substantially similar to that included in the indenture governing the existing notes, which was a result of negotiations between us and the initial purchasers of the existing notes at the time the existing notes were originally issued and sold.

We could, in the future, enter into certain transactions, including recapitalizations, that would not constitute a change of control but would increase the amount of indebtedness, including senior indebtedness, outstanding or otherwise adversely affect a holder. Neither we nor our subsidiaries are prohibited from incurring indebtedness, including senior indebtedness, under the new notes indenture. The incurrence of significant amounts of additional indebtedness could adversely affect our ability to service our debt, including the new notes.

We may not repurchase any new note at any time when the subordination provisions of the new notes indenture otherwise would prohibit us from making such repurchase. If we fail to repurchase the new notes when required, this failure will constitute an event of default under the new notes indenture whether or not repurchase is permitted by the subordination provisions of the new notes indenture.

If a change of control were to occur, we may not have sufficient funds to pay the change of control purchase price for the new notes tendered by holders. In addition, we may in the future incur indebtedness that has similar change of control provisions that permit holders of that debt to accelerate or require us to repurchase that indebtedness upon the occurrence of events similar to a change of control. Our failure to repurchase the new notes upon a change of control will result in an event of default under the new notes indenture, whether or not the purchase is permitted by the subordination provisions of the new notes indenture.

Events of Default

Each of the following constitutes an event of default under the new notes indenture:

- (1) we fail to pay principal or premium, if any, on any new note when due, whether or not prohibited by the subordination provisions of the new notes indenture;
- (2) we fail to pay any interest on any note when due if such failure continues for 30 days, whether or not prohibited by the subordination provisions of the new notes indenture;
- (3) we fail to perform any other covenant required of us in the new notes indenture if such failure continues for 60 days after notice is given in accordance with the new notes indenture;
- (4) we fail to pay the purchase price of any note when due, whether or not prohibited by the subordination provisions of the new notes indenture;
- (5) we fail to provide timely notice of a change of control; or
- (6) certain events in bankruptcy, insolvency or reorganization of EMCORE.

If an event of default, other than an event of default described in clause (6) above, occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the

outstanding new notes may declare the principal amount of the new notes to be due and payable immediately. If an event of default described in clause (6) above occurs, the principal amount of the new notes will automatically become immediately due and payable. Any payment by us on the new notes following any such acceleration will be subject to the subordination provisions described above.

After any such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of the new notes may, under certain circumstances, rescind and annul such acceleration.

Subject to the trustee's duties in the case of an event of default, the trustee is not obligated to exercise any of its rights or powers at the request of the holders, unless the holders have offered to the trustee reasonable indemnity.

Subject to the trustee's indemnification, the holders of a majority in aggregate principal amount of the outstanding new notes have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the new notes.

No holder has any right to institute any proceeding under the new notes indenture, or for the appointment of a receiver or a trustee, or for any other remedy under the new notes indenture unless:

- the holder has previously given to the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding new notes have made a written request and have offered reasonable indemnity to the trustee to institute such proceeding as trustee;
- the trustee has not complied with the request within 60 days after receipt of the request and the offer of security or indemnity; and
- the holders of a majority in principal amount of the outstanding new notes have not given the trustee a direction inconsistent with the request within the 60-day period.

However, these limitations do not apply to a suit instituted by a holder for the enforcement of payment of the principal of or any premium or interest on any new note on or after the applicable due date or the right to convert the new note.

Generally, the holders of not less than a majority of the aggregate principal amount of outstanding new notes may waive any default or event of default unless:

- we fail to pay principal, premium or interest on any new note when due;
- we fail to convert any note into common stock; or
- we fail to comply with any of the provisions of the new notes indenture that would require the consent of the holder of each outstanding note affected.

We will be required under the terms of the new notes indenture to furnish to the trustee, on an annual basis, a statement by our officers as to whether or not EMCORE, to the officer's knowledge, is in default in the performance or observance of any of the terms, provisions and conditions of the new notes indenture, specifying any known defaults.

Modification and Waiver

We and the trustee may make certain modifications and amendments to the new notes indenture or the new notes without notice to or the consent of any holder, including modifications or amendments to comply with the merger provisions described in the new notes indenture, to provide for uncertificated new notes in addition to or in place

of certificated new notes, to comply with the provisions of the Trust Indenture Act, to appoint a successor trustee, to cure any ambiguity, defect or inconsistency, or to make any other change that does not adversely affect the rights of the holders.

We and the trustee may make modifications and amendments to the new notes indenture or the new notes with the consent of the holders of a majority in aggregate principal amount of the outstanding new notes.

However, neither we nor the trustee may make any modification or amendment without the consent of the holder of each outstanding new note if such modification or amendment would:

- change the stated maturity of the principal of or interest on any new note;
- reduce the principal amount of, or any premium or interest on, any new note;
- reduce the amount of principal payable upon acceleration of the maturity of any new note;
- change the place or currency of payment of principal of, or any premium or interest on, any new note;
- impair the right to institute suit for the enforcement of any payment on, or with respect to, any new note;
- modify the subordination provisions in a manner materially adverse to the holders of new notes;
- adversely affect the right of holders to convert new notes other than as provided in or under the new notes indenture;
- reduce the percentage in principal amount of outstanding new notes required for modification or amendment of the new notes indenture;
- reduce the percentage in principal amount of outstanding new notes necessary for waiver of compliance with certain provisions of the new notes indenture or for waiver of certain defaults; or
- modify the foregoing requirements.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any successor person, unless:

- the successor person, if any, is a corporation or limited liability company organized and existing under the laws of the United States, or any state of the United States, and assumes our obligations on the new notes and under the new notes indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- other conditions specified in the new notes indenture are met.

Satisfaction and Discharge

We may discharge our obligations under the new notes indenture while new notes remain outstanding if (1) all outstanding new notes will become due and payable at their scheduled maturity within 90 days or (2) all outstanding new notes have been called for redemption within 90 days and in either case we have deposited with the trustee an amount sufficient to pay and discharge all outstanding new notes on the date of their scheduled maturity or the scheduled date of redemption.

Transfer and Exchange

We have initially appointed the trustee as security registrar, paying agent and conversion agent acting through its corporate trust office. We reserve the right to:

- vary or terminate the appointment of the security registrar, paying agent or conversion agent;
- appoint additional paying agents or conversion agents; or
- approve any change in the office through which any security registrar or any paying agent or conversion agent acts.

Purchase and Cancellation

All new notes surrendered for payment, redemption, registration of transfer or exchange or conversion shall, if surrendered to any person other than the trustee, be delivered to the trustee. All new notes delivered to the trustee shall be cancelled promptly by the trustee. No new notes shall be authenticated in exchange for any new notes cancelled as provided in the new notes indenture.

We may, to the extent permitted by law, purchase new notes in the open market or by tender offer at any price or by private agreement. Any new notes purchased by us may, to the extent permitted by law, be reissued or resold or may, at our option, be surrendered to the trustee for cancellation. Any new notes surrendered for cancellation may not be reissued or resold and will be promptly cancelled.

Replacement of New Notes

We will replace mutilated, destroyed, stolen or lost new notes at your expense upon delivery to the trustee of the mutilated new notes, or evidence of the loss, theft or destruction of the new notes satisfactory to us and the trustee. In the case of a lost, stolen or destroyed new note, indemnity satisfactory to the trustee and us may be required at the expense of the holder of such new note before a replacement new note will be issued.

Governing Law

The new notes indenture and the new notes are governed by and construed in accordance with the laws of the State of New York, without regard to conflicts of laws principles.

The Trustee

Deutsche Bank Trust Company Americas will serve as the trustee under the new notes indenture. The trustee will be permitted to deal with us and any of our affiliates with the same rights as if it were not trustee. However, under the Trust Indenture Act, if the trustee acquires any conflicting interest and there exists a default with respect to the new notes, the trustee must eliminate such conflicts or resign.

The holders of a majority in principal amount of all outstanding new notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy or power available to the trustee.

However, any such direction may not conflict with any law or the new notes indenture, may not be unduly prejudicial to the rights of another holder or the trustee and may not involve the trustee in personal liability.

Book-entry, Delivery and Form

We will initially issue the new notes in the form of one or more global securities. The global security will be deposited with the trustee as custodian for DTC and registered in the name of a nominee of DTC. Except as set forth below, the global security may be transferred, in whole and not in part, only to DTC or another nominee of DTC. You may hold your beneficial interests in the global security directly through DTC if you have an account with DTC or indirectly through organizations which have accounts with DTC. New notes in definitive certificated form (called "certificated securities") will be issued only in certain limited circumstances described below.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a member of the Federal Reserve System;
- a "clearing corporation" within the meaning of the New York Uniform Commercial Code; and
- a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities of institutions that have accounts with DTC (called "participants") and to facilitate the clearance and settlement of securities transactions among its participants in such

securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, which may include the dealer-manager, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's book-entry system is also available to others such as banks, brokers, dealers and trust companies (called "indirect participants") that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

We expect that pursuant to procedures established by DTC, upon the deposit of the global security with DTC, DTC will credit on its book-entry registration and transfer system the principal amount of new notes represented by such global security to the accounts of participants. Ownership of beneficial interests in the global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in the global security will be shown on, and the transfer of those ownership interests will be effected only through, records maintained by DTC (with respect to participants' interests), the participants and the indirect participants. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These limits and laws may impair the ability to transfer or pledge beneficial interests in the global security.

Beneficial owners of interests in global securities who desire to convert their interests into common stock should contact their brokers or other participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion.

So long as DTC, or its nominee, is the registered owner or holder of a global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the new notes represented by the global security for all purposes under the new notes indenture and the new notes. In addition, no beneficial owner of an interest in a global security will be able to transfer that interest except in accordance with the applicable procedures of DTC. Except as set forth below, as an owner of a beneficial interest in the global security you will not be entitled to have the new notes represented by the global security registered in your name, will not receive or be entitled to receive physical delivery of certificated securities and will not be considered to be the owner or holder of any new notes under the global security. We understand that under existing industry practice if an owner of a beneficial interest in the global security desires to take any action that DTC, as the holder of the global security, is entitled to take, DTC would authorize the participants to take such action and the participants would authorize beneficial owners owning through such participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them.

We will make payments of principal of, premium, if any, and interest on the new notes represented by the global security registered in the name of and held by DTC or its nominee to DTC or its nominee, as the case may be, as the registered owner and holder of the global security. Neither we, the trustee nor any paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

We expect that DTC or its nominee, upon receipt of any payment of principal of, premium, if any, or interest on the global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants or indirect participants to owners of beneficial interests in the global security held through such participants or indirect participants will be governed by standing instructions and customary practices and will be the responsibility of such participants or indirect participants. We will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the global security for any note or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests or for any other aspect of the relationship between DTC and its participants or indirect participants or the relationship between such participants or indirect participants and the owners of beneficial interests in the global security owning through such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

DTC has advised us that it will take any action permitted to be taken by a holder of new notes only at the direction of one or more participants to whose account the DTC interests in the global security is credited and only in respect of such portion of the aggregate principal amount of new notes as to which such participant or participants has or have given such direction. However, if DTC notifies us that they are unwilling to be a depository for the global security or ceases to be a clearing agency or there is an event of default under the new notes, DTC will exchange the global security for certificated securities which it will distribute to its participants and which will be legended, if required.

Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global security among participants of DTC, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither we nor the trustee will have any responsibility or liability for the performance by DTC or the participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

Description of Existing Notes

We issued the existing notes under an indenture dated as of May 7, 2001 between us and Wilmington Trust Company, as trustee (the "existing notes indenture"). The following is a summary of the material terms of the existing notes and the existing notes indenture. We urge you to read the indenture because it, and not this description, defines your rights as a holder of the existing notes.

General

The existing notes are unsecured general obligations of EMCORE and are subordinate in right of payment as described below under the caption "– Subordination of Existing Notes." The existing notes are convertible into common stock as described below under the caption "– Conversion of Existing Notes." The existing notes have been issued only in denominations of \$1,000 or integral multiples thereof. The existing notes will mature on May 15, 2006, unless earlier converted by you, redeemed at our option by us or purchased by us at your option upon a change of control, as described below under the captions "– Provisional Redemption" and "– Purchase of Existing Notes at Your Option Upon a Change of Control."

The existing notes indenture does not limit our or our subsidiaries' ability to pay dividends, incur debt or issue or repurchase securities. In addition, there are no financial covenants in the existing notes indenture. You are not protected under the existing notes indenture in the event of a highly leveraged transaction or a change of control of EMCORE, except to the extent described below under the caption "– Purchase of Existing Notes at Your Option Upon a Change of Control."

The existing notes bear interest at the annual rate of 5%. Interest is payable on May 15 and November 15 of each year, subject to limited exceptions if the existing notes are converted, redeemed or purchased prior to the next scheduled interest payment date. The record dates for the payment of interest are May 1 and November 1. We may, at our option, pay interest on the existing notes by check mailed to the holders. However, a holder with an aggregate principal amount of existing notes in excess of \$2 million will be paid by wire transfer in immediately available funds at its election. Interest is computed on the basis of a 360-day year comprised of twelve 30-day months. We will not be required to make any payment on the existing notes due on any day which is not a business day until the next succeeding business day. The payment made on the next succeeding business day will be treated as though it were paid on the original due date and no interest will accrue on the payment for the additional period of time.

We maintain, through the trustee, an office in The City of New York where the existing notes may be presented for registration, transfer, exchange or conversion. Except under the limited circumstances described below, the existing notes will be issued only in fully-registered book-entry form, without coupons, and will be represented by one or more global notes. There will be no service charge for any registration of transfer or exchange of existing notes. We may, however, require holders to pay a sum sufficient to cover any tax or other governmental charge payable in connection with certain transfers or exchanges.

Conversion of Existing Notes

You have the right, at your option, to convert your notes into shares of our common stock at any time prior to maturity, unless previously redeemed or purchased, at the conversion price of \$48.76 per share, subject to adjustment as described below.

Except as described below, we will not make any payment or other adjustment for accrued interest or dividends on any common stock issued upon conversion of the existing notes. Existing notes surrendered for conversion from the close of business on any regular record date to the date immediately preceding any interest payment date, be accompanied by payment of an amount equal to the interest on the existing notes that the holder is about to provide, except if such existing notes or portions thereof have been called for redemption or are subject to purchase following a change of control on a date during the period from the close of business on a record date and ending on the opening of business on the first business day after the next interest payment date, or if this interest

payment date is not a business day, the second business day after the interest payment date. As a result of the foregoing provisions, if the exception described in the preceding sentence does not apply and you surrender notes for conversion on a date that is not an interest payment date, you will not receive any interest for the period from the interest payment date next preceding the date of conversion to the date of conversion or for any later period.

We will not issue fractional shares of common stock upon conversion of existing notes. Instead, we will pay cash equal to such fraction multiplied by the closing market price of the common stock on the last trading day prior to the conversion date.

If the existing notes are called for redemption or are subject to repurchase following a change of control, your conversion rights on the existing notes called for redemption or so subject to repurchase will expire at the close of business on the last business day before the redemption date or repurchase date, as the case may be, unless we default in the payment of the redemption price or purchase price, in which case your conversion rights terminate at the close of business on the date the default is cured and we redeem or repurchase the new notes. If you have submitted your existing notes for repurchase upon a change of control, you may only convert your existing notes if you withdraw your election in accordance with the existing notes indenture.

Conversion Rate Adjustment

We will adjust the conversion price if any of the following events occurs:

- (1) we issue shares of our common stock as a dividend or distribution on our common stock;
- (2) we subdivide or combine our outstanding common stock;
- (3) we issue to all or substantially all holders of our common stock rights or warrants entitling them for a period of not more than 60 days to subscribe for or purchase our common stock, or securities convertible into our common stock, at a price per share or a conversion price per share less than the then current market price per share, provided that the conversion price will be readjusted to the extent that such rights or warrants are not exercised prior to the expiration;
- (4) we distribute to all or substantially all holders of our common stock of shares of our capital stock, evidences of indebtedness or other non-cash assets, or rights or warrants, excluding:
 - dividends, distributions and rights or warrants referred to in clause (1) or (3) above;
 - dividends or distributions exclusively in cash referred to in clause (5) below; and
 - distribution of rights to all holders of common stock pursuant to an adoption of a shareholder rights plan;
- (5) we pay a dividend or make an all-cash distribution to all or substantially all holders of our common stock in an aggregate amount that together with (A) any cash and the fair market value of any other consideration payable in respect of any tender offer by us or any of our subsidiaries for our common stock consummated within the preceding 12 months not triggering a conversion price adjustment and (B) all other all-cash distributions to all or substantially all holders of our common stock made within the preceding 12 months not triggering a conversion price adjustment, exceeds an amount equal to 10% of our market capitalization on the business day immediately preceding the day on which we declare such distribution; and
- (6) we purchase our common stock pursuant to a tender offer (within the meaning of the U.S. federal securities laws) made by us or any of our subsidiaries to the extent that the same involves aggregate

consideration that together with (A) any cash and the fair market value of any other consideration payable in respect of any tender offer by us or any of our subsidiaries for our common stock consummated within the preceding 12 months not triggering a conversion price adjustment and (B) all-cash distributions to all or substantially all holders of our common stock made within the preceding 12 months not triggering a

conversion price adjustment, exceeds an amount equal to 10% of our market capitalization on the expiration date of such tender offer.

In the event of:

- any reclassification of our common stock;
- a consolidation, merger or combination involving EMCORE; or
- a sale or conveyance to another person of the property and assets of EMCORE as an entirety or substantially as an entirety,

in which holders of our outstanding common stock would be entitled to receive stock, other securities, other property, assets or cash for their common stock, holders of existing notes will generally be entitled to convert their existing notes into the same type of consideration received by common stockholders immediately prior to one of these types of events.

We are permitted to reduce the conversion price of the existing notes by any amount for a period of at least 20 days if our board of directors determines that such reduction would be in the best interest of EMCORE. We are required to give at least 15 days prior notice of any reduction in the conversion price. We may also reduce the conversion price to avoid or diminish income tax consequences to holders of our common stock in connection with a dividend or distribution of stock or similar event.

You may, in some circumstances, be deemed to have received a distribution or dividend subject to United States federal income taxation as a result of an adjustment or the non-occurrence of an adjustment to the conversion price.

No adjustment in the conversion price will be required unless it would result in a change in the conversion price of at least one percent. Any adjustment not made will be taken into account in subsequent adjustments. Except as stated above, we will not adjust the conversion price for the issuance of our common stock or any securities convertible into or exchangeable for our common stock or the right to purchase our common stock or such convertible or exchangeable securities.

Subordination of Existing Notes

The payment of the principal of, premium, if any, and interest on the existing notes is subordinated to the extent provided in the existing notes indenture to the prior payment in full, in cash or other payment satisfactory to the holders thereof, of all senior indebtedness, including the new notes.

Upon any distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, or in bankruptcy, insolvency, receivership or similar proceedings, payment of the principal of, premium, if any, and interest on the notes is to be subordinated in right of payment to the prior payment in full, in cash or other payment satisfactory to the holders of senior indebtedness, of all senior indebtedness.

In the event of any acceleration of the existing notes because of an event of default, the holders of any senior indebtedness then outstanding would be entitled to payment in full, in cash or other payment satisfactory to the holders of senior indebtedness, of all obligations with respect to such senior indebtedness before the holders of existing notes are entitled to receive any payment or other distribution. We are required to promptly notify holders of senior indebtedness if payment of the existing notes is accelerated because of an event of default.

We may not make any payment on the existing notes if:

- a default in the payment of designated senior indebtedness occurs and is continuing beyond any applicable period of grace; or
- any other default occurs and is continuing with respect to designated senior indebtedness that permits holders of the designated senior indebtedness to accelerate its maturity and the trustee receives a notice of such default, which we refer to as a payment blockage notice, from any person permitted to give this notice under the indenture.

We may resume making payments on the existing notes:

- in the case of a payment default, when the default is cured or waived or ceases to exist; and
- in the case of a nonpayment default, the earlier of (1) when the default is cured or waived or ceases to exist and (2) 179 days after receipt of the payment blockage notice.

No new period of payment blockage may be commenced pursuant to a payment blockage notice unless and until 365 days have elapsed since our receipt of the prior payment blockage notice.

No default that existed on the date of delivery of any payment blockage notice to the trustee shall be the basis for a subsequent payment blockage notice.

By reason of the subordination provisions described above, in the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of the existing notes may receive less, ratably, than the other creditors of EMCORE. These subordination provisions will not prevent the occurrence of any event of default under the existing notes indenture. The existing notes indenture does not limit our ability to incur additional indebtedness, including senior indebtedness. The incurrence of significant amounts of additional debt could adversely affect our ability to service our debt, including the existing notes.

A portion of our operations are, and may in the future be, conducted through our subsidiaries. As a result, our cash flow and our ability to service our debt, including the existing notes, depend, in part, upon the earnings of our subsidiaries. In addition, we are, and may in the future be, dependent, in part, on the distribution of earnings, loans or other payments by our subsidiaries to us.

Our subsidiaries are separate and distinct legal entities. Our subsidiaries have no obligation to pay any amounts due on the existing notes or to provide us with funds for our payment obligations, whether by dividends, distributions, loans or other payments. In addition, any payment of dividends, distributions, loans or advances by our subsidiaries to us could be subject to statutory or contractual restrictions. Payments to us by our subsidiaries will also be contingent upon our subsidiaries' earnings.

Our right to receive any assets of any of our subsidiaries upon their liquidation or reorganization, and therefore the right of the holders of the existing notes to participate in those assets, will be structurally subordinated to the claims of that subsidiary's creditors, including trade creditors. In addition, even if we were a creditor of any of our subsidiaries, our rights as a creditor would be subordinate to any security interest in the assets of our subsidiaries and any indebtedness of our subsidiaries senior to that held by us. As of December 24, 2003, we had approximately \$93,000 of indebtedness outstanding that would constitute senior indebtedness. If the minimum 85% in principal amount of the existing notes are tendered, \$75,618,128 principal amount of new notes would be

outstanding and would be senior to the remaining existing notes. The existing notes indenture does not limit our ability or the ability of our subsidiaries to incur senior indebtedness or any other indebtedness.

Certain Definitions

"Designated senior indebtedness" means the credit facility and any other particular senior indebtedness that expressly provides that such senior indebtedness is "designated senior indebtedness" for purposes of the indenture.

"Indebtedness" means:

- (1) all of our indebtedness, obligations and other liabilities, contingent or otherwise, for borrowed money, including:
 - overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments; or
- (2) all of our reimbursement obligations and other liabilities, contingent or otherwise, with respect to letters of credit, bank guarantees or bankers' acceptances;
- (3) all of our obligations and liabilities, contingent or otherwise, in respect of leases required, in conformity with generally accepted accounting principles, to be accounted for as capitalized lease obligations on our balance sheet;
- (4) all of our obligations evidenced by a note or similar instrument given in connection with the acquisition of any businesses, properties or assets of any kind;
- (5) all of our obligations issued or assumed as the deferred purchase price of property or services, but excluding trade accounts payable and accrued liabilities arising in the ordinary course of business;
- (6) all of our obligations and other liabilities, contingent or otherwise, under any lease or related document, including a purchase agreement, in connection with the lease of real property or improvements (or any personal property included as part of any such lease) which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property and thereby guarantee a residual value of leased property to the lessor and all of our obligations under such lease or related document to purchase or to cause a third party to purchase the leased property (whether or not such lease transaction is characterized as an operating lease or a capitalized lease in accordance with generally accepted accounting principles);
- (7) all of our obligations, contingent or otherwise, with respect to an interest rate currency or other swap, cap, floor or collar agreement, hedge agreement, forward contract, or other similar instrument or agreement or foreign currency hedge, exchange, purchase or similar instrument or agreement;
- (8) all of our direct or indirect guarantees or similar agreements to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of indebtedness, obligations or liabilities of another person of the kind described in clauses (1) through (7); and
- (9) any and all deferrals, renewals, extensions and refundings of, or amendments, modifications, supplements to, any indebtedness, obligation or liability of the kind described in clauses (1) through (8).

"Senior indebtedness" means the principal of, premium, if any, interest including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding, and rent payable on or in connection with, and all fees, costs, expenses and other amounts accrued or due on or in connection with, indebtedness of EMCORE whether secured or unsecured, absolute or contingent, due or to become due, outstanding on the date of the indenture or thereafter created, incurred, assumed, guaranteed or in effect guaranteed by EMCORE, including all deferrals, renewals, extensions or refundings of, or amendments, modifications or supplements to, the foregoing, unless in the case of any particular indebtedness the instrument creating or evidencing the same or the assumption or guarantee thereof expressly provides that such indebtedness shall not be senior in right of payment to the notes or expressly provides that such indebtedness is on the same basis or junior to the existing notes. Senior indebtedness does not include any indebtedness of EMCORE to any subsidiary or other affiliate of EMCORE, any obligation for federal, state, local or other taxes or trade payables.

Provisional Redemption of Existing Notes

We may redeem any portion of the existing notes at any time prior to May 20, 2004 upon at least 20 and not more than 60 days' notice by mail to the holders of the notes, at a redemption price equal to

\$1,000 per note plus accrued and unpaid interest to the redemption date if the closing price of our common stock has exceeded 150% of the conversion price for at least 20 trading days in any consecutive 30-day trading period ending on the trading day prior to the mailing of the notice of redemption.

If we redeem the existing notes under these circumstances, we will make an additional "make-whole" payment on the redeemed existing notes equal to \$150.00 per \$1,000 note, minus the amount of any interest actually paid on the note prior to the redemption date. We must make these "make-whole" payments on all existing notes called for redemption, including existing notes converted after the date we mailed the notice. The "make-whole" payment for notes converted shall not be reduced by accrued and unpaid interest. We may make these "make-whole" payments, at our option, either in cash or in our common stock or a combination of cash and stock, if a shelf registration covering resales of such common stock is effective and expected to remain effective and available for use for the 30 days following the redemption date. We will specify the type of consideration for the "make-whole" payment in the redemption notice. Payments made in our common stock will be valued at 97% of the average of the closing sales prices of our common stock for the five trading days ending on the day prior to the redemption date. If our issuance of common stock in satisfaction of the "make-whole" payment would result in the acquisition by any investor or group of investors of 20% or more of our common stock (or securities convertible into our common stock) or our voting power, we will be required under the rules of The Nasdaq National Market either to obtain shareholder approval for the issuance of the shares or to take steps, such as paying the "make-whole" amount in cash or deferring the "make-whole" so that no shareholder approval is required.

Optional Redemption of Existing Notes by EMCORE

Except as set forth under "Provisional Redemption," the existing notes may not be redeemed at the option of the Company prior to May 20, 2004. Thereafter the existing notes may be redeemed at the option of the Company, in

whole or in part, upon not less than 20 nor more than 60 days' notice by mail to holders of the existing notes.

The redemption prices (expressed as a percentage of principal amount) are as follows for existing notes redeemed during the periods set forth below:

Period	Redemption Price
Beginning on May 20, 2004 through May 14, 2005	101.25%
Beginning on May 15, 2005 and thereafter	100.00%

in each case together with accrued interest up to, but not including, the redemption date; provided that if the redemption date falls after an interest payment record date and on or before an interest payment date, then the interest payment shall be payable to holders of record on the relevant record date.

If fewer than all of the existing notes are to be redeemed, the trustee will select the existing notes to be redeemed by lot, or in its discretion, on a pro rata basis. If any existing note is to be redeemed in part only, a new existing note in principal amount equal to the unredeemed principal portion will be issued. If a portion of your existing notes is selected for partial redemption and you convert a portion of your existing notes, the converted portion will be deemed to be of the portion selected for redemption.

No sinking fund is provided for the existing notes.

Purchase of Existing Notes at Your Option Upon a Change of Control

If a change of control occurs, you will have the right to require us to purchase all or any part of your notes 30 business days after the occurrence of a change of control at a purchase price equal to 100% of the principal amount of the existing notes plus accrued and unpaid interest to, but excluding, the purchase date. Notes submitted for purchase must be in a principal amount of \$1,000 or integral multiples thereof.

We will mail to the trustee and to each record holder of an existing note a written notice of the change of control within 10 business days after the occurrence of a change of control. This notice will state:

- the terms and conditions of the change of control;
- the procedures required for exercise of the change of control purchase feature; and
- the holder's right to require EMCORE to purchase the existing notes.

You must deliver written notice of your exercise of this purchase right to the paying agent at any time prior to the close of business on the business day prior to the change of control purchase date. The written notice must specify the notes for which the purchase right is being exercised. If you wish to withdraw this election, you must provide a written notice of withdrawal to the paying agent at any time prior to the close of business on the business day prior to the change of control purchase date.

A change of control will be deemed to have occurred if any of the following occurs:

- any "person" or "group" is or becomes the "beneficial owner," directly or indirectly (other than as a direct result of repurchases of stock by EMCORE or its subsidiaries), of shares of voting stock of EMCORE representing 50% or more of the total voting power of all outstanding classes of voting stock of EMCORE or such person or group (other than the management group) has the power, directly or indirectly, to elect a majority of the members of the board of directors of EMCORE; provided, that voting stock acquired in an exempt transaction shall not constitute an acquisition that would cause a change of control;
- EMCORE consolidates with, or merges with or into, another person or EMCORE sells, assigns, conveys, transfers, leases or otherwise disposes of all or substantially all of the assets of EMCORE, or any person consolidates with, or merges with or into, EMCORE, in any such event other than pursuant to a transaction in which (a) the persons that "beneficially owned," directly or indirectly, the shares of voting stock of EMCORE immediately prior to such transaction "beneficially own," directly or indirectly, shares of voting stock of EMCORE, representing at least a majority of the total voting power of all outstanding classes of voting stock of the surviving or transferee person, or (b) an exempt transaction occurs; or
- EMCORE is dissolved or liquidated.

However, a change of control will not be deemed to have occurred if either:

- the last sale price of our common stock for any five trading days during the ten trading days immediately preceding the change of control is at least equal to 105% of the conversion price in effect on such day; or
- in the case of a merger or consolidation, all of the consideration excluding cash payments for fractional shares in the merger or consolidation constituting the change of control consists of common stock traded on a United States national securities exchange or quoted on The Nasdaq National Market (or which will be so traded or quoted when issued or exchanged in connection with such change of control) and as a result of such transaction or transactions the notes become convertible solely into such common stock.

For purposes of this change of control definition:

- "person" or "group" have the meanings given to them for purposes of Sections 13(d) and 14(d) of the Exchange Act or any successor provisions, and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act, or any successor provision;
- a "beneficial owner" will be determined in accordance with Rule 13d-3 under the Exchange Act, as in effect on the date of the indenture, except that the number of shares of voting stock of EMCORE will be deemed to include, in addition to all outstanding shares of voting stock

of EMCORE and unissued shares deemed to be held by the "person" or "group" or other person with respect to which the change of control determination is being made, all unissued shares deemed to be held by all other persons;

- "beneficially owned" has a meaning correlative to that of beneficial owner;
- "exempt transaction" means any purchase from EMCORE of equity interests in EMCORE by any of Thomas Russell, The AER 1997 Trust, Robert Louis-Dreyfus, Gallium Enterprises, Inc. and Reuben Richards (the "management group"); provided that the management group does not collectively beneficially own more than 65% of the total voting power of all outstanding classes of voting stock of EMCORE following such purchase;

- "unissued shares" means shares of voting stock not outstanding that are subject to options, warrants, rights to purchase or conversion privileges exercisable within 60 days of the date of determination of a change of control; and
- "voting stock" means any class or classes of capital stock pursuant to which the holders of capital stock under ordinary circumstances have the power to vote in the election of the board of directors, managers or trustees of any person or other persons performing similar functions irrespective of whether or not, at the time capital stock of any other class or classes shall have, or might have, voting power by reason of the happening of any contingency.

The term "all or substantially all" as used in the definition of change of control will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. There may be a degree of uncertainty in interpreting this phrase. As a result, we cannot assure you how a court would interpret this phrase under applicable law if you elect to exercise your rights following the occurrence of a transaction which you believe constitutes a transfer of "all or substantially all" of our assets.

We will:

- comply with the provisions of Rule 13e-4 and Rule 14e-1, if applicable, under the Exchange Act;
- file a Schedule to or any successor or similar schedule if required under the Exchange Act; and
- otherwise comply with all federal and state securities laws in connection with any offer by us to purchase the notes upon a change of control.

This change of control purchase feature may make more difficult or discourage a takeover of EMCORE and the removal of incumbent management. However, we are not aware of any specific effort to accumulate shares of our common stock or to obtain control of us by means of a merger, tender offer, solicitation or otherwise. In addition, the change of control purchase feature is not part of a plan by management to adopt a series of anti-takeover provisions. Instead, the change of control purchase feature is a result of negotiations between us and the initial purchasers.

We could, in the future, enter into certain transactions, including recapitalizations, that would not constitute a change of control but would increase the amount of indebtedness, including senior indebtedness, outstanding or otherwise adversely affect a holder. Neither we nor our subsidiaries are prohibited from incurring indebtedness, including senior indebtedness, under the indenture. The incurrence of significant amounts of additional indebtedness could adversely affect our ability to service our debt, including the existing notes.

We may not repurchase any note at any time when the subordination provisions of the indenture otherwise would prohibit us from making such repurchase. If we fail to repurchase the notes when required, this failure will constitute an event of default under the existing notes indenture whether or not repurchase is permitted by the subordination provisions of the existing notes indenture.

If a change of control were to occur, we may not have sufficient funds to pay the change of control purchase price for the existing notes tendered by holders, particularly if a substantial amount of new

notes also had to be repurchased under the substantially similar change of control provision in the indenture governing the new notes. In addition, we may in the future incur indebtedness that has similar change of control provisions that permit holders of that debt to accelerate or require us to repurchase that indebtedness upon the occurrence of events similar to a change of control. Our failure to repurchase the notes upon a change of control will result in an event of default under the indenture, whether or not the purchase is permitted by the subordination provisions of the existing notes indenture.

Events of Default

Each of the following constitutes an event of default under the existing notes indenture:

- (1) we fail to pay principal or premium, if any, on any note when due, whether or not prohibited by the subordination provisions of the existing notes indenture;
- (2) we fail to pay any interest on any note when due if such failure continues for 30 days, whether or not prohibited by the subordination provisions of the indenture;
- (3) we fail to perform any other covenant required of us in the existing notes indenture if such failure continues for 60 days after notice is given in accordance with the existing notes indenture;
- (4) we fail to pay the purchase price of any existing note when due, whether or not prohibited by the subordination provisions of the existing notes indenture;
- (5) we fail to provide timely notice of a change of control; or
- (6) certain events in bankruptcy, insolvency or reorganization of EMCORE.

If an event of default, other than an event of default described in clause (6) above, occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding notes may declare the principal amount of the notes to be due and payable immediately. If an event of default described in clause (6) above occurs, the principal amount of the existing notes will automatically become immediately due and payable. Any payment by us on the existing notes following any such acceleration will be subject to the subordination provisions described above.

After any such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of the existing notes may, under certain circumstances, rescind and annul such acceleration.

Subject to the trustee's duties in the case of an event of default, the trustee is not obligated to exercise any of its rights or powers at the request of the holders, unless the holders have offered to the trustee reasonable indemnity.

Subject to the trustee's indemnification, the holders of a majority in aggregate principal amount of the outstanding existing notes have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the notes.

No holder has any right to institute any proceeding under the indenture, or for the appointment of a receiver or a trustee, or for any other remedy under the indenture unless:

- the holder has previously given to the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding notes have made a written request and have offered reasonable indemnity to the trustee to institute such proceeding as trustee;
- the trustee has not complied with the request within 60 days after receipt of the request and the offer of security or indemnity; and
- the holders of a majority in principal amount of the outstanding notes have not given the trustee a direction inconsistent with the request within the 60-day period.

However, these limitations do not apply to a suit instituted by a holder for the enforcement of payment of the principal of or any premium or interest on any note on or after the applicable due date or the right to convert the note.

Generally, the holders of not less than a majority of the aggregate principal amount of outstanding notes may waive any default or event of default unless:

- we fail to pay principal, premium or interest on any note when due;
- we fail to convert any note into common stock; or
- we fail to comply with any of the provisions of the indenture that would require the consent of the holder of each outstanding note affected.

We are required to furnish to the trustee, on an annual basis, a statement by our officers as to whether or not EMCORE, to the officer's knowledge, is in default in the performance or observance of any of the terms, provisions and conditions of the indenture, specifying any known defaults.

Modification and Waiver

We and the trustee may make certain modifications and amendments to the existing notes indenture or the existing notes without notice to or the consent of any holder, including modifications or amendments to comply with the merger provisions described in the existing notes indenture, to provide for uncertificated notes in addition to or in place of certificated notes, to comply with the provisions of the Trust Indenture Act, to appoint a successor trustee, to cure any ambiguity, defect or inconsistency, or to make any other change that does not adversely affect the rights of the holders.

We and the trustee may make modifications and amendments to the existing notes indenture or the existing notes with the consent of the holders of a majority in aggregate principal amount of the outstanding existing notes.

However, neither we nor the trustee may make any modification or amendment without the consent of the holder of each outstanding existing note if such modification or amendment would:

- change the stated maturity of the principal of or interest on any existing note;
- reduce the principal amount of, or any premium or interest on, any existing note;
- reduce the amount of principal payable upon acceleration of the maturity of any existing note;
- change the place or currency of payment of principal of, or any premium or interest on, any existing note;
- impair the right to institute suit for the enforcement of any payment on, or with respect to, any existing note;
- modify the subordination provisions in a manner materially adverse to the holders of existing notes;
- adversely affect the right of holders to convert existing notes other than as provided in or under the existing notes indenture;
- reduce the percentage in principal amount of outstanding existing notes required for modification or amendment of the existing notes indenture;
- reduce the percentage in principal amount of outstanding existing notes necessary for waiver of compliance with certain provisions of the existing notes indenture or for waiver of certain defaults; or
- modify the foregoing requirements.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any successor person, unless:

- the successor person, if any, is a corporation or limited liability company organized and existing under the laws of the United States, or any state of the United States, and assumes our obligations on the existing notes and under the existing notes indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- other conditions specified in the existing notes indenture are met.

Satisfaction and Discharge

We may discharge our obligations under the existing notes indenture while existing notes remain outstanding if (1) all outstanding existing notes will become due and payable at their scheduled maturity within 90 days or (2) all outstanding existing notes have been called for redemption within 90 days and in either case we have deposited with the trustee an amount sufficient to pay and discharge all outstanding existing notes on the date of their scheduled maturity or the scheduled date of redemption.

Transfer and Exchange

We have initially appointed the trustee as security registrar, paying agent and conversion agent acting through its corporate trust office. We reserve the right to:

- vary or terminate the appointment of the security registrar, paying agent or conversion agent;
- appoint additional paying agents or conversion agents; or
- approve any change in the office through which any security registrar or any paying agent or conversion agent acts.

Purchase and Cancellation

All existing notes surrendered for payment, redemption, registration of transfer or exchange or conversion shall, if surrendered to any person other than the trustee, be delivered to the trustee. All existing notes delivered to the trustee shall be cancelled promptly by the trustee. No existing notes shall be authenticated in exchange for any existing notes cancelled as provided in the existing notes indenture.

We may, to the extent permitted by law, purchase existing notes in the open market or by tender offer at any price or by private agreement. Any existing notes purchased by us may, to the extent permitted by law, be reissued or resold or may, at our option, be surrendered to the trustee for cancellation. Any existing notes surrendered for cancellation may not be reissued or resold and will be promptly cancelled.

Replacement of Existing Notes

We will replace mutilated, destroyed, stolen or lost existing notes at your expense upon delivery to the trustee of the mutilated existing notes, or evidence of the loss, theft or destruction of the existing notes satisfactory to us and the trustee. In the case of a lost, stolen or destroyed existing note, indemnity satisfactory to the trustee and us may be required at the expense of the holder of such existing note before a replacement existing note will be issued.

Governing Law

The indenture existing notes and the existing notes are governed by and construed in accordance with the laws of the State of New York, without regard to conflicts of laws principles.

The Trustee

Wilmington Trust Company serves as the trustee under the existing notes indenture. The trustee will be permitted to deal with us and any of our affiliates with the same rights as if it were not trustee. However, under the Trust Indenture Act, if the trustee acquires any conflicting interest and there exists a default with respect to the notes, the trustee must eliminate such conflicts or resign.

The holders of a majority in principal amount of all outstanding existing notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy or power available to the trustee. However, any such direction may not conflict with any law or the existing notes indenture, may not be unduly prejudicial to the rights of another holder or the trustee and may not involve the trustee in personal liability.

Book-entry, Delivery and Form

We initially issued the existing notes in the form of one or more global securities. The global security was deposited with the trustee as custodian for DTC and registered in the name of a nominee of DTC. Except as set forth below, the global security may be transferred, in whole and not in part, only to DTC or another nominee of DTC. You may hold your beneficial interests in the global security directly through DTC if you have an account with DTC or indirectly through organizations which have accounts with DTC. Notes in definitive certificated form (called "certificated securities") will be issued only in certain limited circumstances described below.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a member of the Federal Reserve System;
- a "clearing corporation" within the meaning of the New York Uniform Commercial Code; and
- a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities of institutions that have accounts with DTC (called "participants") and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, which may include the initial purchasers, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's book-entry system is also available to others such as banks, brokers, dealers and trust companies (called "indirect participants") that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

We expect that pursuant to procedures established by DTC, upon the deposit of the global security with DTC, DTC will credit on its book-entry registration and transfer system the principal amount of existing notes represented by such global security to the accounts of participants. Ownership of beneficial interests in the global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in the global security will be shown on, and the transfer of those ownership interests will be effected only through, records maintained by DTC (with respect to participants' interests), the participants and the indirect participants. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These limits and laws may impair the ability to transfer or pledge beneficial interests in the global security.

Beneficial owners of interests in global securities who desire to convert their interests into common stock should contact their brokers or other participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion.

So long as DTC, or its nominee, is the registered owner or holder of a global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the existing notes represented by the global security for all purposes under the existing notes indenture and the existing

notes. In addition, no beneficial owner of an interest in a global security will be able to transfer that interest except in accordance with the applicable procedures of DTC. Except as set forth below, as an owner of a beneficial interest in the global security you will not be entitled to have the existing notes represented by the global security registered in your name, will not receive or be entitled to receive physical delivery of certificated securities and will not be considered to be the owner or holder of any existing notes under the global security. We understand that under existing industry practice if an owner of a beneficial interest in the global security desires to take any action that DTC, as the holder of the global security, is entitled to take, DTC would authorize the participants to take such action and the participants would authorize beneficial owners owning through such participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them.

We will make payments of principal of, premium, if any, and interest on the existing notes represented by the global security registered in the name of and held by DTC or its nominee to DTC or its nominee, as the case may be, as the registered owner and holder of the global security. Neither we, the trustee nor any paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

We expect that DTC or its nominee, upon receipt of any payment of principal of, premium, if any, or interest on the global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants or indirect participants to owners of beneficial interests in the global security held through such participants or indirect participants will be governed by standing instructions and customary practices and will be the responsibility of such participants or indirect participants. We will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the global security for any existing note or for maintaining, supervising or reviewing any

records relating to such beneficial ownership interests or for any other aspect of the relationship between DTC and its participants or indirect participants or the relationship between such participants or indirect participants and the owners of beneficial interests in the global security owning through such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

DTC has advised us that it will take any action permitted to be taken by a holder of existing notes only at the direction of one or more participants to whose account the DTC interests in the global security is credited and only in respect of such portion of the aggregate principal amount of existing notes as to which such participant or participants has or have given such direction. However, if DTC notifies us that they are unwilling to be a depository for the global security or ceases to be a clearing agency or there is an event of default under the notes, DTC will exchange the global security for certificated securities which it will distribute to its participants and which will be legended, if required.

Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global security among participants of DTC, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither we nor the trustee will have any responsibility or liability for the performance by DTC or the participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

Description of Our Capital Stock

Our authorized capital stock consists of 100,000,000 shares of common stock, no par value per share, and 5,882,352 shares of preferred stock, par value \$.0001 per share.

As of December 12, 2003, there were 38,244,800 shares of common stock outstanding, held of record by approximately 5,372 shareholders. The holders of common stock are entitled to one vote per share on all matters to be voted upon by the shareholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably dividends, if any, as may be declared from time to time by our board of directors out of funds legally available. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable, and the shares of common stock to be issued upon completion of any offering will be fully paid and non-assessable.

Our board of directors is divided into three classes. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock.

Book-Entry System—DTC

The new notes will be evidenced by a global security initially deposited with DTC, and registered in the name of Cede & Co., as DTC's nominee. Except as set forth below, the global security may be transferred only to another nominee of DTC or to a successor of DTC or its nominee.

Holders of new notes may hold their interests in the global security directly through DTC or indirectly through organizations which are participants in DTC (called "participants"). Transfers between participants will be affected in the ordinary way in accordance with DTC rules and will be settled in clearinghouse funds. The laws of some states require that some persons take physical delivery of securities in definitive form. As a result, holders may be unable to transfer beneficial interests in the global security to those persons.

Holders that are not participants may beneficially own interests in the global security held by DTC only through participants or indirect participants, including banks, brokers, dealers, trust companies and other parties that clear through or maintain a custodial relationship with a participant. So long as Cede & Co., as the nominee of DTC, is the registered owner of the global security, Cede & Co. will be considered the sole holder of the global security for all purposes. Except as provided below, owners of beneficial interests in the global security will not:

- be entitled to have certificates registered in their names;
- be entitled to receive physical delivery of certificates in definitive form; and
- be considered registered holders.

We will make payments of interest on and principal of and the redemption or repurchase price of the global security to Cede & Co., the nominee for DTC, as the registered holder of the global security. We will make these payments by wire transfer of immediately available funds. Neither we, the new notes trustee nor any paying agent will have any responsibility or liability for:

- records or payments on beneficial ownership interests in the global security; or
- maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We have been informed that DTC's practice is to credit participants' accounts on the payment date. These payments will be made in amounts proportionate to participants' beneficial interests in the new notes. Payments by participants to owners of beneficial interests in the new notes represented by the global security held through participants will be the responsibility of those participants.

We will send any redemption notices to Cede & Co. We understand that if less than all of the new notes are being redeemed, DTC's practice is to determine by lot the amount of the holdings of each participant to be redeemed. We also understand that neither DTC nor Cede & Co. will consent or vote with respect to the new notes. We have been advised that under its usual procedures, DTC will mail an "omnibus proxy" to us as soon as possible after the record date. The omnibus proxy assigns Cede & Co.'s consenting or voting rights to those participants to whose accounts the new notes are credited on the record date identified in a listing attached to the omnibus proxy.

A person having a beneficial interest in existing notes represented by the global security may be unable to pledge that interest to persons or entities that do not participate in DTC system, or to take other actions in respect of that interest, because that interest is not represented by a physical certificate.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a member of the Federal Reserve System;
- a "clearing corporation" within the meaning of the Uniform Commercial Code; and
- a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes to accounts of its participants. Some of the participants, together with other entities, own DTC. Indirect access to DTC system is available to others such as banks, brokers, dealers and trust companies that clear through, or maintain a custodial relationship with a participant, either directly or indirectly.

DTC is under no obligation to perform or continue to perform the above procedures. DTC may discontinue these at any time. If DTC is at any time unwilling or unable to continue as depository and a successor depository is not appointed by us within 90 days, we will cause existing notes to be issued in definitive form in exchange for the global security.

United States Federal Income Tax Considerations

The following is a general discussion of certain U.S. federal income tax consequences to holders who exchange existing notes for new notes and shares of common stock pursuant to the exchange offer. This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder (the "Treasury Regulations") and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change or different interpretations, possibly with retroactive effect. This discussion is for general information only and does not address all of the tax consequences that may be relevant to specific holders in light of their particular circumstances or to holders subject to special treatment under U.S. federal income tax laws (including but not limited to banks and certain other financial institutions, insurance companies, tax-exempt organizations, persons whose functional currency is not the U.S. dollar, dealers in securities or foreign currency, and persons holding existing notes that are a hedge against, or that are hedged against, currency risk or that are part of a straddle, constructive sale or conversion transaction). This discussion assumes that the existing notes, new notes and common stock are held as capital assets. Tax counsel to the Company has not provided any opinion regarding the exchange offer or an investment in the Company. No ruling has or is expected to be sought from the Internal Revenue Service (the "IRS") with respect to the exchange offer. Accordingly, no assurance can be given that the IRS will agree with the views expressed in this discussion, or that a court would not sustain a challenge by the IRS. This discussion does not address the state, local or non-U.S. tax consequences relating to the exchange offer.

As used in this discussion, the term "U.S. holder" means a beneficial owner of an existing note that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other business entity treated as a corporation) created or organized in or under the laws of the United States or of any State or political subdivision thereof or therein, including the District of Columbia;
- an estate the income of which is subject to U.S. federal income tax regardless of the source thereof, or
- a trust with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of its substantial decisions, or certain trusts that were in existence on August 20, 1996 and validly elected to be treated as a domestic trust.

The term "non-U.S. holder" means a beneficial owner of an existing note that is, for U.S. federal income tax purposes, a non-resident alien or a corporation, trust or estate that is not a U.S. holder.

The tax treatment of a partner in a partnership holding existing notes will generally depend upon the status of the partner and the activities of the partnership. A holder that is a partner in a partnership holding existing notes should consult its tax advisor regarding the tax consequences of our exchange offer.

HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES APPLICABLE TO THEM RELATING TO THE EXCHANGE OFFER, INCLUDING THE APPLICABILITY OF U.S. FEDERAL, STATE OR LOCAL TAX LAWS AND NON-U.S. TAX LAWS.

U.S. HOLDERS

Treatment of Exchange Offer.

In general. We intend to take the position that the exchange of existing notes for new notes and common stock pursuant to the exchange offer constitutes a "recapitalization" for federal income tax purposes. In general, the exchange will be treated as a recapitalization if the existing notes and the

new notes constitute "securities." Whether a note is a security for federal income tax purposes depends upon the facts and circumstances surrounding the origin and nature of these instruments. Instruments with a term less than five years are less likely to be considered securities for tax purposes; instruments with a term of ten years or more generally are considered securities. Convertibility of a debt instrument into stock of the issuer makes "security" treatment more likely because of the holder's potential equity participation in the issuer. The existing notes have a term of five years, are convertible into our common stock and contain other indicia of a security. The new notes are seven year convertible instruments and also contain other indicia of a security. For purposes of this discussion, we assume that the existing notes and the new notes are securities, and that the exchange of existing notes for new notes and common stock will constitute a recapitalization for federal income tax purposes. There can be no assurance, however, that the IRS will not successfully assert a contrary position. If, contrary to our position, the exchange offer is not treated as a recapitalization for federal income tax purposes, the exchange could be partially or fully taxable to a U.S. holder. The exchange will be fully taxable if the existing notes are not treated as securities, and will be partially taxable (to the extent of the lesser of any gain on the exchange and the fair market value of the new notes received) if the existing notes are treated as securities but the new notes are not treated as securities.

Recapitalization. If the exchange is treated as a recapitalization for federal income tax purposes, a U.S. holder will not recognize gain or loss (other than with respect to amounts received relating to accrued but unpaid interest or in lieu of fractional portions of new notes or common stock) on the exchange and will have a tax basis in the new notes and common stock (allocated in accordance with their respective fair market values) equal to the U.S. holder's adjusted tax basis in the existing notes exchanged therefor. A U.S. holder also will have a holding period for the new notes and common stock received in the exchange that includes the period during which the U.S. holder held the existing notes. Accrued market discount with respect to the existing notes generally will carry over to the new notes and common stock and will be taxed as ordinary income as such new notes or common stock are disposed. You should consult your tax advisor regarding the application of the market discount rules in your particular situation.

Cash payments of accrued interest on existing notes. Cash payments received in the exchange attributable to accrued interest on existing notes are taxable as ordinary income to the extent not previously included in income.

Cash in Lieu of Fractional Portions of New Notes or Common Stock Cash received in lieu of fractional portions of new notes or common stock in the exchange offer generally will be treated as if the fractional portion of a new note or common stock had been issued in the exchange offer and then redeemed by us for cash. In general, gain or loss will be recognized on receipt of such cash equal to the difference between (1) the amount of cash received in lieu of a fractional note or share and (2) the portion of the holder's basis in new notes or common stock that is allocable to the fractional note or share.

Tax Treatment of New Notes.

Intended treatment of the new notes as convertible debt instruments that are not "contingent payment debt instruments." We intend to treat the new notes as convertible debt instruments that are not "contingent payment debt instruments" under the Treasury Regulations. The federal income tax treatment of the new notes (or debt instruments comparable to them) has not been the subject of authoritative guidance from the IRS, and is not certain. The new notes contain provisions that allow for payment of amounts under certain circumstances other than scheduled interest payments and principal at maturity, including conversion and redemption by us before maturity. See "Description of New Notes." No assurance can be given that the IRS will not successfully assert that the new notes should be treated as "contingent payment debt instruments." Contingent payment debt instruments would have very different tax consequences, as highlighted below. We have not sought or received an IRS ruling concerning our intended tax treatment of the new notes and, because the governing law is unsettled, no assurance can be given that our intended treatment will be respected for federal income tax purposes.

Certain Treasury Regulations (the "CPDI Regulations") treat certain debt instruments with contingent payments as "contingent payment debt instruments." The CPDI Regulations, however, do not apply in a number of circumstances, including in the case of (i) a debt instrument that provides for one or more contingent payments but the yield can be determined, (ii) a debt instrument that provides for contingent payments merely because it provides for an option to convert the debt instrument into stock of the issuer or into cash, or (iii) an instrument with a contingency that, as of the issue date, is either "remote" or "incidental." We intend to take the position that the CPDI Regulations do not apply to the new notes because (i) assuming we choose to exercise our rights with respect to the notes in a manner that minimizes the yield on the new notes, the yield can be determined based on the stated payment schedule and (ii) the option to convert should not by itself cause the CPDI Regulations to apply to the new notes.

If, contrary to our intended treatment, the CPDI Regulations apply to the new notes: (i) holders could be required to include amounts in taxable income each year as OID at a rate that may be significantly higher than the stated rate of interest on the new notes, whether or not actual payments of stated interest are received; (ii) the value of any stock received upon conversion of the new notes could be treated as a payment on the new notes and any gain recognized in respect thereof could be taxable as ordinary income; and (iii) any gain recognized upon a sale, exchange, redemption, or retirement of the new notes could also be treated as ordinary income. The remainder of the discussion assumes that the new notes are not contingent payment debt instruments.

Taxation of Interest on New Notes.

Except to the extent otherwise provided below, U.S. holders generally will recognize interest income on new notes in accordance with their regular method of accounting for U.S. federal income tax purposes.

General consequences of OID. If the issue price of the new notes is less than the stated redemption price at maturity, there could be OID with respect to the new notes. If the OID on a debt instrument is less than ¼ of 1 percent of the stated redemption price at maturity of the debt instrument multiplied by the number of complete years to maturity, however, the OID on the debt instrument will be deemed to be zero. If the new notes have OID, a U.S. holder generally must include any OID on the new notes as ordinary interest income as it accrues on a constant yield method regardless of such U.S. holder's regular method of accounting for U.S. federal income tax purposes. Although the new notes will not be listed on an exchange, we expect prices or trades of the new notes to be quoted similarly to the existing notes such that they will be considered "publicly traded" for federal income tax purposes and, consequently, their issue price will equal their fair market value on the date of the exchange. If not, the issue price of the new notes will equal the fair market value of the existing notes exchanged therefor.

Reporting of information to U.S. holders concerning OID. We will provide the IRS and noteholders with information required to be reported, if any, under the Code and Treasury Regulations with respect to any accrued OID on the new notes. U.S. holders are urged to consult their tax advisors regarding the application of the OID rules to their ownership of the new notes.

Amortizable bond premium and acquisition premium. A U.S. holder who acquires a new note at a premium (i.e., the excess of the holder's Section 171 tax basis over the note's stated redemption price at maturity) will not be subject to the OID accrual rules discussed above and may elect to amortize such premium ("Section 171 premium") from the purchase date to the note's maturity date under a constant yield method that reflects semiannual compounding based on the note's payment period. Section 171 tax basis is equal to adjusted tax basis less any value attributable to a new note's conversion feature. The premium attributable to the conversion feature generally is the excess, if any, of the new note's purchase price over what the note's fair market value would be if there were no conversion feature. Amortized Section 171 premium is treated as an offset to interest income on the note and not as a separate deduction and results in a corresponding reduction in the adjusted tax basis of such notes. The election to amortize Section 171 premium on a constant yield method, once made, applies to all debt obligations held or subsequently acquired by the electing U.S. holder on or after

the first day of the first taxable year to which the election applies and may not be revoked without the consent of the IRS. If such an election to amortize Section 171 premium is not made, a U.S. holder must include all amounts of taxable interest in accordance with its regular method of tax accounting, without reduction for such premium, and may receive a tax benefit from the premium only in computing gain or loss upon a disposition of the new note.

If a U.S. holder's initial tax basis in the new notes is greater than the issue price of the new notes (generally the fair market value) but less than the stated redemption price at maturity, such U.S. holder generally will be considered to have "acquisition premium" with respect to the new notes, which may reduce the amount of OID that the U.S. holder is required to include in taxable income.

The rules regarding amortizable bond premium and acquisition premium are complex. Any U.S. holder whose new notes have or may have amortizable bond premium or acquisition premium should consult its tax advisor as to the effects of these rules on such holder.

Note, however, that the application of the rules described above would be materially affected if the new notes are "contingent payment debt instruments" subject to the CPDI Regulations. See "Treatment of Exchange Offer" above.

Sale, Exchange, Redemption, Retirement or Conversion of the New Notes.

Sale, exchange, redemption or retirement. Except to the extent otherwise provided below, a U.S. holder generally will recognize capital gain or loss on the sale, exchange, redemption or retirement of new notes (other than by conversion into common stock) equal to the difference between the amount realized on the sale, exchange, redemption or retirement of the new notes and the U.S. holder's adjusted tax basis in the new notes. The portion of any amount attributable to accrued interest or OID will not be taken into account in computing a U.S. holder's capital gain or loss but, instead, will be recognized as ordinary income (to the extent not previously included in income). As discussed below, a U.S. holder generally will be required to treat the amount of any early call premium as ordinary income and will not take such premium into account in computing gain or loss on a new note. Except to the extent of any accrued market discount, gain or loss recognized on the sale, exchange,

redemption or retirement of new notes generally will be long-term capital gain or loss if the holding period applicable to the new notes exceeds one year. Long-term capital gains of individual taxpayers are generally taxed at favorable rates. The deduction of capital losses is subject to limitations. Under the market discount rules, any gain recognized by a U.S. holder will be ordinary income to the extent of accrued market discount not previously been included in income.

Conversion of new notes. In general, the conversion of a U.S. holder's new note into our common stock will be tax-free except to the extent of cash received in lieu of fractional shares of common stock (taxed as discussed above with respect to cash for fractional shares) and cash or common stock received as an early call premium (taxed as ordinary income). A U.S. holder's tax basis in the common stock received should equal the tax basis in the new notes exchanged therefor and the holding period for any stock received should have a holding period that includes the holding period applicable to the new notes converted.

Other New Note Tax Considerations.

Early Call Premium. Any early call premium received generally will be taxable as ordinary income in an amount equal to the sum of any cash and the fair market value of any common stock received. The holding period for any such common stock generally will begin on the date following the provisional redemption date, and the adjusted tax basis of such stock generally will equal its fair market value..

Constructive dividend. The terms of the new notes allow for changes in the conversion price of the new notes in certain circumstances. A change in the conversion price that allows holders to receive more shares of common stock on conversion may increase the holders' proportionate interests in our earnings and profits or assets. In certain cases, a change in the conversion price, or the failure to change the conversion price, may cause holders to be treated as having received a constructive stock dividend taxable to holders but limited by the amount of our current or accumulated earnings and profits.

Common Stock.

Dividends on common stock. Distributions, if any, with respect to our common stock will be taxable as dividend income to the extent made from our current or accumulated earnings and profits. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated first as a tax-free return of investment to the extent of the adjusted tax basis in the common stock, and thereafter as gain from a sale of the stock. Subject to certain holding period and other requirements, dividend income received by U.S. individuals is taxed at the same rate as long-term capital gains.

Sale or exchange of common stock. Gain or loss recognized on a sale or exchange of our common stock will equal the difference between the amount received on such sale or exchange and the holder's adjusted tax basis in such stock. Such gain or loss generally will be long-term capital gain or loss if the U.S. holder's holding period in the common stock exceeds one year. However, under the market discount rules, any gain recognized by a U.S. holder will be ordinary income to the extent of the accrued market discount that has not previously been included in income. For these purposes, any accrued market discount that the U.S. holder had in the existing notes that carried over to the common stock received in the exchange or that carried over to the new notes (and any other accrued market discount in the new notes) and carried further to common stock as a result of a conversion will be treated as accrued market discount with respect to the common stock.

NON-U.S. HOLDERS

The following discussion is a summary of certain material U.S. federal income tax consequences to non-U.S. holders resulting from the exchange of existing notes for new notes and common stock pursuant to the exchange offer and the ownership and disposition of the new notes or common stock. The discussion does not apply to a non-U.S. holder who holds existing notes, new notes or common stock in connection with a U.S. trade or business, for whom the rules discussed above applicable to U.S. holders generally apply.

Treatment of Exchange Offer. A non-U.S. holder should not be subject to U.S. tax with respect to the exchange of existing notes for new notes and common stock pursuant to the exchange offer.

Withholding tax on payments of interest and OID on new notes. The payment of interest (including any amounts received pursuant to the exchange offer with respect to accrued interest on existing notes) and accrual of OID on new notes generally will not be subject to U.S. federal withholding tax if the non-U.S. holder (i) does not own, directly or indirectly, 10% or more of the total combined voting power of all classes of our stock entitled to vote; (ii) is not a "controlled foreign corporation" that is related to us; and (iii) certain certification requirements are met.

If the above exception does not apply, U.S. federal withholding tax of 30% will apply to the payment of interest or OID. Withholding taxes may be reduced or eliminated under an applicable income tax treaty assuming a non-U.S. holder properly certifies as to its entitlement to the benefit under such treaty.

To establish an exemption from (or entitlement to reduction in) withholding, you generally must meet certain certification requirements by providing an IRS Form W-8BEN or other appropriate form establishing your non-U.S. status.

Dividends on common stock. Dividends, if any, paid or deemed paid to a non-U.S. holder with respect to our common stock will be subject to U.S. withholding tax at a 30% rate or other lower rate under an applicable income tax treaty. In order to claim the benefits of a tax treaty, you must demonstrate your entitlement by certifying your status and eligibility for treaty benefits. In certain circumstances, an adjustment to the conversion price of the new notes could potentially give rise to a deemed distribution to non-U.S. holders. See "U.S. holders – Constructive dividend" above.

Disposition of the new notes and common stock. Other than proceeds attributable to accrued interest or OID (which are subject to the rules described in "Withholding tax on payments of interest and OID on new notes" above), a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized on the sale, exchange or other disposition (including the conversion of new notes

pursuant to their terms) of new notes or our common stock or on any early call premiums. The above rule will not apply if (i) such holder is an individual who is present in the United States for 183 days or more in the year of such sale, exchange or redemption and certain other conditions are met (or has a "tax home" in the U.S.); or (ii) the gain is treated as effectively connected with the conduct by such holder of a U.S. trade or business.

Effectively connected income. If any interest or OID on the new notes, dividends on our common stock, any early call premiums or gain from the sale, exchange or other disposition (including the conversion of new notes pursuant to their terms) of the new notes or common stock is treated as "effectively connected" with the conduct of a U.S. trade or business, then the income or gain will generally be subject to U.S. federal income tax at regular graduated income tax rates applicable to U.S. holders (and for corporate holders, possibly a branch profits tax as well).

Information Reporting and Backup Withholding

Payments on the new notes, any early call premiums and payments of dividends on common stock or constructive dividends on the new notes will be subject to information reporting and, possibly, "backup withholding." Backup withholding will not apply, however, to (i) exempt recipients (including corporations), (ii) U.S. holders who provide us with a properly completed IRS Form W-9 establishing an exemption from backup withholding or (iii) non-U.S. holders who provide us with a properly completed IRS Form W-8BEN (or other appropriate form) establishing their non-U.S. status.

Any amounts withheld from a payment to a holder under the backup withholding rules will be allowed as a credit against such holder's U.S. federal income tax, and may entitle such holder to a refund, provided that the required information is furnished to the IRS.

THE PRECEDING DISCUSSION OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS GENERALLY APPLICABLE TO BENEFICIAL OWNERS OF EXISTING NOTES THAT RECEIVE NEW NOTES AND COMMON STOCK PURSUANT TO THIS OFFERING, BUT IT IS NOT NECESSARILY APPLICABLE IN YOUR PARTICULAR CIRCUMSTANCES. YOU SHOULD CONSULT YOUR TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE, LOCAL AND NON-U.S. TAX CONSEQUENCES OF THE EXCHANGE OFFER AND OF PURCHASING, HOLDING AND DISPOSING OF THE NEW NOTES AND OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY CHANGE OR PROPOSED CHANGE IN THE APPLICABLE LAWS.

Legal Matters

The validity of the new notes will be passed upon for us by Jenner & Block LLP, Washington, D.C. Customary legal matters will be passed upon for the dealer manager by Skadden, Arps, Slate, Meagher and Flom LLP, New York, New York.

Experts

The financial statements and the related financial statement schedule incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended September 30, 2003 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph referring to accounting changes), which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where You Can Find Additional Information

We file annual, quarterly and special reports, proxy statements and other information with the Commission. The Securities and Exchange Act file number for our Commission filings is 000-22175. You may read and copy these any document we file at the Securities and Exchange Commission's public reference room located at 450 Fifth Street, N.W., Washington, D.C. 20549. You can request

copies of these documents by writing to the Securities and Exchange Commission and paying a fee for the copying cost. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information about the public reference rooms. Our reports, proxy statements and other information filed with the Securities and Exchange Commission are also available to the public the Securities and Exchange Commission's web site at <http://www.sec.gov>. In addition, you can read and copy our filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, Washington, D.C. 20006.

The Securities and Exchange Commission allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the Securities and Exchange Commission will automatically update and supersede this information. We incorporate by reference into this prospectus the documents listed below and any future filings made by us with the Commission prior to consummation of our exchange offer or the date of termination of our exchange offer under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act:

- Annual Report on Form 10-K for the fiscal year ended September 30, 2003;
- Current Report on Form 8-K filed on October 14, 2003;
- Current Report on Form 8-K filed on November 18, 2003; and
- The description of our common stock in our registration statement on Form 8-A, as filed with the SEC on February 26, 1997.

You may request a copy of these filings, at no cost, by writing us at the following address or calling us at the following telephone number:

EMCORE Corporation
145 Belmont Drive
Somerset, New Jersey 08873
Attn: Chief Financial Officer
Telephone (732) 271-9090

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents.

The exchange agent for the exchange offer is:
Wilmington Trust Company

By registered and certified mail:	By regular mail or overnight courier:
Christine Kushto, CCTS Financial Services Officer Wilmington Trust Company 1100 North Market Street Rodney Square North Wilmington, DE 19890-1615	Christine Kushto, CCTS Financial Services Officer Wilmington Trust Company 1100 North Market Street Rodney Square North Wilmington, DE 19890-1615

In person by hand only:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

By facsimile transmission (for eligible institutions only):
(302) 636-4145

For information or confirmation by telephone:

The information agent for the exchange offer is:

DF King & Co., Inc.

Banks and brokers call collect: (212) 269-5550

All others call toll free: (800) 431-9621

Any questions or requests for assistance or additional copies of this prospectus and the letter of transmittal may be directed to the information agent at its telephone number and location set forth above. You may also contact your broker, dealer, commercial bank or trust company or other nominee for assistance concerning the exchange offer.

The dealer manager for the exchange offer is:

CIBC World Markets Corp.

Equity Capital Markets

417 Fifth Avenue

New York, New York 10016

(212) 667-7800

Part II

Information Not Required in Prospectus

Item 20. Indemnification of Directors and Officers

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

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

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

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

INDEMNIFICATION OF DIRECTORS, OFFICERS AND EMPLOYEES

(1) As used in this section,

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

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

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

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

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

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

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

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

(b) with respect to any criminal proceeding, such corporate agent had no reasonable cause to believe his conduct was unlawful. The termination of any proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not of itself create a presumption that such corporate agent did not meet the applicable standards of conduct set forth in paragraphs 14A:3-5(2)(a) and 14A:3-5(2)(b).

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

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

(5) Any indemnification under subsection 14A:3-5(2) and, unless ordered by a court, under subsection 14A:3-5(3) may be made by the corporation only as authorized in a specific case upon a determination that indemnification is proper in the circumstances because the corporate agent met the applicable standard of conduct

set forth in subsection 14A:3-5(2) or subsection 14A:3-5(3). Unless otherwise provided in the certificate of incorporation or bylaws, such determination shall be made

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

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

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

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

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

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

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

(b) Application for such indemnification may be made:

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

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

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

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

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

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

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

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

Item 21. Exhibits and Financial Statement Schedules

(a) Exhibits

Number	Exhibit
4.1	Restated Certificate of Incorporation, dated December 21, 2000 (incorporated by reference to Exhibit 3.1 to the registrant's annual report on Form 10-K for the fiscal year ended September 30, 2000).
4.2	Specimen certificate for the shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form 3-1 (File No. 333-18565) filed with the Commission on February 24, 1997).
4.3	Form of Indenture between the Company and Deutsche Bank Trust Company Americas, as Trustee, with respect to the New Notes.
4.4	Form of New Note (included in Exhibit 4.3).
4.5	Indenture, dated as of May 7, 2001, between the Company and Wilmington Trust Company, as Trustee (incorporated by reference to Exhibit 4.1 to the registrant's quarterly report on Form 10-Q for the fiscal quarter ended March 31, 2001).
4.6	Note, dated as of May 7, 2001 in the amount of \$175,000,000 (incorporated by reference to Exhibit 4.2 to the registrant's quarterly report of Form 10-Q for the fiscal year ended March 31, 2001).
5.1	Opinion of Jenner & Block LLP.*
12.1	Statement re: computation of ratio of earnings to fixed charges.
23.1	Consent of Deloitte & Touche LLP, Independent Auditors.
23.2	Consent of Jenner & Block LLP (contained in its opinion filed as Exhibit 5.1 to this Registration Statement).*
25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended.
99.1	Form of Letter of Transmittal.
99.2	Form of Notice of Guaranteed Delivery.

* To be filed by amendment.

Item 22. Undertakings

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that information required to be included in a post-effective amendment by (a)(1)(i) and (a)(1)(ii) above may be contained in periodic reports filed by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

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- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment will be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time will be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of any employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or 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 of 1933 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 them is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- (d) The registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11 or 13 of Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first-class mail or equally prompt means. This includes information contained in documents filed subsequent to the effective date of this Registration Statement throughout the date responding to the request.
- (e) The registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in this Registration Statement when it became effective.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing and has duly caused this registration statement on Form S-4 to be signed on its behalf by the undersigned, thereunto duly authorized in the Township of Somerset, State of New Jersey, on December 24, 2003.

EMCORE CORPORATION

By: /s/ REUBEN F. RICHARDS, JR.

Name: Reuben F. Richards, Jr.

Title: President and Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Reuben F. Richards, Jr., Thomas G. Werthan and Howard W. Brodie, and each of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorney-in-fact and agent or either of them or their or his substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registrant's Registration Statement on Form S-4 has been signed by the following persons in the capacities indicated on December 24, 2003.

Signature	Title
<u>/s/ THOMAS J. RUSSELL</u> Thomas J. Russell, Ph.D	Chairman of the Board and Director
<u>/s/ REUBEN F. RICHARDS, JR.</u> Reuben F. Richards, Jr.	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ THOMAS G. WERTHAN</u>	Vice President, Chief Financial Officer, and Director (Principal Accounting and Financial Officer)

Thomas G. Werthan		
/s/	<div>RICHARD A. STALL</div> <div>Richard A. Stall</div>	Director
/s/	<div>ROBERT BOGOMOLNY</div> <div>Robert Bogomolny</div>	Director
/s/	<div>ROBERT LOUIS-DREYFUS</div> <div>Robert Louis-Dreyfus</div>	Director
/s/	<div>CHARLES T. SCOTT</div> <div>Charles T. Scott</div>	Director
/s/	<div>JOHN GILLEN</div> <div>John Gillen</div>	Director

Exhibit Index

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99.1	Form of Letter of Transmittal.
99.2	Form of Notice of Guaranteed Delivery.
99.3	Form of Letter to Brokers, Dealers, Commercial Banks, Trust Companies and other Nominees.
99.4	Form of Letter to Clients.

* To be filed by amendment.

EMCORE CORPORATION
5% CONVERTIBLE SENIOR SUBORDINATED NOTES DUE 2011

INDENTURE

Dated as of [____], 2004

Deutsche Bank Trust Company Americas
Trustee

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EXHIBITS

Exhibit A FORM OF NOTE

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INDENTURE dated as of [____], 2004 between EMCORE Corporation, a New Jersey corporation (the "Company"), and Deutsche Bank Trust Company Americas, as trustee (the "Trustee").

The Company and the Trustee agree as follows for the benefit of each other and for the equal and ratable benefit of the Holders of the 5% Convertible Senior Subordinated Notes due 2011 (the "Notes"):

ARTICLE 1.
DEFINITIONS AND INCORPORATION
BY REFERENCE

Section 1.01. Definitions.

"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise; provided, however, that beneficial ownership of 10% or more of the voting securities of a Person shall be deemed to be control.

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

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

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

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

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

"Capital Lease Obligation" means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at such time be required to be capitalized on a balance sheet in accordance with GAAP.

"Capital Stock" means any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock, including, without limitation, with respect to partnerships, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, such partnership.

"Closing Sale Price" means the last reported sales price or, in case no such reported sale takes place on such date, the average of the reported closing bid and asked prices in either case on The Nasdaq National Market or, if the Common Stock is not listed or admitted to trading on The Nasdaq National Market, on the principal national securities exchange on which the Common Stock is listed or admitted to trading or, if not listed or admitted to trading on The Nasdaq National Market or any national securities exchange, the last reported sales price of the Common Stock as quoted on The

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Nasdaq National Market or, in case no reported sales takes place, the average of the closing bid and asked prices as quoted on The Nasdaq National Market or any comparable system or, if the Common Stock is not quoted on The Nasdaq National Market or any comparable system, the closing sales price or, in case no reported sale takes place, the average of the closing bid and asked prices, as furnished by any two members of the National Association of Securities Dealers, Inc. selected from time to time by the Company for that purpose.

"Company" means the issuer, and any and all successors thereto.

"Common Stock" means the common stock, no par value per share, of the Company.

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

"Custodian" means the Trustee, as custodian with respect to the Global Notes or any successor entity thereto.

"Default" means any event that is or with the passage of time or the giving of notice or both would be an Event of Default.

"Definitive Note" means a certificated Note registered in the name of the Holder thereof and issued in accordance with Section 2.06 hereof, substantially in the form of Exhibit A hereto except that such Note shall not bear the Global Note Legend and shall not have the "Schedule of Exchanges of Interests in the Global Note" attached thereto.

"Depositary" means, with respect to any Global Notes, the Person specified in Section 2.03 hereof as the Depositary with respect to such Global Notes, and any and all successors thereto appointed as depositary hereunder and having become such pursuant to the applicable provision of this Indenture.

"Designated Senior Indebtedness" means any Senior Indebtedness permitted hereunder the principal amount of which is \$10.0 million or more and that has been designated by the Company as "Designated Senior Indebtedness."

"Equity Interests" means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

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

"Existing Notes" means the Company's 5% Convertible Subordinated Notes due 2006.

"Existing Notes Indenture" means that Indenture, dated as of May 7, 2001, between the Company and Wilmington Trust Company.

"GAAP" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which are in effect on the date of this Indenture.

"Global Note" means a permanent global Note substantially in the form of Exhibit A hereto issued in accordance with this Indenture, that is deposited with or on behalf of and registered in the name of the Depositary and that bears the Global Note Legend and has the "Schedule of Exchanges of Notes" attached thereto.

"Global Note Legend" means the legend set forth in Exhibit A hereto, which is required to be placed on all Global Notes issued under this Indenture.

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

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

"Indebtedness" means, with respect to any Person, without duplication, (a) all indebtedness, obligations and other liabilities (contingent or otherwise) of such Person for borrowed money (including obligations of such Person in respect of overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments) or evidenced by credit or loan agreements, bonds, debentures, notes or other written obligations (whether or not the recourse of the lender is to the whole of the assets of such Person or to only a portion thereof) (other than any accounts payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services), (b) all reimbursement obligations and other liabilities (contingent or otherwise) of such Person with respect to letters of credit, bank guarantees or bankers' acceptances, (c) all obligations and liabilities (contingent or otherwise) of such Person in respect of leases of such Person required, in conformity with generally accepted accounting principles, to be accounted for as Capitalized Lease Obligations on the balance sheet of such Person, (d) all obligations of such Person evidenced by a note or similar instrument given in connection with the acquisition of any business, properties or assets of any kinds, (e) all obligations of such Person issued or assumed as the deferred purchase price of property or services (excluding trade account payables and accrued liabilities arising in the ordinary course of business), (f) all obligations (contingent or otherwise) of such Person under any lease or related document (including a purchase agreement) in connection with the lease of real property or improvements (or any personal property included as part of any such lease) which provides that such Person is contractually obligated to purchase or cause a third party to purchase the leased property and thereby guarantee a minimum residual value of the leased property to the lessor and the obligations of such Person under such lease or related document to purchase or to cause a third party to purchase such leased property (whether or not such lease transaction is characterized as an operating lease or a capitalized lease in accordance with generally accepted accounting principles), (g) all obligations (contingent or otherwise) of such Person with respect to any interest rate, currency or other swap, cap, floor or collar agreement, hedge agreement, forward contract, or other similar instrument or agreement or foreign currency hedge, exchange, purchase or similar instrument or agreement, (h) all direct or indirect guaranties, agreements to be jointly liable or similar agreements by such Person in respect of, and obligations or liabilities (contingent or otherwise) of such Person to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of another Person of the kind described in clauses (a) through (g), and (i) any and all deferrals, renewals, extensions and refundings of, or amendments, modifications or supplements to, any indebtedness, obligation or liability of the kind described in clauses (a) through (h).

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

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

"Legal Holiday" means a Saturday, a Sunday or a day on which banking institutions in the City of New York or at a place of payment are authorized by law, regulation or executive order to remain closed. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on

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the next succeeding day that is not a Legal Holiday, and no interest shall accrue on such payment for the intervening period.

"Notes" has the meaning assigned to it in the preamble to this Indenture.

"Obligations" means any principal, interest, penalties, fees, indemnifications, reimbursements, fees and expenses, damages and other liabilities payable under the documentation governing any Indebtedness.

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

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

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

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

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

"Permitted Junior Securities" means Equity Interests in the Company or debt securities that are subordinated to all Senior Indebtedness (and any debt securities issued in exchange for Senior Indebtedness) to substantially the same extent as, or to a greater extent than, the Notes are subordinated to Senior Indebtedness pursuant to the Indenture.

"Person" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization or government or agency or political subdivision thereof (including any subdivision or ongoing business of any such entity or substantially all of the assets of any such entity, subdivision or business).

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

"Responsible Officer," when used with respect to the Trustee, means any officer within the Corporate Trust Administration of the Trustee (or any successor group of the Trustee) with direct responsibilities for the administration of this Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

"SEC" means the Securities and Exchange Commission.

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

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"Senior Indebtedness" means (i) the principal of, premium, if any, interest including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding, and rent payable on or in connection with, Indebtedness of the Company unless the instrument under which such Indebtedness is incurred expressly provides that it is on a parity with or subordinated in right of payment to the Notes, and (ii) all Obligations with respect to any of the foregoing, whether secured or unsecured, absolute or contingent, due or to become due, outstanding on the date hereof or hereafter credited, incurred, assumed, guaranteed or in effect guaranteed by the Company, including all deferrals, renewals, extensions and refundings of or amendments, modifications or supplements to, the foregoing. Notwithstanding anything to the contrary in the foregoing, Senior Indebtedness shall not include (x) any of the Existing Notes, (y) any Indebtedness of the Company to any of its Subsidiaries or other Affiliates, (z) any Indebtedness incurred for the purchase of goods or materials or for services obtained in the ordinary course of business (other than with the proceeds of revolving credit borrowings permitted hereby) and (aa) any Indebtedness that is incurred in violation of this Indenture.

"Subsidiary" means, with respect to any Person, any corporation, association or other business entity of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of such Person or a combination thereof.

"TIA" means the Trust Indenture Act of 1939 (15 U.S.C. Sections 77aaa-77bbb) as in effect on the date on which this Indenture is qualified under the TIA; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, "TIA" means, to the extent required by any such amendment, the Trust Indenture Act of 1939 as so amended.

"Trading Day" means a day on which trades may be made on The Nasdaq National Market.

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

"Voting Stock" of a Person means any class or classes of Capital Stock pursuant to which the holders of capital stock under ordinary circumstances have the power to vote in the election of the board of directors, managers or trustees thereof of such Person or other persons performing similar functions irrespective of whether or not, at the time Capital Stock of any other class or classes shall have, or might have, voting power by reason of the happening of any contingency.

Section 1.02. Other Definitions.

Term	Defined in Section
----	-----
"Authentication Order".....	2.02
"Change of Control"	6.08
"Change of Control Offer".....	6.08
"Change of Control Payment".....	6.08
"Change of Control Payment Date".....	6.08
"Change of Control Payment Notice"	6.08
"Conversion Price"	4.01
"Determination Date"	4.06
"Early Call Premium".....	3.08

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Term	Defined in Section
----	-----
"Event of Default".....	8.01
"Expiration Date"	4.06
"Expiration Date"	4.06
"Notice Date"	3.07
"Paying Agent"	2.03
"Provisional Redemption"	3.07
"Provisional Redemption Date"	3.07
"Provisional Redemption Notice"	3.07
"Provisional Redemption Notice Date"	3.07
"Provisional Redemption Price"	3.07
"Purchased Shares"	4.06
"Registrar".....	2.03
"tender offer"	4.06
"Triggering Distribution".....	4.06

Section 1.03 Incorporation by Reference of Trust Indenture Act.

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

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

"indenture securities" means the Notes;

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

"indenture to be qualified" means this Indenture;

"indenture trustee" or "institutional trustee" means the Trustee; and

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

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

Section 1.04. Rules of Construction.

Unless the context otherwise requires:

- (a) a term has the meaning assigned to it;
- (b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;
- (c) "or" is not exclusive;
- (d) words in the singular include the plural, and in the plural include the singular;

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- (e) provisions apply to successive events and transactions; and
- (f) references to sections of or rules under the Securities Act shall be deemed to include substitute, replacement of successor sections or rules adopted by the SEC from time to time.

ARTICLE 2. THE NOTES

Section 2.01. Form and Dating.

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

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

(b) Global Notes. Notes issued in global form shall be substantially in the form of Exhibit A attached hereto (including the Global Note Legend thereon and the "Schedule of Exchanges of Interests in the Global Note" attached thereto). Notes issued in definitive form shall be substantially in the form of Exhibit A attached hereto (but without the Global Note Legend thereon and without the "Schedule of Exchanges of Interests in the Global Note" attached thereto). Each Global Note shall represent such of the outstanding Notes as shall be specified therein and each shall provide that it shall represent the aggregate principal amount of outstanding Notes from time to time endorsed thereon and that the aggregate principal amount of outstanding Notes represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges and redemptions. Any endorsement of a Global Note to reflect the amount of any increase or decrease in the aggregate principal amount of outstanding Notes represented thereby shall be made by the Trustee or the Custodian, at the direction of the Trustee, in accordance with instructions given by the Holder thereof as required by Section 2.13 hereof.

Section 2.02. Execution and Authentication.

An Officer shall sign the Notes for the Company by manual or facsimile signature. The Company's seal shall be reproduced on the Notes and may be in facsimile form.

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

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

The Trustee shall, upon receipt of a written order of the Company signed by an Officer (an "Authentication Order"), authenticate Notes for original issue in the aggregate principal amount of up to \$88,962,500. The Authentication Order shall specify the amount of Notes to be authenticated, shall provide that all Notes will be represented by a Global Note and the date on which each original issue of Notes is to be authenticated. The aggregate principal amount of Notes outstanding at any time may not exceed \$88,962,500 except as provided in Section 2.08 hereof.

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

Section 2.03. Registrar, Paying Agent and Conversion Agent.

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

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

The Company initially appoints the Trustee to act as the Registrar, Paying Agent and Conversion Agent and to act as Custodian with respect to the

Section 2.04. Paying Agent to Hold Money in Trust.

Prior to 10:00 a.m., New York City time, on each due date of the principal of, premium, if any, or interest, on any Notes, the Company shall deposit with the Paying Agent a sum sufficient to pay such principal, premium, if any, or interest so becoming due. The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Holders or the Trustee all money held by the Paying Agent for the payment of principal, premium or interest on the Notes, and will notify the Trustee of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary) shall have no further liability for the money. If the Company or a Subsidiary acts as Paying Agent, it shall before 10:00 a.m. New York City time on each due date of the principal of, premium, if any, or interest, segregate and hold in a separate trust fund for the benefit of the Holders all money held by it as Paying Agent. Upon any bankruptcy or reorganization proceedings relating to the Company, the Trustee shall serve as Paying Agent for the Notes.

Section 2.05. Holder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of all Holders and shall otherwise comply with TIA Section 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least seven Business Days

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before each interest payment date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Holders of Notes and the Company shall otherwise comply with TIA Section 312(a).

Section 2.06. Transfer and Exchange.

(a) Subject to compliance with any applicable additional requirements contained in Section 2.12, when a Note is presented to a Registrar with a request to register a transfer thereof or to exchange such Note for an equal principal amount of Notes of other authorized denominations, the Registrar shall register the transfer or make the exchange as requested; provided, however, that every Note presented or surrendered for registration of transfer or exchange shall be duly endorsed or accompanied by an assignment form and, if applicable, a transfer certificate each in the form included in Exhibit A, and in form satisfactory to the Registrar duly executed by the Holder thereof or its attorney duly authorized in writing. To permit registration of transfers and exchanges, upon surrender of any Note for registration of transfer or exchange at an office or agency maintained pursuant to Section 2.03, the Company shall execute and the Trustee shall authenticate Notes of a like aggregate principal amount at the Registrar's request. Any exchange or registration of transfer shall be without charge, except that the Company or the Registrar may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto, and provided, that this sentence shall not apply to any exchange pursuant to Section 2.07, 2.10, 2.12(a), 3.06, 4.02 (last paragraph), 6.08(a)(10) or 11.05.

Neither the Company, any Registrar nor the Trustee shall be required to exchange or register a transfer of (a) any Notes for a period of 15 days next preceding any mailing of a notice of Notes to be redeemed, (b) any Notes or portions thereof selected or called for redemption (except, in the case of redemption of a Note in part, the portion not to be redeemed) or (c) any Notes or portions thereof in respect of which a Note has been delivered and not withdrawn by the Holder thereof (except, in the case of the purchase of a Note in part, the portion not to be purchased).

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

(b) Any Registrar appointed pursuant to Section 2.03 hereof shall provide to the Trustee such information as the Trustee may reasonably require in connection with the delivery by such Registrar of Notes upon registration of transfer or exchange of Notes.

(c) Each Holder of a Note agrees to indemnify the Company, the Registrar and the Trustee against any liability that may result from the registration of transfer, exchange or assignment of such Holder's Note in violation of any provision of this Indenture and/or applicable United States federal or state securities law.

The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on registration of transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Note (including any transfers between or among Participants or other beneficial owners of interests in any Global Note) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

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Section 2.07. Replacement Notes.

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

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

Section 2.08. Outstanding Notes.

The Notes outstanding at any time are all the Notes authenticated by

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

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

If the principal amount of any Note is considered paid under Section 6.01 hereof, it ceases to be outstanding and interest on it ceases to accrue.

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

Section 2.09. Treasury Notes.

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

Section 2.10. Temporary Notes.

Until certificates representing Notes are ready for delivery, the Company may prepare and execute, and the Trustee, upon receipt of an Authentication Order, shall authenticate and deliver temporary Notes. Temporary Notes shall be substantially in the form of definitive Notes but may have variations that the Company considers appropriate for temporary Notes and as shall be reasonably acceptable to the Trustee. Without unreasonable delay, the Company shall prepare and the Trustee, upon receipt of an Authentication Order, shall authenticate and deliver definitive Notes in exchange for temporary Notes.

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

Section 2.11. Cancellation.

The Company at any time may deliver Notes to the Trustee for cancellation. The Registrar, Paying Agent and Conversion Agent shall forward to the Trustee any Notes surrendered to them for registration of transfer, exchange, redemption, payment or conversion. The Trustee and no one else shall cancel all Notes surrendered for registration of transfer, exchange, redemption, payment, conversion, replacement or cancellation and shall destroy canceled Notes (subject to the record retention requirement of the Exchange Act), in accordance with their normal procedures. All Notes which are redeemed, purchased or otherwise acquired by the Company or any of its Subsidiaries prior to the maturity date shall be delivered to the Trustee for cancellation. Certification of the destruction of all canceled Notes shall be delivered to the Company. The Company may not hold or resell such Notes or issue new Notes to replace Notes that it has purchased or otherwise acquired or that have been delivered to the Trustee for cancellation.

Section 2.12. Additional Transfer and Exchange Requirements.

(a) Transfer And Exchange Of Global Notes.

(1) Definitive Notes shall be issued in exchange for interests in the Global Notes only if (x) the Depositary notifies the Company that it is unwilling or unable to continue as depositary for the Global Notes or if it at any time ceases to be a "clearing agency" registered under the Exchange Act, if so required by applicable law or regulation and a successor depositary is not appointed by the Company within 90 days, or (y) an Event of Default has occurred and is continuing. In either case, the Company shall execute, and the Trustee shall, upon receipt of an Authentication Order (which the Company agrees to deliver promptly), authenticate and deliver Definitive Notes in an aggregate principal amount equal to the principal amount of such Global Notes in exchange therefor. Definitive Notes issued in exchange for beneficial interests in Global Notes shall be registered in such names and shall be in such authorized denominations as the Depositary, pursuant to instructions from its direct or Indirect Participants or otherwise, shall instruct the Trustee. The Trustee shall deliver or cause to be delivered such Definitive Notes to the persons in whose names such Notes are so registered. Such exchange shall be effected in accordance with the Applicable Procedures.

(2) Notwithstanding any other provisions of this Indenture other than the provisions set forth in Section 2.12(a)(1), a Global Note may not be transferred as a whole except by the Depositary to a nominee of the Depositary or by a nominee of the Depositary to the Depositary or another nominee of the Depositary or by the Depositary or any such nominee to a successor Depositary or a nominee of such successor Depositary.

(b) Transfer And Exchange Of Definitive Notes. In the event that Definitive Notes are issued in exchange for beneficial interests in Global Notes in accordance with Section 2.12(a)(1) of this Indenture, on or after such event when Definitive Notes are presented by a Holder to a Registrar with a request:

(x) to register the transfer of the Definitive Notes to a person who will take delivery thereof in the form of Definitive Notes only; or

(y) to exchange such Definitive Notes for an equal principal amount of Definitive Notes of other authorized denominations,

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such Registrar shall register the transfer or make the exchange as requested; provided, however, that the Definitive Notes presented or surrendered for register of transfer or exchange: shall be duly endorsed or accompanied by a written instrument of transfer in accordance with the proviso to the first paragraph of Section 2.06(a).

(c) Transfers of Definitive Notes for Beneficial Interest in Global Notes. In the event that Definitive Notes are issued in exchange for beneficial interests in Global Notes and, thereafter, the events or conditions specified in Section 2.12(a)(1) which required such exchange shall cease to exist, the Company shall mail notice to the Trustee and to the Holders stating that Holders may exchange Definitive Notes for interests in Global Notes by complying with the procedures set forth in this Indenture and briefly describing such procedures and the events or circumstances requiring that such notice be given. Thereafter, if Definitive Notes are presented by a Holder to a Registrar with a request:

(x) to register the transfer of such Definitive Notes to a person who will take delivery thereof in the form of a beneficial interest in a Global Note; or

(y) to exchange such Definitive Notes for an equal principal amount of beneficial interests in a Global Note, which beneficial interests will be owned by the Holder transferring such Definitive Notes,

the Registrar shall register the transfer or make the exchange as requested by canceling such Definitive Note and causing, or directing the Custodian to cause, the aggregate principal amount of the applicable Global Note to be increased accordingly and, if no such Global Note is then outstanding, the Company shall issue and the Trustee, upon receipt of an Authentication Order, shall authenticate and deliver a new Global Note; provided, however, that the Definitive Notes presented or surrendered for registration of transfer or exchange:

(1) shall be duly endorsed or accompanied by a written instrument of transfer in accordance with the proviso to Section 2.06; and

(2) in the case of a Definitive Note to be transferred or exchanged for a beneficial interest in a Global Note, such request need not be accompanied by any additional information or documents.

(d) Transfers to the Company. Nothing in this Indenture or in the Notes shall prohibit the sale or other transfer of any Notes (including beneficial interests in Global Notes) to the Company or any of its Subsidiaries, which Notes shall thereupon be cancelled in accordance with Section 2.11.

Section 2.13. CUSIP Numbers.

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

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Section 2.14. Defaulted Interest.

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

ARTICLE 3. REDEMPTION AND PREPAYMENT

Section 3.01. Notices to Trustee.

If the Company elects to redeem Notes pursuant to the provisional or optional redemption provisions of Section 3.07 hereof, it shall furnish to the Trustee, at least 20 days but not more than 60 days before a redemption date, an Officers' Certificate setting forth (i) the clause of this Indenture pursuant to which the redemption shall occur, (ii) the redemption date, (iii) the principal amount of Notes to be redeemed and (iv) the redemption price.

Section 3.02. Selection of Notes to Be Redeemed.

If less than all of the Notes are to be redeemed [or purchased] in an offer to purchase at any time, the Trustee shall select the Notes to be redeemed [or purchased] among the Holders of the Notes in compliance with the requirements of the principal national securities exchange, if any, on which the Notes are listed or, if the Notes are not so listed, on a pro rata basis, by lot or in accordance with any other method the Trustee considers fair and appropriate. In the event of partial redemption by lot, the particular Notes to be redeemed shall be selected, unless otherwise provided herein, not less than 20 nor more than 60 days prior to the redemption date by the Trustee from the outstanding Notes not previously called for redemption.

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

Section 3.03. Notice of Redemption.

At least 20 days but not more than 60 days before a redemption date, the Company shall mail or cause to be mailed, by first class mail, a notice of redemption to each Holder whose Notes are to be redeemed at its registered address.

The notice shall identify the Notes to be redeemed and shall state:

- (a) the redemption date;
- (b) the redemption price;
- (c) the then current Conversion Price;
- (d) if any Note is being redeemed in part, the portion of the principal amount of such Note to be redeemed and that, after the redemption date upon surrender of such Note, a new Note or Notes in principal amount equal to the unredeemed portion shall be issued upon cancellation of the original Note;
- (e) the name and address of the Paying Agent and Conversion Agent;
- (f) that Notes called for redemption must be surrendered to the Paying Agent to collect the redemption price;
- (g) that Notes called for redemption must be presented and surrendered to a Paying Agent to collect the Redemption Price;
- (h) that Holders who wish to convert Notes must surrender such Notes for conversion no later than the close of business on the Business Day immediately preceding the Redemption Date and must satisfy the other requirements in paragraph 8 of the Notes;
- (i) that, unless the Company defaults in making such redemption payment, interest on Notes called for redemption ceases to accrue on and after the redemption date;
- (j) the paragraph of the Notes and/or Section of this Indenture pursuant to which the Notes called for redemption are being redeemed; and
- (k) that no representation is made as to the correctness or accuracy of the CUSIP number, if any, listed in such notice or printed on the Notes.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at its expense; provided, however, that the Company shall have delivered to the Trustee, at least 40 days prior to the redemption date, an Officers' Certificate requesting that the Trustee give such notice and setting forth the information to be stated in such notice as provided in the preceding paragraph.

Section 3.04. Effect of Notice of Redemption.

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

Section 3.05. Deposit of Redemption Price.

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

If the Company complies with the provisions of the preceding paragraph, on and after the redemption date, interest shall cease to accrue on the Notes or the portions of Notes called for redemption.

If a Note is redeemed on or after an interest record date but on or prior to the related interest payment date, then any accrued and unpaid interest shall be paid to the Person in whose name such Note was registered at the close of business on such record date. If any Note called for redemption shall not be so paid upon surrender for redemption because of the failure of the Company to comply with the preceding paragraph, interest shall be paid on the unpaid principal, from the redemption date until such principal is paid, and to the extent lawful on any interest not paid on such unpaid principal, in each case at the rate provided in the Notes and in Section 6.01 hereof.

Section 3.06. Notes Redeemed in Part.

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

Section 3.07. Provisional Redemption.

(a) The Notes may be redeemed at the election of the Company, as a whole or in part from time to time, at any time (a "Provisional Redemption"), upon at least 20 and not more than 60 days' notice by mail to the Holders of the Notes (a "Provisional Redemption Notice") at a redemption price equal to \$1,000 per \$1,000 principal amount of the Notes redeemed plus accrued and unpaid interest, if any (such amount, together with the Early Call Premium described below, the "Provisional Redemption Price"), to but excluding the date of redemption (the "Provisional Redemption Date") if the Closing Sale Price of the Common Stock has exceeded 150% of the Conversion Price for at least 20 Trading Days within a period of any 30 consecutive Trading Days ending on the Trading Day prior to the date of mailing of the notice of Provisional Redemption (the "Provisional Redemption Notice Date").

(b) Except as set forth in clause (a) of this Section 3.07, the Company shall not have the option to redeem the Notes pursuant to this Section 3.07.

(c) Any redemption pursuant to this Section 3.07 shall be made pursuant to the provisions of Section 3.01 through 3.06 hereof.

Section 3.08. Early Call Premium.

If the Company delivers a Provisional Redemption Notice pursuant to Section 3.07(a) on or prior to May 15, 2007, the Company shall make an additional payment, at its option, in cash or Common Stock or a combination of cash and Common Stock (the "Early Call Premium") with respect to the Notes called for redemption to holders on the Provisional Redemption Notice Date in an amount equal to \$150.00 per \$1,000 principal amount of the Notes, less the amount of any interest actually paid (including, if the Provisional Redemption Date occurs after a record date but before an interest payment date, any interest paid or to be paid in connection with such interest payment date) on

such Notes prior to the Provisional Redemption Date. Payments made in Common Stock will be valued at 95% of the average closing sales prices of Common Stock for the five Trading Days ending on and including the third day prior to the Provisional Redemption Date. The Company shall pay the Early Call Premium on all Notes called for Provisional Redemption, including those Notes converted into Common Stock between the Provisional Redemption Notice Date and the Provisional Redemption Date. The Company shall specify in the Provisional Redemption Notice whether the Early Call Premium will be paid in cash, common stock or any combination thereof; provided, however, that in no event will the Company issue common stock to the extent such issuance would require shareholder approval, regardless of whether the amount of stock specified in the Provisional Redemption Notice would be reduced as a result.

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Section 3.09. Mandatory Redemption.

The Company shall not be required to make mandatory redemption payments with respect to the Notes.

ARTICLE 4. Conversion

Section 4.01. Conversion Privilege.

A Holder of a Note may convert it into fully paid and nonassessable shares of Common Stock at any time prior to maturity at the Conversion Price then in effect, except that, with respect to any Note called for redemption or submitted or presented for purchase pursuant to Section 6.08, such conversion right shall terminate at the close of business on the Business Day immediately preceding the Redemption Date or Change of Control Payment Date, as the case may be (unless the Company shall default in making the redemption payment or Change of Control Payment when it becomes due, in which case the conversion right shall terminate on the date such default is cured and such Note is redeemed or purchased, as the case may be). The number of shares of Common Stock issuable upon conversion of a Note is determined by dividing the principal amount of such Note by the conversion price in effect on the Conversion Date (the "Conversion Price").

The initial Conversion Price is stated in Section 8 of the Notes and is subject to adjustment as provided in this Article 4.

A Holder may convert a portion of a Note equal to any integral multiple of \$1,000. Provisions of this Indenture that apply to conversion of all of a Note also apply to conversion of a portion of it.

A Note in respect of which a Holder has delivered a Change of Control Payment Notice pursuant to Section 6.08 exercising the option of such Holder to require the Company to purchase such Note may be converted only if such Change of Control Payment Notice is withdrawn by a written notice of withdrawal delivered to a Paying Agent prior to the close of business on the Business Day immediately preceding the Change of Control Payment Date in accordance with Section 6.08.

A Holder of Notes is not entitled to any rights of a holder of Common Stock until such Holder has converted its Notes to Common Stock, and only to the extent such Notes are deemed to have been converted into Common Stock pursuant to this Article 4.

Section 4.02. Conversion Procedure.

To convert a Note, a Holder must satisfy the requirements in Section 8 of the Notes. The date on which the Holder satisfies all of those requirements is the conversion date (the "Conversion Date"). As soon as practicable after the Conversion Date, the Company shall deliver to the Holder through the Conversion Agent a certificate for the number of whole shares of Common Stock issuable upon the conversion and a check for any fractional share determined pursuant to Section 4.03 hereof. The Person in whose name the certificate is registered shall become the stockholder of record on the Conversion Date and, as of such date, such Person's rights as a Holder shall cease; provided, however, that no surrender of a Note on any date when the stock transfer books of the Company shall be closed shall be effective to constitute the Person entitled to receive the shares of Common Stock upon such conversion as the stockholder of record of such shares of Common Stock on such date, but such surrender shall be effective to constitute the Person entitled to receive such shares of Common Stock as the stockholder of record thereof for all purposes at the close of business on the next succeeding day on which such stock transfer

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books are open; provided further, however, that such conversion shall be at the Conversion Price in effect on the date that such Note shall have been surrendered for conversion, as if the stock transfer books of the Company had not been closed.

No payment or other adjustment shall be made for accrued interest or dividends or distributions on any Common Stock issued upon conversion of the Notes. If any Notes are converted during any period after any record date for the payment of an installment of interest but before the next interest payment date, interest for such notes will be paid on the next interest payment date, notwithstanding such conversion, to the Holders of such Notes. Any Notes that are, however, delivered to the Company for conversion after any record date but before the next interest payment date must, except as described in the next sentence, be accompanied by a payment equal to the interest payable on such interest payment date on the principal amount of Notes being converted. The payment to the Company described in the preceding sentence shall not be required if, during that period between a record date and the next interest payment date, a conversion occurs on or after the date that the Company has issued a redemption notice or Change of Control Offer and prior to the date of redemption stated in such notice or the Change on Control Payment Date, as the case may be. No fractional shares will be issued upon conversion, but a cash adjustment will be made for any fractional shares.

If a Holder converts more than one Note at the same time, the number of whole shares of Common Stock issuable upon the conversion shall be based on the total principal amount of Notes converted.

Upon surrender of a Note that is converted in part, the Trustee shall authenticate for the Holder a new Note equal in principal amount to the unconverted portion of the Note surrendered.

Section 4.03. Fractional Shares.

The Company will not issue fractional shares of Common Stock upon conversion of a Note. In lieu thereof, the Company will pay an amount in cash based upon the Closing Sale Price of the Common Stock on the last trading day

prior to the date of conversion.

Section 4.04. Taxes on Conversion.

The issuance of certificates for shares of Common Stock upon the conversion of any Note shall be made without charge to the converting Holder for such certificates or for any tax in respect of the issuance of such certificates, and such certificates shall be issued in the respective names of, or in such names as may be directed by, the Holder or Holders of the converted Note; provided, however, that in the event that certificates for shares of Common Stock are to be issued in a name other than the name of the Holder of the Note converted, such Note, when surrendered for conversion, shall be accompanied by an instrument of transfer, in form satisfactory to the Company, duly executed by the registered holder thereof or his duly authorized attorney; and provided further, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any such certificates in a name other than that of the Holder of the converted Note, and the Company shall not be required to issue or deliver such certificates unless or until the Person or Persons requesting the issuance thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not applicable.

Section 4.05. Company to Provide Stock.

The Company shall at all times reserve and keep available, free from preemptive rights, out of its authorized but unissued Common Stock, solely for the purpose of issuance upon conversion of Notes as

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herein provided, a sufficient number of shares of Common Stock to permit the conversion of all outstanding Notes for shares of Common Stock. All shares of Common Stock which may be issued upon conversion of the Notes shall be duly authorized, validly issued, fully paid and nonassessable and free of preemptive rights and free of any lien or adverse claim when so issued.

The Company will endeavor promptly to comply with all federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Notes, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or on The Nasdaq National Market or other over-the-counter market or such other market on which the Common Stock is then listed or quoted; provided, however, that if rules of such automated quotation system or exchange permit the Company to defer the listing of such Common Stock until the first conversion of the Notes into Common Stock in accordance with the provisions of this Indenture, the Company covenants to list such Common Stock issuable upon conversion of the Notes in accordance with the requirements of such automated quotation system or exchange at such time.

Section 4.06. Adjustment of Conversion Price.

The Conversion Price shall be subject to adjustment from time to time as follows:

(a) Stock split and combinations. In case the Company, at any time or from time to time after the issuance date of the Notes (a) subdivides or splits the outstanding shares of its Common Stock, (b) combines or reclassifies the outstanding shares of its Common Stock into a smaller number of shares or (c) issues by reclassification of the shares of its Common Stock any shares of its capital stock, then the Conversion Price in effect immediately prior to that event or the record date for that event, whichever is earlier, will be adjusted so that the holder of any Notes thereafter surrendered for conversion will be entitled to receive the number of shares of the Company's Common Stock or of its other securities which the Holder would have owned or have been entitled to receive after the occurrence of any of the events described above, had those Notes been surrendered for conversion immediately before the occurrence of that event or the record date for that event, whichever is earlier.

(b) Stock Dividends in Common Stock. In case the Company, at any time or from time to time after the issuance date of the Notes, pays a dividend or makes a distribution in shares of its Common Stock on any class of its capital stock other than dividends or distributions of shares of Common Stock or other securities with respect to which adjustments are provided in paragraph (a) above or with respect to payments of interest or dividend obligations with respect to a particular series of capital stock in accordance with the terms of such capital stock, the Conversion Price will be adjusted so that the Holder of each Note will be entitled to receive, upon conversion of that Note, the number of shares of the Company's Common Stock determined by multiplying (a) the Conversion Price by (b) a fraction, the numerator of which will be the number of shares of Common Stock outstanding and the denominator of which will be the sum of that number of shares and the total number of shares issued in that dividend or distribution;

(c) Issuance of rights or warrants. In case the Company issues to all holders of its Common Stock rights or warrants entitling those holders for a period of not more than 60 days to subscribe for or purchase its Common Stock or securities convertible into its Common Stock at a price per share or conversion price per share less than the Current Market Price, the Conversion Price in effect immediately before the close of business on the record date fixed for determination of shareholders entitled to receive those rights or warrants will be reduced by multiplying the Conversion Price by a fraction, the numerator of which is the sum of the number of shares of the Company's Common Stock outstanding at the close of business on that record date and the number of shares of Common Stock that the aggregate offering price of the total number of shares of the Company's Common Stock so offered for subscription or purchase

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would purchase at the Current Market Price and the denominator of which is the sum of the number of shares of Common Stock outstanding at the close of business on that record date and the number of additional shares of the Company's Common Stock so offered for subscription or purchase. For purposes of this paragraph (c), the issuance of rights or warrants to subscribe for or purchase securities convertible into shares of the Company's Common Stock will be deemed to be the issuance of rights or warrants to purchase shares of the Company's Common Stock into which those securities are convertible at an aggregate offering price equal to the sum of the aggregate offering price of those securities and the minimum aggregate amount, if any, payable upon conversion of those securities into shares of the Company's Common Stock. This adjustment will be made successively whenever any such event occurs.

(d) Distribution of indebtedness, securities or assets. In case the Company shall distribute to all or substantially all holders of its Common Stock any shares of capital stock of the Company (other than Common Stock), evidences of indebtedness or other non-cash assets (including securities of any person other than the Company but excluding (1) dividends or distributions paid

exclusively in cash or (2) dividends or distributions referred to in subsection (b) of this Section 4.06), or shall distribute to all or substantially all holders of its Common Stock rights or warrants to subscribe for or purchase any of its securities (excluding those rights and warrants referred to in subsection (c) of this Section 4.06 and also excluding the distribution of rights to all holders of Common Stock pursuant to the adoption of a stockholders rights plan or the detachment of such rights under the terms of such stockholder rights plan), then in each such case the Conversion Price shall be adjusted so that the same shall equal the price determined by multiplying the current Conversion Price by a fraction of which the numerator shall be the current market price per share (as defined in subsection (g) of this Section 4.06) of the Common Stock on the record date mentioned below less the fair market value on such record date (as determined by the Board of Directors, whose determination shall be conclusive evidence of such fair market value and which shall be evidenced by an Officers' Certificate delivered to the Trustee) of the portion of the capital stock, evidences of indebtedness or other non-cash assets so distributed or of such rights or warrants applicable to one share of Common Stock (determined on the basis of the number of shares of Common Stock outstanding on the record date), and of which the denominator shall be the current market price per share (as defined in subsection (g) of this Section 4.06) of the Common Stock on such record date. Such adjustment shall be made successively whenever any such distribution is made and shall become effective immediately after the record date for the determination of shareholders entitled to receive such distribution.

(e) In case the Company shall, by dividend or otherwise, at any time distribute (a "Triggering Distribution") to all or substantially all holders of its Common Stock cash in an aggregate amount that, together with the aggregate amount of (A) any cash and the fair market value (as determined by the Board of Directors, whose determination shall be conclusive evidence thereof and which shall be evidenced by an Officers' Certificate delivered to the Trustee) of any other consideration payable in respect of any tender offer by the Company or a Subsidiary of the Company for Common Stock consummated within the 12 months preceding the date of payment of the Triggering Distribution and in respect of which no Conversion Price adjustment pursuant to this Section 4.06 has been made and (B) all other cash distributions to all or substantially all holders of its Common Stock made within the 12 months preceding the date of payment of the Triggering Distribution and in respect of which no Conversion Price adjustment pursuant to this Section 4.06 has been made, exceeds an amount equal to 10.0% of the product of the current market price per share of Common Stock (as determined in accordance with subsection (g) of this Section 4.06) on the Business Day (the "Determination Date") immediately preceding the day on which such Triggering Distribution is declared by the Company multiplied by the number of shares of Common Stock outstanding on the Determination Date (excluding shares held in the treasury of the Company), the Conversion Price shall be reduced so that the same shall equal the price determined by multiplying such Conversion Price in effect immediately prior to the Determination Date by a fraction of which the numerator shall be the current market price per share of the Common Stock (as determined in

accordance with subsection (g) of this Section 4.06) on the Determination Date less the sum of the aggregate amount of cash and the aggregate fair market value (determined as aforesaid in this Section 4.06(d)) of any such other consideration so distributed, paid or payable within such 12 months (including, without limitation, the Triggering Distribution) applicable to one share of Common Stock (determined on the basis of the number of shares of Common Stock outstanding on the Determination Date) and the denominator shall be such current market price per share of the Common Stock (as determined in accordance with subsection (g) of this Section 4.06) on the Determination Date, such reduction to become effective immediately prior to the opening of business on the day following the date on which the Triggering Distribution is paid.

(f) In case any tender offer made by the Company or any of its Subsidiaries for Common Stock shall expire and such tender offer (as amended upon the expiration thereof) shall involve the payment of aggregate consideration in an amount (determined as the sum of the aggregate amount of cash consideration and the aggregate fair market value (as determined by the Board of Directors, whose determination shall be conclusive evidence thereof and which shall be evidenced by an Officers' Certificate delivered to the Trustee) of any other consideration) that, together with the aggregate amount of (A) any cash and the fair market value (as determined by the Board of Directors, whose determination shall be conclusive evidence thereof and which shall be evidenced by an Officers' Certificate delivered to the Trustee) of any other consideration payable in respect of any other tender offers by the Company or any Subsidiary of the Company for Common Stock consummated within the 12 months preceding the date of the Expiration Date (as defined below) and in respect of which no Conversion Price adjustment pursuant to this Section 4.06 has been made and (B) all cash distributions to all or substantially all holders of its Common Stock made within the 12 months preceding the Expiration Date and in respect of which no Conversion Price adjustment pursuant to this Section 4.06 has been made, exceeds an amount equal to 10.0% of the product of the current market price per share of Common Stock (as determined in accordance with subsection (g) of this Section 4.06) as of the last date (the "Expiration Date") tenders could have been made pursuant to such tender offer (as it may be amended) (the last time at which such tenders could have been made on the Expiration Date is hereinafter sometimes called the "Expiration Time") multiplied by the number of shares of Common Stock outstanding (including tendered shares but excluding any shares held in the treasury of the Company) at the Expiration Time, then, immediately prior to the opening of business on the day after the Expiration Date, the Conversion Price shall be reduced so that the same shall equal the price determined by multiplying the Conversion Price in effect immediately prior to close of business on the Expiration Date by a fraction of which the numerator shall be the product of the number of shares of Common Stock outstanding (including tendered shares but excluding any shares held in the treasury of the Company) at the Expiration Time multiplied by the current market price per share of the Common Stock (as determined in accordance with subsection (g) of this Section 4.06) on the Trading Day next succeeding the Expiration Date and the denominator shall be the sum of (x) the aggregate consideration (determined as aforesaid) payable to stockholders based on the acceptance (up to any maximum specified in the terms of the tender offer) of all shares validly tendered and not withdrawn as of the Expiration Time (the shares deemed so accepted, up to any such maximum, being referred to as the "Purchased Shares") and (y) the product of the number of shares of Common Stock outstanding (less any Purchased Shares and excluding any shares held in the treasury of the Company) at the Expiration Time and the current market price per share of Common Stock (as determined in accordance with subsection (g) of this Section 4.06) on the Trading Day next succeeding the Expiration Date, such reduction to become effective immediately prior to the opening of business on the day following the Expiration Date. In the event that the Company is obligated to purchase shares pursuant to any such tender offer, but the Company is permanently prevented by applicable law from effecting any or all such purchases or any or all such purchases are rescinded, the Conversion Price shall again be adjusted to be the Conversion Price which would have been in effect based upon the number of shares actually purchased. If the application of this Section 4.06(f) to any

tender offer would result in an increase in the Conversion Price, no adjustment shall be made for such tender offer under this Section 4.06(f).

For purposes of this Section 4.06(e), the term "tender offer" shall mean and include both tender offers and exchange offers, all references to "purchases" of shares in tender offers (and all similar references) shall mean and include both the purchase of shares in tender offers and the acquisition of shares pursuant to exchange offers, and all references to "tendered shares" (and all similar references) shall mean and include shares tendered in both tender offers and exchange offers.

(g) For the purpose of any computation under subsections (b), (c), (d) and (e) of this Section 4.06, the current market price per share of Common Stock on any date shall be deemed to be the average of the daily Closing Sale Prices for the 30 consecutive Trading Days commencing 45 Trading Days before (i) the Determination Date or the Expiration Date, as the case may be, with respect to distributions or tender offers under subsections (d) and (e) of this Section 4.06 or (ii) the record date with respect to distributions, issuances or other events requiring such computation under subsection (c), (d) or (e) of this Section 4.06. If no such prices are available, the current market price per share shall be the fair value of share of Common Stock as determined by the Board of Directors (which shall be evidenced by an Officers' Certificate delivered to the Trustee).

(h) If any distribution in respect of which an adjustment to the Conversion Price is required to be made as of the record date or Determination Date or Expiration Date therefor is not thereafter made or paid by the Company for any reason, the Conversion Price shall be readjusted to the Conversion Price which would then be in effect if such record date had not been fixed or such effective date or Determination Date or Expiration Date had not occurred.

Section 4.07. No Adjustment.

No adjustment in the Conversion Price shall be required until cumulative adjustments amount to 1% or more of the Conversion Price as last adjusted; provided, however, that any adjustments which by reason of this Section 4.07 are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Article 4 shall be made to the nearest cent or to the nearest one-hundredth of a share, as the case may be. No adjustment need be made for rights to purchase Common Stock pursuant to a Company plan for reinvestment of dividends or interest. No adjustment need be made for a change in the par value or no par value of the Common Stock.

Section 4.08. Other Adjustments.

(a) In the event that, as a result of an adjustment made pursuant to Section 4.06 hereof, the Holder of any Note thereafter surrendered for conversion shall become entitled to receive any shares of Capital Stock of the Company other than shares of its Common Stock, thereafter the Conversion Price of such other shares so receivable upon conversion of any Note shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to Common Stock contained in this Article 4.

(b) In the event that shares of Common Stock are not delivered after the expiration of any of the rights or warrants referred to in Section 4.06(c) hereof, the Conversion Price shall be readjusted to the Conversion Price which would otherwise be in effect had the adjustment made upon the issuance of such rights or warrants been made on the basis of delivery of only the number of shares of Common Stock actually delivered.

Section 4.09. Adjustments for Tax Purposes.

The Company may make such reductions in the Conversion Price, in addition to those required by Section 4.06 hereof, as it determines in its discretion to be advisable in order that any stock dividend, subdivision of shares, distribution or rights to purchase stock or securities or distribution of securities convertible into or exchangeable for stock made by the Company to its stockholders will not be taxable to the recipients thereof.

Section 4.10. Notice of Adjustment.

Whenever the Conversion Price is adjusted, the Company shall promptly mail to Holders at the addresses appearing on the Registrar's books a notice of the adjustment and file with the Trustee an Officers' Certificate briefly stating the facts requiring the adjustment and the manner of computing it. The certificate shall be conclusive evidence of the correctness of such adjustment. Unless and until a Trust Officer of the Trustee shall receive written notice of an adjustment of the Conversion Price, the Trustee may assume without inquiry that the Conversion Price has not been adjusted and that the last Conversion Price of which it has knowledge remains in effect.

Section 4.11. Notice of Certain Transactions.

In the event that:

(1) the Company takes any action which would require an adjustment in the Conversion Price;

(2) the Company takes any action that would require a supplemental indenture pursuant to Section 4.12; or

(3) there is a dissolution or liquidation of the Company;

the Company shall mail to Holders at the addresses appearing on the Registrar's books and the Trustee a notice stating the proposed record or effective date, as the case may be, to permit a Holder of a Note to convert such Note into shares of Common Stock prior to the record date for or the effective date of the transaction in order to receive the rights, warrants, securities or assets which a holder of shares of Common Stock on that date may receive. The Company shall mail the notice at least 15 days before such date; however, failure to mail such notice or any defect therein shall not affect the validity of any transaction referred to in clause (1), (2) or (3) of this Section 4.11.

Section 4.12. Effect of Reclassifications, Consolidations, Mergers or Sales on Conversion Privilege.

If any of the following shall occur, namely: (i) any reclassification or change of outstanding shares of Common Stock issuable upon conversion of Notes (other than a change in par value, or from par value to no par value, or

from no par value to par value, or as a result of a subdivision or combination or as a result of a reincorporation of the Company in another jurisdiction), (ii) any consolidation or merger to which the Company is a party other than a merger in which the Company is the continuing corporation and which does not result in any reclassification of, or change (other than a change in name, or par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) in, outstanding shares of Common Stock or (iii) any sale or conveyance of all or substantially all of the property or business of the Company as an entirety, then the Company, or such successor or purchasing corporation, as the case may be, shall, as a condition precedent to such reclassification, change, consolidation, merger, sale or conveyance, execute and deliver to the Trustee a

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supplemental indenture in form reasonably satisfactory to the Trustee providing that the Holder of each Note then outstanding shall have the right to convert such Note into the kind and amount of shares of stock and other securities and property (including cash) receivable upon such reclassification, change, consolidation, merger, sale or conveyance by a Holder of the number of shares of Common Stock deliverable upon conversion of such Note immediately prior to such reclassification, change, consolidation, merger, sale or conveyance. In the event that the shares of Common Stock are exchanged or substituted for other securities in connection with any such reclassification, change, consolidation, merger, sale or conveyance, such supplemental indenture shall provide for adjustments of the Conversion Price which shall be as nearly equivalent as may be practicable to the adjustments of the Conversion Price provided for in this Article 4. If, in the case of any such consolidation, merger, sale or conveyance, the stock or other securities and property (including cash) receivable thereupon by a Holder of Common Stock includes shares of stock or other securities and property of a corporation other than the successor or purchasing corporation, as the case may be, in such consolidation, merger, sale or conveyance, then such supplemental indenture shall also be executed by such other corporation and shall contain such additional provisions to protect the interests of the Holders of the Notes as the Board of Directors of the Company shall reasonably consider necessary by reason of the foregoing. The provision of this Section 4.12 shall similarly apply to successive consolidations, mergers, sales or conveyances.

In the event the Company shall execute a supplemental indenture pursuant to this Section 4.12, the Company shall promptly file with the Trustee an Officers' Certificate briefly stating the reasons therefor, the kind or amount of shares of stock or securities or property (including cash) receivable by Holders of the Notes upon the conversion of their Notes after any such reclassification, change, consolidation, merger, sale or conveyance and any adjustment to be made with respect thereto.

Section 4.13. Trustee's Disclaimer.

The Trustee has no duty to determine when an adjustment under this Article 4 should be made, how it should be made or what such adjustment should be, but may accept as conclusive evidence of the correctness of any such adjustment, and shall be protected in relying upon, the Officers' Certificate with respect thereto which the Company is obligated to file with the Trustee pursuant to Section 4.10 hereof. The Trustee makes no representation as to the validity or value of any securities or assets issued upon conversion of Notes, and the Trustee shall not be responsible for the Company's failure to comply with any provisions of this Article 4.

The Trustee shall not be under any responsibility to determine the correctness of any provisions contained in any supplemental indenture executed pursuant to Section 4.12, but may accept as conclusive evidence of the correctness thereof, and shall be protected in relying upon, the Officers' Certificate with respect thereto which the Company is obligated to file with the Trustee pursuant to Section 4.12 hereof.

Section 4.14. Voluntary Reduction.

The Company from time to time may reduce the Conversion Price by any amount for any period of time if the period is at least 20 days and if the reduction is irrevocable during the period if the Board of Directors determines that such reduction would be in the best interest of the Company and the Company provides 15 days prior notice of any reduction in the Conversion Price; provided, however, that in no event may the Company reduce the Conversion Price to be less than the par value of a share of Common Stock.

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ARTICLE 5. SUBORDINATION

Section 5.01. Agreement to Subordinate.

(a) The Company agrees, and each Holder by accepting a Note agrees, that the Indebtedness evidenced by the Notes (including the principal of, premium, if any, and interest on all the Notes and the redemption price and Early Call Premium, if any, with respect to any Notes being called for redemption and the Change of Control Payment with respect to all Notes subject to purchase pursuant to Section 6.08 hereof) is subordinated in right of payment, to the extent and in the manner provided in this Article 5, to the prior payment in full of all Senior Indebtedness (whether outstanding on the date hereof or hereafter created, incurred, assumed or guaranteed), and that the subordination is for the benefit of the holders of Senior Indebtedness. No provision of this Section 5 shall prevent the occurrence of any Default or Event of Default.

(b) Nothing contained in this Indenture or in the definition of Senior Indebtedness under this Indenture is meant or shall be construed to provide that the Notes issued under this Indenture are not senior to the Existing Notes.

Section 5.02. Liquidation; Dissolution; Bankruptcy.

Upon any distribution to creditors of the Company in a liquidation or dissolution of the Company or in a bankruptcy, reorganization, insolvency, receivership or similar proceeding relating to the Company or its property, in an assignment for the benefit of creditors or any marshaling of the Company's assets and liabilities:

(i) holders of Senior Indebtedness shall be entitled to receive payment in full of all Obligations due in respect of such Senior Indebtedness (including interest after the commencement of any such proceeding at the rate specified in the applicable Senior Indebtedness) before Holders of the Notes shall be entitled to receive any payment with respect to the Notes (except that Holders may receive Permitted Junior Securities); and

(ii) until all Obligations with respect to Senior Indebtedness (as provided in clause (i) above) are paid in full, any distribution to which Holders would be entitled but for this Article 5 shall be made to holders of Senior Indebtedness (except that Holders of Notes may receive Permitted Junior Securities), as their interests may appear.

Section 5.03. Default on Designated Senior Indebtedness.

(a) The Company may not make any payment or distribution to the Trustee or any Holder in respect of Obligations with respect to the Notes and may not acquire from the Trustee or any Holder any Notes for cash or property (other than Permitted Junior Securities) until all principal and other Obligations with respect to the Senior Indebtedness have been paid in full if:

(i) a default in the payment of any principal or other Obligations with respect to Designated Senior Indebtedness occurs and is continuing beyond any applicable grace period in the agreement, indenture or other document governing such Designated Senior Indebtedness; or

(ii) a default, other than a payment default, on Designated Senior Indebtedness occurs and is continuing that then permits holders of the Designated Senior Indebtedness to accelerate its maturity and the Trustee receives a notice of the default (a "Payment Blockage

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Notice") from a Person who may give it pursuant to Section 5.12 hereof. If the Trustee receives any such Payment Blockage Notice, no subsequent Payment Blockage Notice shall be effective for purposes of this Section unless and until (A) at least 360 days shall have elapsed since the issuance of the immediately prior Payment Blockage Notice and (B) all scheduled payments of principal, premium, if any, and interest on the Notes that have come due have been paid in full in cash. No nonpayment default that existed or was continuing on the date of delivery of any Payment Blockage Notice to the Trustee shall be, or be made, the basis for a subsequent Payment Blockage Notice unless such default shall have been waived for a period of not less than 180 days.

(b) The Company may and shall resume payments on and distributions in respect of the Notes and may acquire them upon the earlier of:

(i) the date upon which the Trustee receives notice from the Company that the default is cured or waived or ceases to exist, or

(ii) in the case of a default referred to in clause (ii) of Section 5.03(a) hereof, 179 days pass after the Payment Blockage Notice is received if the maturity of such Designated Senior Indebtedness has not been accelerated,

if this Article 5 otherwise permits the payment, distribution or acquisition at the time of such payment or acquisition.

Section 5.04. Acceleration of Notes.

If payment of the Notes is accelerated because of an Event of Default, the Company shall promptly notify holders of Senior Indebtedness of the acceleration.

Section 5.05. When Distribution Must Be Paid Over.

In the event that the Trustee or any Holder receives any payment of any Obligations or distribution of assets of the Company of any kind or character (other than Permitted Junior Securities pursuant to Section 5 hereof), whether in cash, property or securities (including, without limitation, by way of setoff or otherwise) with respect to the Notes at a time when the Trustee or such Holder, as applicable, has actual knowledge that such payment is prohibited by Section 5.03 hereof, such payment shall be held by the Trustee or such Holder, in trust for the benefit of, and shall be paid forthwith over and delivered, upon written request, to, the holders of Senior Indebtedness as their interests may appear or their Representative under the indenture or other agreement (if any) pursuant to which Senior Indebtedness may have been issued, as their respective interests may appear, for application to the payment of all Obligations with respect to Senior Indebtedness remaining unpaid to the extent necessary to pay such Obligations in full in accordance with their terms, after giving effect to any concurrent payment or distribution to or for the holders of Senior Indebtedness.

With respect to the holders of Senior Indebtedness, the Trustee undertakes to perform only such obligations on the part of the Trustee as are specifically set forth in this Article 5, and no implied covenants or obligations with respect to the holders of Senior Indebtedness shall be read into this Indenture against the Trustee. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Indebtedness, and shall not be liable to any such holders if the Trustee shall pay over or distribute to or on behalf of Holders or the Company or any other Person money or assets to which any holders of Senior Indebtedness shall be entitled by virtue of this Article 5, except if such payment is made as a result of the willful misconduct or gross negligence of the Trustee.

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Section 5.06. Notice by Company.

The Company shall promptly notify the Trustee and the Paying Agent of any facts known to the Company that would cause a payment of any Obligations with respect to the Notes to violate this Article 5, but failure to give such notice shall not affect the subordination of the Notes to the Senior Indebtedness as provided in this Article 5.

Section 5.07. Subrogation.

After all Senior Indebtedness is paid in full in cash or other payment satisfactory to the holders of the Senior Indebtedness and until the Notes are paid in full, Holders of Notes shall be subrogated (equally and ratably with all other Indebtedness *pari passu* with the Notes and entitled to similar rights of subrogation) to the rights of holders of Senior Indebtedness to receive payments or distributions applicable to Senior Indebtedness to the extent that payments or distributions otherwise payable to the Holders of Notes have been applied to the payment of Senior Indebtedness. A distribution made under this Article 5 to holders of Senior Indebtedness that otherwise would have been made to Holders of Notes (whether by the Company, any Holder, the Trustee or otherwise) is not, as between the Company and Holders, a payment by the Company on the Notes.

Section 5.08. Relative Rights.

This Article 5 defines the relative rights of Holders of Notes and

holders of Senior Indebtedness. Nothing in this Indenture shall:

(i) impair, as between the Company and Holders of Notes, the obligation of the Company, which is absolute and unconditional, to pay principal of, premium, if any, and interest on the Notes in accordance with their terms;

(ii) affect the relative rights of Holders of Notes and creditors of the Company other than their rights in relation to holders of Senior Indebtedness; or

(iii) prevent the Trustee or any Holder of Notes from exercising its available remedies upon a Default or Event of Default, subject to the rights of holders and owners of Senior Indebtedness to receive distributions and payments otherwise payable to Holders of Notes.

If the Company fails because of this Article 5 to pay principal of, premium, if any, or interest on a Note on the due date, the failure is still a Default or Event of Default.

Section 5.09. Subordination May Not Be Impaired by Company.

No right of any holder of Senior Indebtedness to enforce the subordination of the Indebtedness evidenced by the Notes shall be impaired by any act or failure to act by the Company or any Holder or by the failure of the Company or any Holder to comply with this Indenture.

Section 5.10. Distribution or Notice to Representative.

Whenever a distribution is to be made or a notice given to holders of Senior Indebtedness, the distribution may be made and the notice given to their Representative.

Upon any payment or distribution of assets of the Company referred to in this Article 5, the Trustee and the Holders of Notes shall be entitled to rely upon any order or decree made by any court of

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competent jurisdiction or upon any certificate of such Representative or of the liquidating trustee or agent or other Person making any distribution to the Trustee or to the Holders of Notes for the purpose of ascertaining the Persons entitled to participate in such distribution, the holders of the Senior Indebtedness and other Indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article 5.

Section 5.11. Rights of Trustee and Paying Agent.

Notwithstanding the provisions of this Article 5 or any other provision of this Indenture, the Trustee shall not at any time be charged with knowledge of the existence of any facts that would prohibit the making of any payment or distribution by the Trustee, and the Trustee and the Paying Agent may continue to make payments on the Notes, unless the Trustee shall have received at its Corporate Trust Office at least five Business Days prior to the date of such payment written notice of facts that would cause the payment of any Obligations with respect to the Notes to violate this Article 5. Only the Company or a Representative may give the notice. Nothing in this Article 5 shall impair the claims of, or payments to, the Trustee under or pursuant to Section 9.07 hereof.

The Trustee in its individual or any other capacity may hold Senior Indebtedness with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights.

Section 5.12. Authorization to Effect Subordination.

Each Holder of Notes, by the Holder's acceptance thereof, authorizes and directs the Trustee on such Holder's behalf to take such action as may be necessary or appropriate to effectuate the subordination as provided in this Article 5, and appoints the Trustee to act as such Holder's attorney-in-fact for any and all such purposes. If the Trustee does not file a proper proof of claim or proof of debt in the form required in any proceeding referred to in Section 8.09 hereof at least 30 days before the expiration of the time to file such claim, the holders of any Designated Senior Indebtedness are hereby authorized to file an appropriate claim for and on behalf of the Holders of the Notes.

Section 5.13. Amendments.

The provisions of this Article 5 shall not be amended or modified without the written consent of the holders of all Senior Indebtedness.

Section 5.14. Agreement to Subordinate Unaffected.

The provisions of this Article 5 shall remain in full force and effect irrespective of (a) any amendment, modification, or supplement of, or any waiver or consent to, any of the terms of the Senior Indebtedness or the agreement or instrument governing the Senior Indebtedness, (b) the release or non-perfection of any collateral securing the Senior Indebtedness or (c) the manner of sale or other disposition of the collateral securing the Senior Indebtedness or the application of the proceeds upon such sale.

Section 5.15. Certain Conversions Deemed Payment.

For the purposes of this Article 5 only, (1) the issuance and delivery of Permitted Junior Securities upon conversion of Notes in accordance with Article 4 shall not be deemed to constitute a payment or distribution on account of the principal of, or premium, if any, or interest on the Notes or on account of the purchase or other acquisition of Notes, and (2) the payment, issuance or delivery of cash (except in satisfaction of fractional shares pursuant to Section 4.03), property or securities (other than Permitted Junior Securities) upon conversion of a Note shall be deemed to constitute payment on account

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of the principal of such Note. Nothing contained in this Article 5 or elsewhere in this Indenture or in the Notes is intended to or shall impair, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders, the right, which is absolute and unconditional, of the Holder of any Note to convert such Note in accordance with Article 4.

ARTICLE 6. COVENANTS

Section 6.01. Payment of Notes.

The Company shall pay or cause to be paid the principal of, premium, if

any, and interest on the Notes on the dates and in the manner provided in the Notes. Principal, premium, if any, and interest shall be considered paid on the date due if the Paying Agent, if other than the Company or a Subsidiary thereof, holds as of 10:00 a.m. Eastern Time on the due date money deposited by the Company in immediately available funds and designated for and sufficient to pay all principal, premium, if any, and interest then due.

The Company shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal at the rate borne by the Notes to the extent lawful; it shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest (without regard to any applicable grace period) at the same rate to the extent lawful.

Section 6.02. Maintenance of Office or Agency.

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

The Company may also from time to time designate one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in the Borough of Manhattan, the City of New York for such purposes. The Company shall give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

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

Section 6.03. Reports.

The Company shall furnish to the Holders of Notes copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) which the Company may be required to file with the SEC pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934; or, if the

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Company is not required to file information, documents or reports pursuant to either of said Sections, then it shall file with the Trustee and the SEC, in accordance with rules and regulations prescribed from time to time by the SEC, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Securities Exchange Act of 1934 in respect of a security listed and registered on a national securities exchange as may be prescribed from time to time in such rules and regulations; provided, that if the Company files the reports required by this Section 6.03 with the SEC and such reports are publicly available, it shall be deemed to have satisfied its obligation to furnish such reports to the Holders pursuant to this Section 6.03. The Company shall at all times comply with TIA Section 314(a).

Section 6.04. Compliance Certificate.

(a) The Company shall deliver to the Trustee, within 90 days after the end of each fiscal year, an Officers' Certificate stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officers with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to each such Officer signing such certificate, that to the best of his or her knowledge the Company has kept, observed, performed and fulfilled each and every covenant contained in this Indenture and is not in default in the performance or observance of any of the terms, provisions and conditions of this Indenture (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which he or she may have knowledge and what action the Company is taking or proposes to take with respect thereto) and that to the best of his or her knowledge no event has occurred and remains in existence by reason of which payments on account of the principal of or interest, if any, on the Notes is prohibited or if such event has occurred, a description of the event and what action the Company is taking or proposes to take with respect thereto.

(b) The Company shall, so long as any of the Notes are outstanding, deliver to the Trustee, forthwith upon any Officer becoming aware of any Default or Event of Default, an Officers' Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

Section 6.05. Taxes.

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

Section 6.06. Stay, Extension and Usury Laws.

The Company covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, that may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it shall not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Trustee, but shall suffer and permit the execution of every such power as though no such law has been enacted.

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Section 6.07. Corporate Existence.

Subject to Article 7 hereof, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect (i) its

corporate existence, and the corporate, partnership or other existence of each of its Subsidiaries, in accordance with the respective organizational documents (as the same may be amended from time to time) of the Company or any such Subsidiary and (ii) the rights (charter and statutory), licenses and franchises of the Company and its Subsidiaries; provided, however, that the Company shall not be required to preserve any such right, license or franchise, or the corporate, partnership or other existence of any of its Subsidiaries, if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and its Subsidiaries, taken as a whole, and that the loss thereof is not adverse in any material respect to the Holders of the Notes.

Section 6.08. Offer to Repurchase Upon Change of Control.

(a) Upon the occurrence of a Change of Control, the Company shall make an offer (a "Change of Control Offer") to each Holder to repurchase all or any part (equal to \$1,000 or an integral multiple thereof) of each Holder's Notes at a purchase price equal to 100% of the aggregate principal amount thereof plus accrued and unpaid interest thereon, if any, to, but excluding, the date of purchase (the "Change of Control Payment"). Within 10 business days following any Change of Control, the Company shall mail a notice to each Holder stating: (1) that the Change of Control Offer is being made pursuant to this Section 6.08 and that all Notes tendered will be accepted for payment; (2) the purchase price and the purchase date, which shall be 30 business days after the occurrence of a Change of Control (the "Change of Control Payment Date"); (3) that any Note not tendered will continue to accrue interest; (4) the name and address of each Paying Agent and Conversion Agent, (5) the Conversion Price and any adjustments thereto, (6) that Notes as to which a Change of Control Payment Notice has been given may be converted into Common Stock pursuant to Article 4 of this Indenture only to the extent that the Change of Control Payment Notice has been withdrawn in accordance with the terms of this Indenture, (7) that, unless the Company defaults in the payment of the Change of Control Payment, all Notes accepted for payment pursuant to the Change of Control Offer shall cease to accrue interest after the Change of Control Payment Date; (8) that Holders electing to have any Notes purchased pursuant to a Change of Control Offer will be required to surrender the Notes, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the Notes completed, to the Paying Agent at the address specified in the notice prior to the close of business on the Business Day preceding the Change of Control Payment Date; (9) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the close of business on the Business Day preceding the Change of Control Payment Date, a telegram, telex, facsimile transmission, letter or any other written form setting forth the name of the Holder, the principal amount of Notes delivered for purchase, and a statement that such Holder is withdrawing his election to have the Notes purchased; and (10) that Holders whose Notes are being purchased only in part will be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered, which unpurchased portion must be equal to \$1,000 in principal amount or an integral multiple thereof. The Company shall comply with the requirements of Rule 13e-4 and Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable in connection with the repurchase of Notes in connection with a Change of Control.

A "Change of Control" shall be deemed to have occurred if any of the following occurs after the date hereof:

(i) any "person" or "group" (as such terms are defined below) is or becomes the "beneficial owner" (as defined below), directly or indirectly (other than as a direct result of

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repurchases of stock by the Company), of shares of Voting Stock of the Company representing 50% or more of the total voting power of all outstanding classes of Voting Stock of the Company or such person or group (other than the "management group") has the power, directly or indirectly, to elect a majority of the members of the Board of Directors of the Company; provided, that Voting Stock acquired in an exempt transaction shall not constitute a Change of Control;

(ii) the Company consolidates with, or merges with or into, another Person or the Company sells, assigns, conveys, transfers, leases or otherwise disposes of all or substantially all of the assets of the Company, or any Person consolidates with, or merges with or into, the Company, in any such event other than (a) pursuant to a transaction in which the Persons that "beneficially owned" (as defined below), directly or indirectly, shares of Voting Stock of the Company immediately prior to such transaction "beneficially own" (as defined below), directly or indirectly, shares of Voting Stock of the Company representing at least a majority of the total voting power of all outstanding classes of Voting Stock of the surviving or transferee Person or (b) an exempt transaction; or

(iii) there shall occur the liquidation or dissolution of the Company.

For the purpose of the definition of "Change of Control", (i) "person" and "group" have the meanings given such terms under Section 13(d) and 14(d) of the Exchange Act or any successor provision to either of the foregoing, and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act (or any successor provision thereto), (ii) a "beneficial owner" shall be determined in accordance with Rule 13d-3 under the Exchange Act, as in effect on the date of this Indenture, except that the number of shares of Voting Stock of the Company shall be deemed to include, in addition to all outstanding shares of Voting Stock of the Company and Unissued Shares deemed to be held by the "person" or "group" (as such terms are defined above) or other Person with respect to which the Change of Control determination is being made, all Unissued Shares deemed to be held by all other Persons, and (iii) the terms "beneficially owned" and "beneficially own" shall have meanings correlative to that of "beneficial owner". The term "Unissued Shares" means shares of Voting Stock not outstanding that are subject to options, warrants, rights to purchase or conversion privileges exercisable within 60 days of the date of determination of a Change of Control. The term "exempt transaction" means any purchase from the Company of equity interests in the Company by the management group; provided that the management group does not collectively beneficially own more than 65% of the total Voting Stock of all outstanding classes of Voting Stock of the Company following such purchase. The term "management group" means any of Thomas Russell, The AER 1997 Trust, Robert Louis - Dreyfus, Gallium Enterprises, Inc. and Reuben Richards.

Notwithstanding anything to the contrary set forth in this Section 6.08, a Change of Control will not be deemed to have occurred if either:

(i) the Closing Sale Price of the Common Stock for any five Trading Days during the period of the ten Trading Days immediately preceding the Change of Control is at least equal to 105% of the

(ii) in the case of a merger or consolidation, all of the consideration (excluding cash payments for fractional shares in the merger or consolidation constituting the Change of Control) consists of common stock traded on a United States national securities exchange or quoted on The Nasdaq National Market (or which will be so traded or quoted when issued or exchanged in connection with such Change of Control) and as a result of such transaction or transactions the Notes become convertible solely into such common stock.

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(b) A Holder may exercise its rights pursuant to this Section 6.08 upon delivery of a written notice (which shall be in substantially the form entitled "Option of Holder to Elect Purchase" on the reverse of the Notes and which may be delivered by letter, overnight courier, hand delivery, facsimile transmission or in any other written form and, in the case of Global Notes, may be delivered electronically or by other means in accordance with the Depository's customary procedures) of the exercise of such rights (a "Change of Control Payment Notice") to any Paying Agent at any time prior to the close of business on the Business Day next preceding the Change of Control Purchase Date.

Notwithstanding anything herein to the contrary, any Holder delivering to a Paying Agent the Change of Control Payment Notice contemplated by this Section 6.08(b) shall have the right to withdraw such Change of Control Payment Notice in whole or in a portion thereof that is a principal amount of \$1,000 or in an integral multiple thereof at any time prior to the close of business on the Business Day next preceding the Change of Control Payment Date by delivery of a written notice of withdrawal to the Paying Agent in accordance with Section 6.08(a) hereof.

Upon receipt by any Paying Agent of the Change of Control Payment Notice specified in this Section 6.08(b), the Holder of the Security in respect of which such Change of Control Payment Notice was given shall (unless such Change of Control Payment Notice is withdrawn as specified below) thereafter be entitled to receive the Change of Control Payment Price with respect to such Note. Such Change of Control Payment Price shall be paid to such Holder promptly following the later of (1) the Change of Control Payment Date with respect to such Note (provided the conditions in this Section 6.08(b) have been satisfied) and (ii) the time of delivery of such Note to a Paying Agent by the Holder thereof in the manner required by this Section 6.08(b). Notes in respect of which a Change of Control Payment Notice has been given by the Holder thereof may not be converted into shares of Common Stock on or after the date of the delivery of such Change of Control Payment Notice unless such Change of Control Payment Notice has first been validly withdrawn.

(c) On the Change of Control Payment Date, the Company shall, to the extent lawful, (1) accept for payment all Notes or portions thereof properly tendered pursuant to the Change of Control Offer, (2) deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all Notes or portions thereof so tendered and (3) deliver or cause to be delivered to the Trustee the Notes so accepted together with an Officers' Certificate stating the aggregate principal amount of Notes or portions thereof being purchased by the Company. The Paying Agent shall promptly mail to each Holder of Notes so tendered payment in an amount equal to the purchase price for the Notes, and the Trustee shall promptly authenticate and mail (or cause to be transferred by book entry) to each Holder a new Note equal in principal amount to any unpurchased portion of the Notes surrendered by such Holder, if any; provided, that each such new Note shall be in a principal amount of \$1,000 or an integral multiple thereof. The Company shall publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date.

If a Paying Agent holds, in accordance with the terms hereof, money sufficient to pay the Change of Control Payment Price of any Note for which a Change of Control Payment Notice has been tendered and not withdrawn in accordance with this Indenture then, on the Change of Control Payment Date, such Note will cease to be outstanding and the rights of the Holder in respect thereof shall terminate (other than the right to receive the Change of Control Payment Price as aforesaid).

(d) Notwithstanding anything to the contrary in this Section 6.08, the Company shall not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in this Section 6.08 hereof and all other provisions of this Indenture applicable to a Change of Control

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Offer made by the Company and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

ARTICLE 7. SUCCESSORS

Section 7.01. Merger, Consolidation, or Sale of Assets.

The Company shall not, directly or indirectly, consolidate or merge with or into (whether or not the Company is the surviving corporation), or sell, assign, transfer, convey or otherwise dispose of all or substantially all of its properties or assets in one or more related transactions to, another Person unless (i) the Company is the surviving corporation or the Person formed by or surviving any such consolidation or merger (if other than the Company) or to which such sale, assignment, transfer, conveyance or other disposition shall have been made is a corporation organized or existing under the laws of the United States, any state thereof or the District of Columbia, (ii) the Person formed by or surviving any such consolidation or merger (if other than the Company) or the Person to which such sale, assignment, transfer, conveyance or other disposition shall have been made assumes all the obligations of the Company under the Registration Rights Agreement, the Notes and this Indenture pursuant to a supplemental indenture in a form reasonably satisfactory to the Trustee, (iii) immediately after such transaction, no Default or Event of Default exists and (iv) the Company or the surviving corporation, as the case may be, shall have delivered to the Trustee and Officers' Certificate and an Opinion of Counsel, each stating that such merger, consolidation, conveyance, transfer or lease comply with this Article Seven and that all conditions precedent herein provided for relating to such transaction have been satisfied.

Section 7.02. Successor Corporation Substituted.

Upon any consolidation or merger, or any sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of the assets of the Company in accordance with Section 7.01 hereof, the successor corporation formed by such consolidation or into or with which the Company is merged or to

which such sale, assignment, transfer, lease, conveyance or other disposition is made shall succeed to, and be substituted for (so that from and after the date of such consolidation, merger, sale, lease, conveyance or other disposition, the provisions of this Indenture referring to the "Company" shall refer instead to the successor corporation and not to the Company), and may exercise every right and power of the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein; provided, however, that the predecessor Company shall not be relieved from the obligation to pay the principal of and interest on the Notes except in the case of a sale, assignment, transfer, conveyance or other disposition of all of the Company's assets that meets the requirements of Section 7.01 hereof.

ARTICLE 8.
DEFAULTS AND REMEDIES

Section 8.01. Events of Default.

An "Event of Default" occurs if:

(a) the Company defaults in the payment when due of interest on the Notes and such default continues for a period of 30 days;

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(b) the Company defaults in the payment when due of principal of or premium, if any, on the Notes when the same becomes due and payable at maturity, upon redemption (including in connection with an offer to purchase) or otherwise;

(c) the Company fails to comply with any of the provisions of Section 6.08 hereof;

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

(e) the Company fails to provide timely notice of a Change of Control;

(f) the Company:

(i) commences a voluntary case,

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

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

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

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

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

(i) is for relief against the Company in an involuntary case;

(ii) appoints a custodian of the Company or for all or substantially all of the property of the Company; or

(iii) orders the liquidation of the Company;

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

Section 8.02. Acceleration.

If any Event of Default (other than an Event of Default specified in clause (f) or (g) of Section 8.01 hereof with respect to the Company) occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of the then outstanding Notes may declare all the Notes to be due and payable immediately. Upon any such declaration, the Notes shall become due and payable immediately. Notwithstanding the foregoing, if an Event of Default specified in clause (f) or (g) of Section 8.01 hereof occurs with respect to the Company, all outstanding Notes shall be due and payable immediately without further action or notice. The Holders of a majority in aggregate principal amount of the then outstanding Notes by written notice to the Trustee may on behalf of all of the Holders rescind an acceleration and its consequences if the rescission would not conflict with any judgment or decree and if all existing Events of Default (except nonpayment of principal, interest or premium that has become due solely because of the acceleration) have been cured or waived.

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Section 8.03. Other Remedies.

If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of principal, premium, if any, and interest on the Notes or to enforce the performance of any provision of the Notes or this Indenture.

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

Section 8.04. Waiver of Past Defaults.

Subject to Section 8.02, Holders of not less than a majority in aggregate principal amount of the then outstanding Notes by notice to the Trustee may on behalf of the Holders of all of the Notes waive an existing Default or Event of Default and its consequences hereunder, except a continuing Default or Event of Default in the payment of the principal of, premium, if any, or interest on, the Notes (including in connection with an offer to purchase) or a failure by the Company to convert any Notes into Common Stock (provided, however, that the Holders of a majority in aggregate principal amount of the then outstanding Notes may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration). Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

Section 8.05. Control by Majority.

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

Section 8.06. Limitation on Suits.

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

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

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

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

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

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

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

Section 8.07. Rights of Holders of Notes to Receive Payment.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Note to receive payment of principal, premium and interest on the Note, on or after the respective due dates expressed in the Note (including in connection with an offer to purchase), to convert such Note in accordance with Article 4 or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

Section 8.08. Collection Suit by Trustee.

If an Event of Default specified in Section 8.01(a) or (b) occurs and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Company for the whole amount of principal of, premium and interest remaining unpaid on the Notes and interest on overdue principal and, to the extent lawful, interest and such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

Section 8.09. Trustee May File Proofs of Claim.

The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Holders of the Notes allowed in any judicial proceedings relative to the Company (or any other obligor upon the Notes), its creditors or its property and shall be entitled and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 9.07 hereof. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 9.07 hereof out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a Lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties that the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Notes or the rights of any Holder, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

Section 8.10. Priorities.

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

First: to the Trustee, its agents and attorneys for amounts due under Section 9.07 hereof, including payment of all compensation, expense and liabilities incurred, and all advances made, by the Trustee and the costs and expenses of collection;

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

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

The Trustee may fix a record date and payment date for any payment to Holders of Notes pursuant to this Section 8.10.

Section 8.11. Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by

it as a Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by a Holder of a Note pursuant to Section 8.07 hereof, or a suit by Holders of more than 10% in principal amount of the then outstanding Notes.

ARTICLE 9.
TRUSTEE

Section 9.01. Duties of Trustee.

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

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

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

(ii) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.

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

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

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

(iii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 7.05 hereof.

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

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

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

Section 9.02. Rights of Trustee.

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

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

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

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

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

(f) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction.

(g) The Trustee shall not be charged with knowledge of any Default or Event of Default with respect to the Notes unless either (1) a Responsible Officer shall have actual knowledge of such Default or Event of Default or (2) written notice of such Default or Event of Default shall have been given to the Trustee by the Company or by any Holder of the Notes.

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Section 9.03. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Notes and may otherwise deal with the Company or any Affiliate of the Company with the same rights it would have if it were not Trustee. However, in the event that the Trustee acquires any conflicting

interest it must eliminate such conflict within 90 days, apply to the SEC for permission to continue as trustee or resign. Any Agent may do the same with like rights and duties. The Trustee is also subject to Sections 9.10 and 9.11 hereof.

Section 9.04. Trustee's Disclaimer.

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

Section 9.05. Notice of Defaults.

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

Section 9.06. Reports by Trustee to Holders of the Notes.

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

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

Section 9.07. Compensation and Indemnity.

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

The Company shall indemnify the Trustee and its officers, directors, employees, representations and agents against any and all losses, liabilities or expenses incurred by it, including in any Agent capacity in which it acts, arising out of or in connection with the acceptance or administration of its duties under this Indenture, including the costs and expenses of enforcing this Indenture against the Company (including this Section 9.07) and defending itself against any claim (whether asserted by the Company or any Holder or any other person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, except to the extent any such loss, liability or expense may be attributable to its negligence or bad faith. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Company shall not relieve the Company of its obligations hereunder. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld.

The obligations of the Company under this Section 9.07 shall survive the resignation or removal of the Trustee and the satisfaction and discharge of this Indenture.

To secure the Company's payment obligations in this Section, the Trustee shall have a Lien prior to the Notes on all money or property held or collected by the Trustee, except that held in trust to pay principal and interest on particular Notes. Such Lien shall survive the satisfaction and discharge of this Indenture.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 8.01(g) or (h) hereof occurs, the expenses and the compensation for the services (including the fees and expenses of its agents and counsel) are intended to constitute expenses of administration under any Bankruptcy Law.

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

Section 9.08. Replacement of Trustee.

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

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

- (a) the Trustee fails to comply with Section 9.10 hereof;
- (b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;
- (c) a custodian or public officer takes charge of the Trustee or its property; or
- (d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee

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takes office, the Holders of a majority in principal amount of the then outstanding Notes may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company, or the Holders of at least 10% in principal amount of the then outstanding Notes may petition any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee, after written request by any Holder who has been a Holder for at least six months, fails to comply with Section 9.10, such Holder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Thereupon, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Holders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, provided all sums owing to the Trustee hereunder have been paid and subject to the Lien provided for in Section 9.07 hereof. Notwithstanding replacement of the Trustee pursuant to this Section 9.08, the Company's obligations under Section 9.07 hereof shall continue for the benefit of the retiring Trustee.

Section 9.09. Successor Trustee by Merger, etc.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business or assets to, another corporation or banking association, the successor corporation or banking association without any further act shall be the successor Trustee; provided, however, that such corporation or banking association shall be otherwise eligible under Section 9.10 of the Indenture.

Section 9.10. Eligibility; Disqualification.

There shall at all times be a Trustee hereunder that is a corporation organized and doing business under the laws of the United States of America or of any state thereof that is authorized under such laws to exercise corporate trustee power, that is subject to supervision or examination by federal or state authorities and that has a combined capital and surplus of at least \$100 million as set forth in its most recent published annual report of condition.

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

Section 9.11. Preferential Collection of Claims Against Company.

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

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ARTICLE 10. SATISFACTION AND DISCHARGE

Section 10.01. Satisfaction and Discharge.

This Indenture will be discharged and will cease to be of further effect as to all Notes issued hereunder, when:

- (1) either:
 - (a) all Notes that have been authenticated (except lost, stolen or destroyed Notes that have been replaced or paid and Notes for whose payment money has theretofore been deposited in trust and thereafter repaid to the Company) have been delivered to the Trustee for cancellation; or
 - (b) all Notes that have not been delivered to the Trustee for cancellation have become due and payable by reason of the making of a notice of redemption or otherwise or will become due and payable within one year and the Company has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust solely for the benefit of the Holders, cash in U.S. dollars, non-callable Government Securities, or a combination thereof, in such amounts as will be sufficient without consideration of any reinvestment of interest, to pay and discharge the entire indebtedness on the Notes not delivered to the Trustee for cancellation for principal, premium and accrued interest to the date of maturity or redemption;
- (2) no Default or Event of Default shall have occurred and be continuing on the date of such deposit or shall occur as a result of such deposit and such deposit will not result in a breach or violation of, or constitute a default under, any other instrument to which the Company is a party or by which the Company is bound;
- (3) the Company has paid or caused to be paid all sums payable by it under this Indenture; and
- (4) the Company has delivered irrevocable instructions to the Trustee under this Indenture to apply the deposited money toward the payment of the Notes at maturity or the redemption date, as the case may be.

In addition, the Company must deliver an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge have been satisfied.

Notwithstanding the satisfaction and discharge of this Indenture, if money shall have been deposited with the Trustee pursuant to subclause (b) of clause (1) of this Section, the provisions of Section 10.02 shall survive.

Section 10.02. Application of Trust Money.

All money deposited with the Trustee pursuant to Section 10.01 shall be held in trust and applied by it, in accordance with the provisions of the Notes and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal (and premium, if any) and interest for whose payment such money has been deposited with the Trustee; but such money need not be segregated from other funds except to the extent required by law.

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If the Trustee or Paying Agent is unable to apply any money or Government Securities in accordance with Section 10.01 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the Company's obligations under this Indenture and the Notes shall be revived and reinstated as though no deposit had occurred pursuant to Section 10.01; provided that if the Company has made any payment of principal of, premium, if any, or interest on any Notes because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Notes to receive such payment from the money or Government Securities held by the Trustee or Paying Agent.

Section 10.03. Repayment to Company.

The Trustee and each Paying Agent shall promptly pay to the Company upon request any excess money (i) deposited with them pursuant to Section 10.1 and (ii) held by them at any time.

The Trustee and each Paying Agent shall pay to the Company upon request any money held by them for the payment of principal or interest that remains unclaimed for two years after a right to such money has matured; provided, however, that the Trustee or such Paying Agent, before being required to make any such payment, may at the expense of the Company cause to be mailed to each Holder entitled to such money notice that such money remains unclaimed and that after a date specified therein, which shall be at least 30 days from the date of such mailing, any unclaimed balance of such money then remaining will be repaid to the Company. After payment to the Company, Holders entitled to money must look to the Company for payment as general unsecured creditors.

Section 10.04. Reinstatement.

If the Trustee or any Paying Agent is unable to apply any money in accordance with Section 10.2 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the Company's obligations under this Indenture and the Notes shall be revived and reinstated as though no deposit had occurred pursuant to Section 10.1 until such time as the Trustee or such Paying Agent is permitted to apply all such money in accordance with Section 10.2; provided, however, that if the Company has made any payment of the principal of or interest on any Notes because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Notes to receive any such payment from the money held by the Trustee or such Paying Agent.

ARTICLE 11.
AMENDMENT, SUPPLEMENT AND WAIVER

Section 11.01. Without Consent of Holders of Notes.

Notwithstanding Section 11.02 of this Indenture, the Company and the Trustee may amend or supplement this Indenture or the Notes without the consent of any Holder of a Note:

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

(b) to provide for uncertificated Notes in addition to or in place of certificated Notes or to alter the provisions of Article 2 hereof (including the related definitions) in a manner that does not materially adversely affect any Holder;

(c) to provide for the assumption of the Company's obligations to the Holders of the Notes by a successor to the Company pursuant to Article 7 hereof;

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

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

(f) to provide for the issuance of additional Notes pursuant to the purchasers option set forth in the Purchase Agreement.

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon receipt by the Trustee of the documents described in Section 9.02 hereof, the Trustee shall join with the Company in the execution of any amended or supplemental Indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into such amended or supplemental Indenture that affects its own rights, duties or immunities under this Indenture or otherwise.

Section 11.02. With Consent of Holders of Notes.

Except as provided below in this Section 11.02, the Company and the Trustee may amend or supplement this Indenture (including Section 6.08 hereof) and the Notes with the consent of the Holders of at least a majority in principal amount of the Notes then outstanding voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes), and, subject to Sections 8.04 and 8.07 hereof, any existing Default or Event of Default (other than a Default or Event of Default in the payment of the principal of, premium, if any, or interest on the Notes, except a payment default resulting from an acceleration that has been rescinded) or compliance with any provision of this Indenture or the Notes may be waived with the consent of the Holders of a majority in principal amount of the then outstanding Notes voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes). Section 2.08 hereof shall determine which Notes are considered to be "outstanding" for purposes of this Section 11.02.

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee of the consent of the Holders of Notes as aforesaid, and upon receipt by the Trustee of the documents described in Section 9.02 hereof, the Trustee shall join with the Company in the execution of such amended or supplemental Indenture unless such amended or supplemental Indenture directly affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such amended or supplemental Indenture.

It shall not be necessary for the consent of the Holders of Notes under this Section 11.02 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

After an amendment, supplement or waiver under this Section becomes effective, the Company shall mail to the Holders of Notes affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amended or supplemental Indenture or waiver. Subject to Sections 8.04 and 8.07 hereof, the Holders of a majority in aggregate principal amount of the Notes then outstanding voting as a single class may waive compliance in a particular instance by the Company with any provision of this Indenture or the Notes. However, without the consent of each Holder affected,

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an amendment or waiver under this Section 11.02 may not (with respect to any Notes held by a non-consenting Holder):

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

(b) reduce the principal of or change the fixed maturity of any Note or alter or waive any of the provisions with respect to the redemption of the Notes except as provided above with respect to Section 6.08 hereof;

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

(d) waive a Default or Event of Default in the payment of principal of or premium, if any, or interest on the Notes (except a rescission of acceleration of the Notes by the Holders of at least a majority in aggregate principal amount of the then outstanding Notes and a waiver of the payment default that resulted from such acceleration);

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

(f) make any change in the provisions of this Indenture relating to waivers of past Defaults or the rights of Holders of Notes to receive payments of principal of or interest on the Notes; or

(g) make any change in Section 8.04 or 8.07 hereof or in the foregoing amendment and waiver provisions.

Section 11.03. Compliance with Trust Indenture Act.

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

Section 11.04. Revocation and Effect of Consents.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Note is a continuing consent by the Holder of a Note and every subsequent Holder of a Note or portion of a Note that evidences the same debt as the consenting Holder's Note, even if notation of the consent is not made on any Note. However, any such Holder of a Note or subsequent Holder of a Note may revoke the consent as to its Note if the Trustee receives written notice of revocation before the date the waiver, supplement or amendment becomes effective. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder.

Section 11.05. Notation on or Exchange of Notes.

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

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

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Section 11.06. Trustee to Sign Amendments, etc.

The Trustee shall sign any amended or supplemental Indenture authorized pursuant to this Article Nine if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee. The Company may not sign an amendment or supplemental Indenture until the Board of Directors approves it. In executing any amended or supplemental indenture, the Trustee shall be entitled to receive and (subject to Section 9.01 hereof) shall be fully protected in relying upon, in addition to the documents required by Section 12.04 hereof, an Officer's Certificate and an Opinion of Counsel stating that the execution of such amended or supplemental indenture is authorized or permitted by this Indenture.

ARTICLE 12. MISCELLANEOUS

Section 12.01. Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies or conflicts with the duties imposed by TIA Section 318(c), the imposed duties shall control.

Section 12.02. Notices.

Any notice or communication by the Company or the Trustee to the others is duly given if in writing and delivered in Person or mailed by first class mail (registered or certified, return receipt requested), telex, telecopier or overnight air courier guaranteeing next day delivery, to the others' address:

If to the Company:

EMCORE Corporation
145 Belmont Drive
Somerset, New Jersey 08873
Telecopier No.: (732) 271-9686
Attention: Chief Financial Officer

With a copy to:

Jenner & Block LLP
601 Thirteenth Street, N.W.
Washington, D.C. 20005
Telecopier No.: (202) 637-6374
Attention: John E. Welch, Esq.

If to the Trustee:

Deutsche Bank Trust Company Americas
60 Wall Street
27th Floor - MSNYC60-2710
New York, NY 10005
Telecopier No.: (212) 454-2223
Attention: Corporate Trust & Services Agency

The Company or the Trustee, by notice to the others may designate additional or different addresses for subsequent notices or communications.

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All notices and communications (other than those sent to Holders) shall be deemed to have been duly given: at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when answered back, if telexed; when receipt acknowledged, if telecopied; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next day delivery.

Any notice or communication to a Holder shall be mailed by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery to its address shown on the register kept by the Registrar. Any notice or communication shall also be so mailed to any Person described in TIA Section 313(c), to the extent required by the TIA. Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Company mails a notice or communication to Holders, it shall mail a copy to the Trustee and each Agent at the same time.

Section 12.03. Communication by Holders of Notes with Other Holders of Notes.

Holders may communicate pursuant to TIA Section 312(b) with other Holders with respect to their rights under this Indenture or the Notes. The Company, the Trustee, the Registrar and anyone else shall have the protection of TIA Section 312(c).

Section 12.04. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

(a) an Officers' Certificate in form and substance reasonably satisfactory to the Trustee (which shall include the statements set forth in Section 12.05 hereof) stating that, in the opinion of the signers, all conditions precedent and covenants, if any, provided for in this Indenture relating to the proposed action have been satisfied; and

(b) an Opinion of Counsel in form and substance reasonably satisfactory to the Trustee (which shall include the statements set forth in Section 12.05 hereof) stating that, in the opinion of such counsel, all such conditions precedent and covenants have been satisfied.

Section 12.05. Statements Required in Certificate or Opinion.

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA Section 314(a)(4)) shall comply with the provisions of TIA Section 314(e) and shall include:

(a) a statement that the Person making such certificate or opinion has read such covenant or condition;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

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(c) a statement that, in the opinion of such Person, he or she has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been satisfied; and

(d) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been satisfied.

Section 12.06. Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or at a meeting of Holders. The Registrar or Paying Agent may make reasonable rules and set reasonable requirements for its functions.

Section 12.07. No Personal Liability of Directors, Officers, Employees and Stockholders.

No past, present or future director, officer, employee, incorporator or stockholder of the Company, as such, shall have any liability for any obligations of the Company under the Notes, this Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

Section 12.08. Governing Law.

THE INTERNAL LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO

CONSTRUE THIS INDENTURE THE NOTES WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.

Section 12.09. No Adverse Interpretation of Other Agreements.

This Indenture may not be used to interpret any other indenture, loan or debt agreement of the Company or its Subsidiaries or of any other Person. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 12.10. Successors.

All agreements of the Company in this Indenture and the Notes shall bind its successors. All agreements of the Trustee in this Indenture shall bind its successors.

Section 12.11. Severability.

In case any provision in this Indenture or in the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 12.12. Counterpart Originals.

The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

Section 12.13. Table of Contents, Headings, etc.

The Table of Contents, Cross-Reference Table and Headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part of this Indenture and shall in no way modify or restrict any of the terms or provisions hereof.

[Signature page follows]

SIGNATURES

Dated as of [_____], 2004

EMCORE Corporation

By: _____
Name:
Title:

Deutsche Bank Trust Company Americas,
as Trustee

By: _____
Name:
Title:

EXHIBIT A

FORM OF NOTE

[LEGEND TO APPEAR ON GLOBAL NOTE]

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITARY TRUST COMPANY TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITARY TRUST COMPANY (AND ANY PAYMENT HEREON IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITARY TRUST COMPANY), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN. THIS NOTE IS A GLOBAL NOTE WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF A DEPOSITARY OR A NOMINEE THEREOF. THIS NOTE IS EXCHANGEABLE FOR SECURITIES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE ONLY IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE AND, UNLESS AND UNTIL IT IS EXCHANGED IN WHOLE OR IN PART FOR SECURITIES IN DEFINITIVE FORM, THIS NOTE MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY OR BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH SUCCESSOR DEPOSITARY AND TRANSFERS OF PORTIONS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH SECTION 2.12 OF THE INDENTURE.

EMCORE CORPORATION

CUSIP: [_____]

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5% CONVERTIBLE SENIOR SUBORDINATED NOTES DUE 2011

EMCORE Corporation, a New Jersey corporation (the "Company," which term shall include any successor corporation under the Indenture referred to on the reverse hereof), promises to pay to Cede & Co., or registered assigns, the principal sum of [_____] Dollars (\$[_____] on [____], 2011 or such greater or lesser amount as is indicated on the Schedule of Exchanges of Notes on the other side of this Note.

Interest Payment Dates: May 15 and November 15

Record Dates: May 1 and November 1

This Note is convertible as specified on the other side of this Note. Additional provisions of this Note are set forth on the other side of this Note.

IN WITNESS WHEREOF, the Company has caused this instrument to be duly executed.

EMCORE Corporation

By: _____

Name:

Title

Attest:

By: _____

Name:

Title

Dated: _____

Trustee's Certificate of Authentication: This is one of the Notes referred to in the within-mentioned Indenture.

DEUTSCHE BANK TRUST COMPANY AMERICAS,

as Trustee

By: _____

Name:

Title: Authorized Signer

[REVERSE SIDE OF SECURITY]

EMCORE CORPORATION

5% CONVERTIBLE SENIOR SUBORDINATED NOTES DUE 2011

1. INTEREST

EMCORE Corporation, a New Jersey corporation (the "Company," which term shall include any successor corporation under the Indenture hereinafter referred to), promises to pay interest on the principal amount of this Note at the rate of 5% per annum. The Company shall pay interest semiannually on May 15 and November 15 of each year, commencing May 15, 2004, unless such date is not a business day, in which case, we shall pay interest on the next succeeding business day and such payment shall be deemed to have been paid on such interest payment date and no interest shall accrue during the additional period of time. Interest on the Notes shall accrue from the most recent date to which interest has been paid or, if no interest has been paid, from [____], 2004; provided, however, that if there is not an existing default in the payment of interest and if this Note is authenticated between a record date referred to on the face hereof and the next succeeding interest payment date, interest shall accrue from such interest payment date. Interest will be computed on the basis of a 360-day year of twelve 30-day months.

2. METHOD OF PAYMENT

The Company shall pay interest on this Note (except defaulted interest) to the person who is the Holder of this Note at the close of business on May 1 or November 1, as the case may be, next preceding the related interest payment date. The Holder must surrender this Note to a Paying Agent to collect payment of principal. The Company will pay principal and interest in money of the United States that at the time of payment is legal tender for payment of public and private debts. The Company may, however, pay principal and interest in respect of any Definitive Note by check or wire payable in such money; provided, however, that a Holder with an aggregate principal amount in excess of \$2,000,000 will be paid by wire transfer in immediately available funds at the election of such Holder. The Company may mail an interest check to the Holder's registered address. Notwithstanding the foregoing, so long as this Note is registered in the name of a Depositary or its nominee, all payments hereon shall be made by wire transfer of immediately available funds to the account of the Depositary or its nominee.

3. PAYING AGENT, REGISTRAR AND CONVERSION AGENT

Initially, Deutsche Bank Trust Company Americas (the "Trustee," which term shall include any successor trustee under the Indenture hereinafter referred to) will act as Paying Agent, Registrar and Conversion Agent. The Company may change any Paying Agent, Registrar or Conversion Agent without notice to the Holder. The Company or any of its Subsidiaries may, subject to certain limitations set forth in the Indenture, act as Paying Agent or Registrar.

4. INDENTURE, LIMITATIONS

This Note is one of a duly authorized issue of Notes of the Company designated as its 5% Convertible Senior Subordinated Notes due 2011 (the "Notes"), issued under an Indenture dated as of [____], 2004 (together with any supplemental indentures thereto, the "Indenture"), between the Company and the Trustee. The terms of this Note include those stated in the Indenture and those required by or made part of the Indenture by reference to the Trust Indenture Act of 1939, as amended, as in effect on the date of the Indenture. This Note is subject to all such terms, and the Holder of this Note is referred to the Indenture and said Act for a statement of them. All capitalized terms used but not defined herein shall have the meaning ascribed to such term in the Indenture.

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The Notes are subordinated unsecured obligations of the Company limited to \$[_____] aggregate principal amount, subject to Section 2.2 of the Indenture. The Indenture does not limit other debt of the Company, secured or unsecured, including Senior Indebtedness.

5. PROVISIONAL REDEMPTION

The Notes may be redeemed at the election of the Company, as a whole or in part from time to time, at any time (a "Provisional Redemption"), upon at least 20 and not more than 60 days' notice by mail to the Holders of the Notes (a "Provisional Redemption Notice") at a redemption price equal to \$1,000 per \$1,000 principal amount of the Notes redeemed plus accrued and unpaid interest, if any (such amount, together with the Early Call Premium described below, the "Provisional Redemption Price"), to but excluding the date of redemption (the "Provisional Redemption Date") if the Closing Sale Price of the Common Stock has exceeded 150% of the Conversion Price for at least 20 Trading Days within a period of any 30 consecutive Trading Days ending on the Trading Day prior to the date of mailing of the notice of Provisional Redemption (the "Provisional Redemption Notice Date").

Except as set forth above, the Company shall not have the option to redeem the Notes.

6. EARLY CALL PREMIUM

If the Company delivers a Provisional Redemption Notice on or prior to May 15, 2007, the Company shall make an additional payment, at its option, in cash or Common Stock or a combination of cash and Common Stock (the "Early Call Premium") with respect to the Notes called for redemption to holders on the Provisional Redemption Notice Date in an amount equal to \$150.00 per \$1,000 principal amount of the Notes, less the amount of any interest actually paid (including, if the Provisional Redemption Date occurs after a record date but before an interest payment date, any interest paid or to be paid in connection with such interest payment date) on such Notes prior to the Provisional Redemption Date. Payments made in Common Stock will be valued at 95% of the average closing sales prices of Common Stock for the five Trading Days ending on the third day prior to the Provisional Redemption Date. The Company shall pay the Early Call Premium on all Notes called for Provisional Redemption on or prior to May 15, 2007, including those Notes converted into Common Stock between the Provisional Redemption Notice Date and the Provisional Redemption Date. The Company shall specify in the Provisional Redemption Notice whether the Early Call Premium will be paid in cash, common stock or any combination thereof; provided, however, that in no event will the Company issue common stock to the extent such issuance would require shareholder approval, regardless of whether the amount of stock specified in the Provisional Redemption Notice would be reduced as a result.

7. NOTICE OF REDEMPTION

Notice of redemption will be mailed by first-class mail at least 20 days but not more than 60 days before the Redemption Date to each Holder of Notes to be redeemed at its registered address. Notes in denominations larger than \$1,000 may be redeemed in part, but only in whole multiples of \$1,000. On and after the Redemption Date, subject to the deposit with the Paying Agent of funds sufficient to pay the Redemption Price plus accrued interest, if any, accrued to, but not including, the Redemption Date, interest shall cease to accrue on Notes or portions of them called for redemption.

8. PURCHASE OF NOTES AT OPTION OF HOLDER UPON A CHANGE OF CONTROL

At the option of the Holder and subject to the terms and conditions of the Indenture, the Company shall become obligated to purchase all or any part specified by the Holder (so long as the principal

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amount of such part is \$1,000 or an integral multiple thereof) of the Notes held by such Holder on the date that is 30 Business Days after the occurrence of a Change of Control, at a purchase price equal to 100% of the principal amount thereof together with accrued interest up to, but excluding, the Change of Control Purchase Date. The Holder shall have the right to withdraw any Change of Control Purchase Notice (in whole or in a portion thereof that is \$1,000 or an integral multiple thereof) at any time prior to the close of business on the Business Day next preceding the Change of Control Purchase Date by delivering a written notice of withdrawal to the Paying Agent in accordance with the terms of the Indenture.

9. CONVERSION

A Holder of a Note may convert the principal amount of such Note (or any portion thereof equal to \$1,000 or any integral multiple of \$1,000 in excess thereof) into shares of Common Stock at any time prior to the close of business on May 15, 2011; provided, however, that if the Note is called for redemption or subject to purchase upon a Change of Control, the conversion right will terminate at the close of business on the Business Day immediately preceding the redemption date or the Change of Control Purchase Date, as the case may be, for such Note or such earlier date as the Holder presents such Note for redemption or purchase (unless the Company shall default in making the redemption payment or Change of Control Purchase Price, as the case may be, when due, in which case the conversion right shall terminate at the close of business on the date such default is cured and such Note is redeemed or purchased).

The initial Conversion Price is \$[] per share, subject to adjustment under certain circumstances. The number of shares of Common Stock issuable upon conversion of a Note is determined by dividing the principal amount of the Note or portion thereof converted by the Conversion Price in effect on the Conversion Date. No fractional shares will be issued upon conversion; in lieu thereof, an amount will be paid in cash based upon the closing price (as defined in the Indenture) of the Common Stock on the Trading Day immediately prior to the

To convert a Note, a Holder must (a) complete and manually sign the conversion notice set forth below and deliver such notice to a Conversion Agent, (b) surrender the Note to a Conversion Agent, (c) furnish appropriate endorsements and transfer documents if required by a Registrar or a Conversion Agent, and (d) pay any transfer or similar tax, if required. Notes so surrendered for conversion (in whole or in part) during the period from the close of business on any regular record date to the opening of business on the next succeeding interest payment date (excluding Notes or portions thereof called for redemption or subject to purchase upon a Change of Control on a Redemption Date or Change of Control Purchase Date, as the case may be, during the period beginning at the close of business on a regular record date and ending at the opening of business on the first Business Day after the next succeeding interest payment date, or if such interest payment date is not a Business Day, the second such Business Day) shall also be accompanied by payment in funds acceptable to the Company of an amount equal to the interest payable on such interest payment date on the principal amount of such Note then being converted, and such interest shall be payable to such registered Holder notwithstanding the conversion of such Note, subject to the provisions of this Indenture relating to the payment of defaulted interest by the Company. If the Company defaults in the payment of interest payable on such interest payment date, the Company shall promptly repay such funds to such Holder. A Holder may convert a portion of a Note equal to \$1,000 or any integral multiple thereof.

A Note in respect of which a Holder had delivered a Change of Control Purchase Notice exercising the option of such Holder to require the Company to purchase such Note may be converted only if the Change of Control Purchase Notice is withdrawn in accordance with the terms of the Indenture.

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10. SUBORDINATION

The indebtedness evidenced by the Notes is, to the extent and in the manner provided in the Indenture, subordinate and junior in right of payment to the prior payment in full in cash of all Senior Indebtedness. Any Holder by accepting this Note agrees to and shall be bound by such subordination provisions and authorizes the Trustee to give them effect. In addition to all other rights of Senior Indebtedness described in the Indenture, the Senior Indebtedness shall continue to be Senior Indebtedness and entitled to the benefits of the subordination provisions irrespective of any amendment, modification or waiver of any terms of any instrument relating to the Senior Indebtedness or any extension or renewal of the Senior Indebtedness.

11. DENOMINATIONS, TRANSFER, EXCHANGE

The Notes are in registered form without coupons in denominations of \$1,000 and integral multiples thereof. A Holder may register the transfer of or exchange Notes in accordance with the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes or other governmental charges that may be imposed in relation thereto by law or permitted by the Indenture.

12. PERSONS DEEMED OWNERS

The Holder of a Note may be treated as the owner of it for all purposes.

13. UNCLAIMED MONEY

If money for the payment of principal or interest remains unclaimed for two years, the Trustee or Paying Agent will pay the money back to the Company at its written request. After that, Holders entitled to money must look to the Company for payment.

14. AMENDMENT, SUPPLEMENT AND WAIVER

Subject to certain exceptions, the Indenture or the Notes may be amended or supplemented with the consent of the Holders of at least a majority in principal amount of the Notes then outstanding, and an existing default or Event of Default and its consequence or compliance with any provision of the Indenture or the Notes may be waived in a particular instance with the consent of the Holders of a majority in principal amount of the Notes then outstanding. Without the consent of or notice to any Holder, the Company and the Trustee may amend or supplement the Indenture or the Notes to, among other things, cure any ambiguity, defect or inconsistency or make any other change that does not adversely affect the rights of any Holder.

15. SUCCESSOR CORPORATION

When a successor corporation assumes all the obligations of its predecessor under the Notes and the Indenture in accordance with the terms and conditions of the Indenture, the predecessor corporation will (except in certain circumstances specified in the Indenture) be released from those obligations.

16. DEFAULTS AND REMEDIES

Under the Indenture, an Event of Default includes: (i) default for 30 days in payment of any interest on any Notes; (ii) default in payment of any principal (including, without limitation, any premium, if any) on the Notes when due; (iii) failure by the Company for 60 days after notice to it to

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comply with any of its other agreements contained in the Indenture or the Notes; (iv) we fail to comply with any of the provisions of Section 6.08 of the Indenture; (v) we fail to provide timely notice of a change of control; and (vi) certain events of bankruptcy, insolvency or reorganization of the Company. If an Event of Default (other than as a result of certain events of bankruptcy, insolvency or reorganization of the Company) occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of the Notes then outstanding may declare all unpaid principal to the date of acceleration on the Notes then outstanding to be due and payable immediately, all as and to the extent provided in the Indenture. If an Event of Default occurs as a result of certain events of bankruptcy, insolvency or reorganization of the Company, unpaid principal of the Notes then outstanding shall become due and payable immediately without any declaration or other act on the part of the Trustee or any Holder, all as and to the extent provided in the Indenture. Holders may not enforce the Indenture or the Notes except as provided in the Indenture. The Trustee may require indemnity satisfactory to it before it enforces the Indenture or the Notes. Subject to certain limitations, Holders of a majority in principal amount of the Notes then outstanding may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Holders notice of any continuing default (except a default in payment of principal or interest) if it determines that withholding notice is in their interests. The Company is

required to file periodic reports with the Trustee as to the absence of default.

17. TRUSTEE DEALINGS WITH THE COMPANY

Deutsche Bank Trust Company Americas, the Trustee under the Indenture, in its individual or any other capacity, may make loans to, accept deposits from and perform services for the Company or an Affiliate of the Company, and may otherwise deal with the Company or an Affiliate of the Company, as if it were not the Trustee.

18. NO RECOURSE AGAINST OTHERS

A director, officer, employee or shareholder, as such, of the Company shall not have any liability for any obligations of the Company under the Notes or the Indenture nor for any claim based on, in respect of or by reason of such obligations or their creation. The Holder of this Note by accepting this Note waives and releases all such liability. The waiver and release are part of the consideration for the issuance of this Note.

19. AUTHENTICATION

This Note shall not be valid until the Trustee or an authenticating agent manually signs the certificate of authentication on the other side of this Note.

20. ABBREVIATIONS AND DEFINITIONS

Customary abbreviations may be used in the name of the Holder or an assignee, such as: TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian) and UGMA (= Uniform Gifts to Minors Act).

All terms defined in the Indenture and used in this Note but not specifically defined herein are defined in the Indenture and are used herein as so defined.

21. INDENTURE TO CONTROL; GOVERNING LAW

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In the case of any conflict between the provisions of this Note and the Indenture, the provisions of the Indenture shall control. This Note shall be governed by, and construed in accordance with, the laws of the State of New York, without regard to principles of conflicts of law.

The Company will furnish to any Holder, upon written request and without charge, a copy of the Indenture. Requests may be made to: EMCORE Corporation, 145 Belmont Drive, Somerset, New Jersey 08873, Attention: Chief Financial Officer.

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ASSIGNMENT FORM

To assign this Note, fill in the form below:

I or we assign and transfer this Note to

(Insert assignee's soc. sec. or tax I.D. no.)

(Print or type assignee's name, address and zip code)

and irrevocably appoint

agent to transfer this Note on the books of the Company. The agent may substitute another to act for him or her.

Your Signature: _____

Date: _____
(Sign exactly as your name appears on the other side of this Note)

*Signature guaranteed by:

By: _____

* The signature must be guaranteed by an institution which is a member of

Signature(s) must be guaranteed by a qualified guarantor institution with membership in an approved signature guarantee program pursuant to Rule 17Ad-15 under the Securities Exchange Act of 1934.

Signature Guaranty

Principal amount to be redeemed
(in an integral multiple of \$1,000, if less than all):

NOTICE: The signature to the foregoing Election must correspond to the Name as
written upon the face of this Note in every particular, without alteration or
any change whatsoever.

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SCHEDULE OF EXCHANGES OF NOTES

The following exchanges, redemptions, repurchases or conversions of a
part of this global Note have been made:

PRINCIPAL AMOUNT OF THIS GLOBAL NOTE FOLLOWING SUCH DECREASE DATE OF EXCHANGE (OR INCREASE)	AUTHORIZED SIGNATORY OF CUSTODIAN	AMOUNT OF DECREASE IN PRINCIPAL AMOUNT OF THIS GLOBAL NOTE	AMOUNT OF INCREASE IN PRINCIPAL AMOUNT OF THIS GLOBAL NOTE
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**Computation of Ratio of Earnings
to Fixed Charges**

Encore Corporation

Calculation of Ratio of Earnings to Fixed Charges

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Fixed Charges:					
Interest expense	\$ 1,617	\$ 342	\$ 3,240	\$ 8,856	\$ 8,288
Amortized financing costs	<u>—</u>	<u>—</u>	<u>556</u>	<u>1,300</u>	<u>982</u>
Total fixed charges	1,617	342	3,796	10,156	9,270
Earnings:					
Net loss	(21,355)	(25,485)	(8,642)	(129,761)	(38,525)
Equity in unconsolidated affiliates	4,997	13,265	12,326	2,706	1,228
Fixed charges	<u>1,617</u>	<u>342</u>	<u>3,796</u>	<u>10,156</u>	<u>9,270</u>
Total earnings	(\$14,741)	(\$11,878)	\$ 7,480	(\$116,899)	(\$28,027)
Ratio of earnings to fixed charges	(9.12)	(34.73)	1.97	(11.51)	(3.02)
Total insufficiency	(\$16,358)	(\$12,220)	—	(\$127,055)	(\$37,297)

Consent of Deloitte & Touche LLP

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of EMCORE Corporation on Form S-4 of our report dated December 24, 2003 (which report expresses an unqualified opinion and includes an explanatory paragraph referring to accounting changes), appearing in the Annual Report on Form 10-K of EMCORE Corporation for the year ended September 30, 2003 and to the reference to us under the headings "Selected Consolidated Financial Data" and "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Deloitte & Touche LLP

Parsippany, New Jersey
December 24, 2003

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

FORM T-1

STATEMENT OF ELIGIBILITY UNDER THE TRUST INDENTURE ACT OF 1939 OF A CORPORATION
DESIGNATED TO ACT AS TRUSTEE

CHECK IF AN APPLICATION TO DETERMINE ELIGIBILITY OF A TRUSTEE PURSUANT TO
SECTION 305(b)(2)

DEUTSCHE BANK TRUST COMPANY AMERICAS
(FORMERLY BANKERS TRUST COMPANY)
(Exact name of trustee as specified in its charter)

NEW YORK 13-4941247
(Jurisdiction of Incorporation or (I.R.S. Employer
organization if not a U.S. national bank) Identification no.)

60 WALL STREET 10005
NEW YORK, NEW YORK (Zip Code)
(Address of principal executive offices)

DEUTSCHE BANK TRUST COMPANY AMERICAS
ATTENTION: WILL CHRISTOPH
LEGAL DEPARTMENT
1301 6TH AVENUE, 8TH FLOOR
NEW YORK, NEW YORK 10019
(212) 469-0378
(Name, address and telephone number of agent for service)

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

NEW JERSEY 22-2746503
(State or other jurisdiction (IRS Employer Identification No.)
of incorporation or organization)

145 BELMONT DRIVE
SOMERSET, NEW JERSEY 08873
(732) 271-9090
(Address, including zip code, and telephone number, including area
code, of Registrant's principal executive offices)

5% CONVERTIBLE SENIOR SUBORDINATED NOTES DUE MAY 15, 2011
(TITLE OF THE INDENTURE SECURITIES)

ITEM 1. GENERAL INFORMATION.

Furnish the following information as to the trustee.

(a) Name and address of each examining or supervising authority to
which it is subject.

NAME	ADDRESS
-----	-----
Federal Reserve Bank (2nd District)	New York, NY
Federal Deposit Insurance Corporation	Washington, D.C.
New York State Banking Department	Albany, NY

(b) Whether it is authorized to exercise corporate trust powers.
Yes.

ITEM 2. AFFILIATIONS WITH OBLIGOR.

If the obligor is an affiliate of the Trustee, describe each such
affiliation.

None.

ITEM 3. -15. NOT APPLICABLE

ITEM 16. LIST OF EXHIBITS.

EXHIBIT 1 -	Restated Organization Certificate of Bankers Trust Company dated August 6, 1998, Certificate of Amendment of the Organization Certificate of Bankers Trust Company dated September 25, 1998, Certificate of Amendment of the Organization Certificate of Bankers Trust Company dated December 16, 1998, and Certificate of Amendment of the Organization Certificate of Bankers Trust Company dated February 22, 2002, copies attached.
EXHIBIT 2 -	Certificate of Authority to commence business - Incorporated herein by reference to Exhibit 2 filed with Form T-1 Statement, Registration No. 33-21047.
EXHIBIT 3 -	Authorization of the Trustee to exercise corporate trust powers - Incorporated herein by reference to Exhibit 2 filed with Form T-1 Statement, Registration No. 33-21047.
EXHIBIT 4 -	Existing By-Laws of Bankers Trust Company, as amended on April 15, 2002. Copy attached.

EXHIBIT 5 - Not applicable.

EXHIBIT 6 - Consent of Bankers Trust Company required by Section 321(b) of the Act. - Incorporated herein by reference to Exhibit 4 filed with Form T-1 Statement, Registration No. 22-18864.

EXHIBIT 7 - The latest report of condition of Deutsche Bank Trust Company Americas dated as of September 30, 2003. Copy attached.

EXHIBIT 8 - Not Applicable.

EXHIBIT 9 - Not Applicable.

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SIGNATURE

Pursuant to the requirements of the Trust Indenture Act of 1939, as amended, the trustee, Deutsche Bank Trust Company Americas, a corporation organized and existing under the laws of the State of New York, has duly caused this statement of eligibility to be signed on its behalf by the undersigned, thereunto duly authorized, all in The City of New York, and State of New York, on this 19th day of December, 2003.

DEUTSCHE BANK TRUST COMPANY AMERICAS

/s/ Dorothy Robinson

By: Dorothy Robinson
Vice President

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State of New York,

BANKING DEPARTMENT

I, MANUEL KURSKY, Deputy Superintendent of Banks of the State of New York, DO HEREBY APPROVE the annexed Certificate entitled "CERTIFICATE OF AMENDMENT OF THE ORGANIZATION CERTIFICATE OF BANKERS TRUST COMPANY UNDER SECTION 8005 OF THE BANKING LAW," dated September 16, 1998, providing for an increase in authorized capital stock from \$3,001,666,670 consisting of 200,166,667 shares with a par value of \$10 each designated as Common Stock and 1,000 shares with a par value of \$1,000,000 each designated as Series Preferred Stock to \$3,501,666,670 consisting of 200,166,667 shares with a par value of \$10 each designated as Common Stock and 1,500 shares with a par value of \$1,000,000 each designated as Series Preferred Stock.

WITNESS, my hand and official seal of the Banking Department at the City of New York, this 25TH day of SEPTEMBER in the Year of our Lord one thousand nine hundred and NINETY-EIGHT.

/s/ Manuel Kursky

Deputy Superintendent of Banks

RESTATED
ORGANIZATION
CERTIFICATE
OF
BANKERS TRUST COMPANY

Under Section 8007
Of the Banking Law

Bankers Trust Company
1301 6th Avenue, 8th Floor
New York, N.Y. 10019

Counterpart Filed in the Office of the Superintendent of Banks, State of
New York, August 31, 1998

RESTATED ORGANIZATION CERTIFICATE
OF
BANKERS TRUST
Under Section 8007 of the Banking Law

We, James T. Byrne, Jr. and Lea Lahtinen, being respectively a Managing
Director and an Assistant Secretary and a Vice President and an Assistant
Secretary of BANKERS TRUST COMPANY, do hereby certify:

1. The name of the corporation is Bankers Trust Company.
2. The organization certificate of the corporation was filed by the
Superintendent of Banks of the State of New York on March 5, 1903.
3. The text of the organization certificate, as amended heretofore, is
hereby restated without further amendment or change to read as herein-set forth
in full, to wit:

"Certificate of Organization of Bankers Trust Company

Know All Men By These Presents That we, the undersigned, James A.
Blair, James G. Cannon, E. C. Converse, Henry P. Davison, Granville W. Garth, A.
Barton Hepburn, Will Logan, Gates W. McGarrah, George W. Perkins, William H.
Porter, John F. Thompson, Albert H. Wiggin, Samuel Woolverton and Edward F. C.
Young, all being persons of full age and citizens of the United States, and a
majority of us being residents of the State of New York, desiring to form a
corporation to be known as a Trust Company, do hereby associate ourselves
together for that purpose under and pursuant to the laws of the State of New
York, and for such purpose we do hereby, under our respective hands and seals,
execute and duly acknowledge this Organization Certificate in duplicate, and
hereby specifically state as follows, to wit:

- I. The name by which the said corporation shall be known is Bankers
Trust Company.
- II. The place where its business is to be transacted is the City of New
York, in the State of New York.

III. Capital Stock: The amount of capital stock which the corporation
is hereafter to have is Three Billion One Million, Six Hundred Sixty-Six
Thousand, Six Hundred Seventy Dollars (\$3,001,666,670), divided into Two Hundred
Million, One Hundred Sixty-Six Thousand, Six Hundred Sixty-Seven (200,166,667)
shares with a par value of \$10 each designated as Common Stock and 1,000 shares
with a par value of One Million Dollars (\$1,000,000) each designated as Series
Preferred Stock.

(a) Common Stock

1. Dividends: Subject to all of the rights of the Series Preferred
Stock, dividends may be declared and paid or set apart for payment upon the
Common Stock out of any assets or funds of the corporation legally available for
the payment of dividends.
2. Voting Rights: Except as otherwise expressly provided with respect
to the Series Preferred Stock or with respect to any series of the Series
Preferred Stock, the Common Stock shall have the exclusive right to vote for the
election of directors and for all other purposes, each holder of the Common
Stock being entitled to one vote for each share thereof held.
3. Liquidation: Upon any liquidation, dissolution or winding up of the
corporation, whether voluntary or involuntary, and after the holders of the
Series Preferred Stock of each series shall have been paid in full the amounts
to which they respectively shall be entitled, or a sum sufficient for the
payment in full set aside, the remaining net assets of the corporation shall be
distributed pro rata to the holders of the Common Stock in accordance with their
respective rights and interests, to the exclusion of the holders of the Series
Preferred Stock.
4. Preemptive Rights: No holder of Common Stock of the corporation
shall be entitled, as such, as a matter of right, to subscribe for or purchase
any part of any new or additional issue of stock of any class or series
whatsoever, any rights or options to purchase stock of any class or series

whatsoever, or any securities convertible into, exchangeable for or carrying rights or options to purchase stock of any class or series whatsoever, whether now or hereafter authorized, and whether issued for cash or other consideration, or by way of dividend or other distribution.

(b) Series Preferred Stock

1. Board Authority: The Series Preferred Stock may be issued from time to time by the Board of Directors as herein provided in one or more series. The designations, relative rights, preferences and limitations of the Series Preferred Stock, and particularly of the shares of each series thereof, may, to the extent permitted by law, be similar to or may differ from those of any other series. The Board of Directors of the corporation is hereby expressly granted authority, subject to the provisions of this Article III, to issue from time to time Series Preferred Stock in one or more series and to fix from time to time before issuance thereof, by filing a certificate pursuant to the Banking Law, the number of shares in each such series of such class and all designations, relative rights (including the right, to the extent permitted by law, to convert into shares of any class or into shares of any series of any class), preferences and limitations of the shares in each such series, including, buy without limiting the generality of the foregoing, the following:

(i) The number of shares to constitute such series (which number may at any time, or from time to time, be increased or decreased by the Board of Directors, notwithstanding that shares of the series may be outstanding at the time of such increase or decrease, unless the Board of Directors shall have otherwise provided in creating such series) and the distinctive designation thereof;

(ii) The dividend rate on the shares of such series, whether or not dividends on the shares of such series shall be cumulative, and the date or dates, if any, from which dividends thereon shall be cumulative;

(iii) Whether or not the share of such series shall be redeemable, and, if redeemable, the date or dates upon or after which they shall be redeemable, the amount or amounts per share (which shall be, in the case of each share, not less than its preference upon involuntary liquidation, plus an amount equal to all dividends thereon accrued and unpaid, whether or not earned or declared) payable thereon in the case of the redemption thereof, which amount may vary at different redemption dates or otherwise as permitted by law;

(iv) The right, if any, of holders of shares of such series to convert the same into, or exchange the same for, Common Stock or other stock as permitted by law, and the terms and conditions of such conversion or exchange, as well as provisions for adjustment of the conversion rate in such events as the Board of Directors shall determine;

(v) The amount per share payable on the shares of such series upon the voluntary and involuntary liquidation, dissolution or winding up of the corporation;

(vi) Whether the holders of shares of such series shall have voting power, full or limited, in addition to the voting powers provided by law and, in case additional voting powers are accorded, to fix the extent thereof; and

(vii) Generally to fix the other rights and privileges and any qualifications, limitations or restrictions of such rights and privileges of such series, provided, however, that no such rights, privileges, qualifications, limitations or restrictions shall be in conflict with the organization certificate of the corporation or with the resolution or resolutions adopted by the Board of Directors providing for the issue of any series of which there are shares outstanding.

All shares of Series Preferred Stock of the same series shall be identical in all respects, except that shares of any one series issued at different times may differ as to dates, if any, from which dividends thereon may accumulate. All shares of Series Preferred Stock of all series shall be of equal rank and shall be identical in all respects except that to the extent not otherwise limited in this Article III any series may differ from any other series with respect to any one or more of the designations, relative rights, preferences and limitations described or referred to in subparagraphs (I) to (vii) inclusive above.

2. Dividends: Dividends on the outstanding Series Preferred Stock of each series shall be declared and paid or set apart for payment before any dividends shall be declared and paid or set apart for payment on the Common Stock with respect to the same quarterly dividend period. Dividends on any shares of Series Preferred Stock shall be cumulative only if and to the extent set forth in a certificate filed pursuant to law. After dividends on all shares of Series Preferred Stock (including cumulative dividends if and to the extent any such shares shall be entitled thereto) shall have been declared and paid or set apart for payment with respect to any quarterly dividend period, then and not otherwise so long as any shares of Series Preferred Stock shall remain outstanding, dividends may be declared and paid or set apart for payment with respect to the same quarterly dividend period on the Common Stock out the assets or funds of the corporation legally available therefor.

All Shares of Series Preferred Stock of all series shall be of equal rank, preference and priority as to dividends irrespective of whether or not the rates of dividends to which the same shall be entitled shall be the same and when the stated dividends are not paid in full, the shares of all series of the Series Preferred Stock shall share ratably in the payment thereof in accordance with the sums which would be payable on such shares if all dividends were paid in full, provided, however, that any two or more series of the Series Preferred Stock may differ from each other as to the existence and extent of the right to cumulative dividends, as aforesaid.

3. Voting Rights: Except as otherwise specifically provided in the certificate filed pursuant to law with respect to any series of the Series Preferred Stock, or as otherwise provided by law, the Series Preferred Stock shall not have any right to vote for the election of directors or for any other purpose and the Common Stock shall have the exclusive right to vote for the election of directors and for all other purposes.

4. Liquidation: In the event of any liquidation, dissolution or winding up of the corporation, whether voluntary or involuntary, each series of Series Preferred Stock shall have preference and priority over the Common Stock for payment of the amount to which each outstanding series of Series Preferred Stock shall be entitled in accordance with the provisions thereof and each holder of Series Preferred Stock shall be entitled to be paid in full such amount, or have a sum sufficient for the payment in full set aside, before any payments shall be made to the holders of the Common Stock. If, upon liquidation, dissolution or

winding up of the corporation, the assets of the corporation or proceeds thereof, distributable among the holders of the shares of all series of the Series Preferred Stock shall be insufficient to pay in full the preferential amount aforesaid, then such assets, or the proceeds thereof, shall be distributed among such holders ratably in accordance with the respective amounts which would be payable if all amounts payable thereon were paid in full. After the payment to the holders of Series Preferred Stock of all such amounts to

which they are entitled, as above provided, the remaining assets and funds of the corporation shall be divided and paid to the holders of the Common Stock.

5. Redemption: In the event that the Series Preferred Stock of any series shall be made redeemable as provided in clause (iii) of paragraph 1 of section (b) of this Article III, the corporation, at the option of the Board of Directors, may redeem at any time or times, and from time to time, all or any part of any one or more series of Series Preferred Stock outstanding by paying for each share the then applicable redemption price fixed by the Board of Directors as provided herein, plus an amount equal to accrued and unpaid dividends to the date fixed for redemption, upon such notice and terms as may be specifically provided in the certificate filed pursuant to law with respect to the series.

6. Preemptive Rights: No holder of Series Preferred Stock of the corporation shall be entitled, as such, as a matter or right, to subscribe for or purchase any part of any new or additional issue of stock of any class or series whatsoever, any rights or options to purchase stock of any class or series whatsoever, or any securities convertible into, exchangeable for or carrying rights or options to purchase stock of any class or series whatsoever, whether now or hereafter authorized, and whether issued for cash or other consideration, or by way of dividend.

(c) Provisions relating to Floating Rate Non-Cumulative Preferred Stock, Series A. (Liquidation value \$1,000,000 per share.)

1. Designation: The distinctive designation of the series established hereby shall be "Floating Rate Non-Cumulative Preferred Stock, Series A" (hereinafter called "Series A Preferred Stock").

2. Number: The number of shares of Series A Preferred Stock shall initially be 250 shares. Shares of Series A Preferred Stock redeemed, purchased or otherwise acquired by the corporation shall be cancelled and shall revert to authorized but unissued Series Preferred Stock undesignated as to series.

3. Dividends:

(a) Dividend Payments Dates. Holders of the Series A Preferred Stock shall be entitled to receive non-cumulative cash dividends when, as and if declared by the Board of Directors of the corporation, out of funds legally available therefor, from the date of original issuance of such shares (the "Issue Date") and such dividends will be payable on March 28, June 28, September 28 and December 28 of each year ("Dividend Payment Date") commencing September 28, 1990, at a rate per annum as determined in paragraph 3(b) below. The period beginning on the Issue Date and ending on the day preceding the first Dividend Payment Date and each successive period beginning on a Dividend Payment Date and ending on the date preceding the next succeeding Dividend Payment Date is herein called a "Dividend Period". If any Dividend Payment Date shall be, in The City of New York, a Sunday or a legal holiday or a day on which banking institutions are authorized by law to close, then payment will be postponed to the next succeeding business day with the same force and effect as if made on the Dividend Payment Date, and no interest shall accrue for such Dividend Period after such Dividend Payment Date.

(b) Dividend Rate. The dividend rate from time to time payable in respect of Series A Preferred Stock (the "Dividend Rate") shall be determined on the basis of the following provisions:

(i) On the Dividend Determination Date, LIBOR will be determined on the basis of the offered rates for deposits in U.S. dollars having a maturity of three months commencing on the second London Business Day immediately following such Dividend Determination Date, as such rates appear on the Reuters Screen LIBO Page as of 11:00 A.M. London time, on such Dividend Determination Date. If at least two such offered rates appear on the Reuters Screen LIBO Page, LIBOR in respect of such Dividend Determination Dates will be the arithmetic mean (rounded to the nearest one-hundredth of a percent, with five one-thousandths of a percent rounded upwards) of such offered rates. If fewer than those offered rates appear, LIBOR in respect of such Dividend Determination Date will be determined as described in paragraph (ii) below.

(ii) On any Dividend Determination Date on which fewer than those offered rates for the applicable maturity appear on the Reuters Screen LIBO Page as specified in paragraph (i) above, LIBOR will be determined on the basis of the rates at which deposits in U.S. dollars having a maturity of three months commencing on the second London Business Day immediately following such Dividend Determination Date and in a principal amount of not less than \$1,000,000 that is representative of a single transaction in such market at such time are offered by three major banks in the London interbank market selected by the corporation at approximately 11:00 A.M., London time, on such Dividend Determination Date to prime banks in the London market. The corporation will request the principal London office of each of such banks to provide a quotation of its rate. If at least two such quotations are provided, LIBOR in respect of such Dividend Determination Date will be the arithmetic mean (rounded to the nearest one-hundredth of a percent, with five one-thousandths of a percent rounded upwards) of such quotations. If fewer than two quotations are provided, LIBOR in respect of such Dividend Determination Date will be the arithmetic mean (rounded to the nearest one-hundredth of a percent, with five one-thousandths of a percent rounded upwards) of the rates quoted by three major banks in New York City selected by the corporation at approximately 11:00 A.M., New York City time, on such Dividend Determination Date for loans in U.S. dollars to leading European banks having a maturity of three months commencing on the second London Business Day immediately following such Dividend Determination Date and in a principal amount of not less than \$1,000,000 that is representative of a single transaction in such market at such time; provided, however, that if the banks selected as aforesaid by the corporation are not quoting as aforementioned in this sentence, then, with respect to such Dividend Period, LIBOR for the preceding Dividend Period will be continued as LIBOR for such Dividend Period.

(iii) The Dividend Rate for any Dividend Period shall be equal

to the lower of 18% or 50 basis points above LIBOR for such Dividend Period as LIBOR is determined by sections (I) or (ii) above.

As used above, the term "Dividend Determination Date" shall mean, with respect to any Dividend Period, the second London Business Day prior to the commencement of such Dividend Period; and the term "London Business Day" shall mean any day that is not a Saturday or Sunday and that, in New York City, is not a day on which banking institutions generally are authorized or required by law or executive order to close and that is a day on which dealings in deposits in U.S. dollars are transacted in the London interbank market.

4. Voting Rights: The holders of the Series A Preferred Stock shall have the voting power and rights set forth in this paragraph 4 and shall have no other voting power or rights except as otherwise may from time to time be required by law.

So long as any shares of Series A Preferred Stock remain outstanding, the corporation shall not, without the affirmative vote or consent of the holders of at least a majority of the votes of the Series Preferred Stock entitled to vote outstanding at the time, given in person or by proxy, either in writing or by resolution adopted at a meeting at which the holders of Series A Preferred Stock (alone or together with the holders of one or more other series of Series Preferred Stock at the time outstanding and entitled to vote) vote separately as a class, alter the provisions of the Series Preferred Stock so as to materially adversely affect its rights; provided, however, that in the event any such materially adverse alteration affects the rights of only the Series A Preferred Stock, then the alteration may be effected with the vote or consent of at least a majority of the votes of the Series A Preferred Stock; provided, further, that an increase in the amount of the authorized Series Preferred Stock and/or the creation and/or issuance of other series of Series Preferred Stock in accordance with the organization certificate shall not be, nor be deemed to be, materially adverse alterations. In connection with the exercise of the voting rights contained in the preceding sentence, holders of all series of Series Preferred Stock which are granted such voting rights (of which the Series A Preferred Stock is the initial series) shall vote as a class (except as specifically provided otherwise) and each holder of Series A Preferred Stock shall have one vote for each share of stock held and each other series shall have such number of votes, if any, for each share of stock held as may be granted to them.

The foregoing voting provisions will not apply if, in connection with the matters specified, provision is made for the redemption or retirement of all outstanding Series A Preferred Stock.

5. Liquidation: Subject to the provisions of section (b) of this Article III, upon any liquidation, dissolution or winding up of the corporation, whether voluntary or involuntary, the holders of the Series A Preferred Stock shall have preference and priority over the Common Stock for payment out of the assets of the corporation or proceeds thereof, whether from capital or surplus, of \$1,000,000 per share (the "liquidation value") together with the amount of all dividends accrued and unpaid thereon, and after such payment the holders of Series A Preferred Stock shall be entitled to no other payments.

6. Redemption: Subject to the provisions of section (b) of this Article III, Series A Preferred Stock may be redeemed, at the option of the corporation in whole or part, at any time or from time to time at a redemption price of \$1,000,000 per share, in each case plus accrued and unpaid dividends to the date of redemption.

At the option of the corporation, shares of Series A Preferred Stock redeemed or otherwise acquired may be restored to the status of authorized but unissued shares of Series Preferred Stock.

In the case of any redemption, the corporation shall give notice of such redemption to the holders of the Series A Preferred Stock to be redeemed in the following manner: a notice specifying the shares to be redeemed and the time and place of redemption (and, if less than the total outstanding shares are to be redeemed, specifying the certificate numbers and number of shares to be redeemed) shall be mailed by first class mail, addressed to the holders of record of the Series A Preferred Stock to be redeemed at their respective addresses as the same shall appear upon the books of the corporation, not more than sixty (60) days and not less than thirty (30) days previous to the date fixed for redemption. In the event such notice is not given to any shareholder such failure to give notice shall not affect the notice given to other shareholders. If less than the whole amount of outstanding Series A Preferred Stock is to be redeemed, the shares to be redeemed shall be selected by lot or pro rata in any manner determined by resolution of the Board of Directors to be fair and proper. From and after the date fixed in any such notice as the date of redemption (unless default shall be made by the corporation in providing moneys at the time and place of redemption for the payment of the redemption price) all dividends upon the Series A Preferred Stock so called for redemption shall cease to accrue, and all rights of the holders of said Series A Preferred Stock as stockholders in the corporation, except the right to receive the redemption price (without interest) upon surrender of the certificate representing the Series A Preferred Stock so called for redemption, duly endorsed for transfer, if required, shall cease and terminate. The corporation's obligation to provide moneys in accordance with the preceding sentence shall be deemed fulfilled if, on or before the redemption date, the corporation shall deposit with a bank or trust company (which may be an affiliate of the corporation) having an office in the Borough of Manhattan, City of New York, having a capital and surplus of at least \$5,000,000 funds necessary for such redemption, in trust with irrevocable instructions that such funds be applied to the redemption of the shares of Series A Preferred Stock so called for redemption. Any interest accrued on such funds shall be paid to the corporation from time to time. Any funds so deposited and unclaimed at the end of two (2) years from such redemption date shall be released or repaid to the corporation, after which the holders of such shares of Series A Preferred Stock so called for redemption shall look only to the corporation for payment of the redemption price.

IV. The name, residence and post office address of each member of the corporation are as follows:

Name ----	RESIDENCE -----	POST OFFICE ADDRESS -----
James A. Blair	9 West 50th Street, Manhattan, New York City	33 Wall Street, Manhattan, New York City
James G. Cannon	72 East 54th Street, Manhattan New York City	14 Nassau Street, Manhattan, New York City
E. C. Converse	3 East 78th Street, Manhattan, New York City	139 Broadway, Manhattan, New York City

Henry P. Davison	Englewood, New Jersey	2 Wall Street, Manhattan, New York City
Granville W. Garth	160 West 57th Street, Manhattan, New York City	33 Wall Street Manhattan, New York City
A. Barton Hepburn	205 West 57th Street Manhattan, New York City	83 Cedar Street Manhattan, New York City
William Logan	Montclair, New Jersey	13 Nassau Street Manhattan, New York City
George W. Perkins	Riverdale, New York	23 Wall Street, Manhattan, New York City
William H. Porter	56 East 67th Street Manhattan, New York City	270 Broadway, Manhattan, New York City
John F. Thompson	Newark, New Jersey	143 Liberty Street, Manhattan, New York City
Albert H. Wiggin	42 West 49th Street, Manhattan, New York City	214 Broadway, Manhattan, New York City
Samuel Woolverton	Mount Vernon, New York	34 Wall Street, Manhattan, New York City
Edward F.C. Young	85 Glenwood Avenue, Jersey City, New Jersey	1 Exchange Place, Jersey City, New Jersey

V. The existence of the corporation shall be perpetual.

VI. The subscribers, the members of the said corporation, do, and each for himself does, hereby declare that he will accept the responsibilities and faithfully discharge the duties of a director therein, if elected to act as such, when authorized accordance with the provisions of the Banking Law of the State of New York.

VII. The number of directors of the corporation shall not be less than 10 nor more than 25."

4. The foregoing restatement of the organization certificate was authorized by the Board of Directors of the corporation at a meeting held on July 21, 1998.

IN WITNESS WHEREOF, we have made and subscribed this certificate this 6th day of August, 1998.

IN WITNESS WHEREOF, we have made and subscribed this certificate this 6th day of August, 1998.

/s/ James T. Byrne, Jr.

James T. Byrne, Jr.
Managing Director and Secretary

/s/ Lea Lahtinen

Lea Lahtinen
Vice President and Assistant Secretary

State of New York)
) ss:
County of New York)

Lea Lahtinen, being duly sworn, deposes and says that she is a Vice President and an Assistant Secretary of Bankers Trust Company, the corporation described in the foregoing certificate; that she has read the foregoing certificate and knows the contents thereof, and that the statements herein contained are true.

/s/ Lea Lahtinen

Lea Lahtinen

Sworn to before me this 6th day of August, 1998.

/s/ Sandra L. West

Notary Public

SANDRA L. WEST
Notary Public State of New York
No. 31-4942101
Qualified in New York County
Commission Expires September 19, 1998

STATE OF NEW YORK,

BANKING DEPARTMENT

I, MANUEL KURSKY, Deputy Superintendent of Banks of the State of New York, DO HEREBY APPROVE the annexed Certificate entitled "RESTATED ORGANIZATION CERTIFICATE OF BANKERS TRUST COMPANY UNDER SECTION 8007 OF THE BANKING LAW," dated August 6, 1998, providing for the restatement of the Organization Certificate and all amendments into a single certificate.

WITNESS, my hand and official seal of the Banking Department at the City of New York, this 31ST day of AUGUST in the Year of our Lord one thousand nine hundred and NINETY-EIGHT.

/s/ Manuel Kursky

DEPUTY Superintendent of Banks

CERTIFICATE OF AMENDMENT

OF THE

ORGANIZATION CERTIFICATE

OF BANKERS TRUST

Under Section 8005 of the Banking Law

We, James T. Byrne, Jr. and Lea Lahtinen, being respectively a Managing Director and Secretary and a Vice President and an Assistant Secretary of Bankers Trust Company, do hereby certify:

1. The name of the corporation is Bankers Trust Company.
2. The organization certificate of said corporation was filed by the Superintendent of Banks on the 5th of March, 1903.
3. The organization certificate as heretofore amended is hereby amended to increase the aggregate number of shares which the corporation shall have authority to issue and to increase the amount of its authorized capital stock in conformity therewith.
4. Article III of the organization certificate with reference to the authorized capital stock, the number of shares into which the capital stock shall be divided, the par value of the shares and the capital stock outstanding, which reads as follows:

"III. The amount of capital stock which the corporation is hereafter to have is Three Billion, One Million, Six Hundred Sixty-Six Thousand, Six Hundred Seventy Dollars (\$3,001,666,670), divided into Two Hundred Million, One Hundred Sixty-Six Thousand, Six Hundred Sixty-Seven (200,166,667) shares with a par value of \$10 each designated as Common Stock and 1000 shares with a par value of One Million Dollars (\$1,000,000) each designated as Series Preferred Stock."

is hereby amended to read as follows:

"III. The amount of capital stock which the corporation is hereafter to have is Three Billion, Five Hundred One Million, Six Hundred Sixty-Six Thousand, Six Hundred Seventy Dollars (\$3,501,666,670), divided into Two Hundred Million, One Hundred Sixty-Six Thousand, Six Hundred Sixty-Seven (200,166,667) shares with a par value of \$10 each designated as Common Stock and 1500 shares with a par value of One Million Dollars (\$1,000,000) each designated as Series Preferred Stock."

5. The foregoing amendment of the organization certificate was authorized by unanimous written consent signed by the holder of all outstanding shares entitled to vote thereon.

IN WITNESS WHEREOF, we have made and subscribed this certificate this 25th day of September, 1998

/s/ James T. Byrne, Jr.

James T. Byrne, Jr.
Managing Director and Secretary

/s/ Lea Lahtinen

Lea Lahtinen
Vice President and Assistant Secretary

State of New York)
) ss:
County of New York)

Lea Lahtinen, being fully sworn, deposes and says that she is a Vice President and an Assistant Secretary of Bankers Trust Company, the corporation described in the foregoing certificate; that she has read the foregoing certificate and knows the contents thereof, and that the statements herein contained are true.

/s/ Lea Lahtinen

Lea Lahtinen

Sworn to before me this 25th day
of September, 1998

/s/ Sandra L. West

Notary Public

SANDRA L. WEST
Notary Public State of New York
No. 31-4942101
Qualified in New York County
Commission Expires September 19, 2000

STATE OF NEW YORK,

BANKING DEPARTMENT

I, P. VINCENT CONLON, Deputy Superintendent of Banks of the State of New York, DO HEREBY APPROVE the annexed Certificate entitled "CERTIFICATE OF AMENDMENT OF THE ORGANIZATION CERTIFICATE OF BANKERS TRUST COMPANY UNDER SECTION 8005 OF THE BANKING LAW," dated December 16, 1998, providing for an increase in authorized capital stock from \$3,501,666,670 consisting of 200,166,667 shares with a par value of \$10 each designated as Common Stock and 1,500 shares with a par value of \$1,000,000 each designated as Series Preferred Stock to \$3,627,308,670 consisting of 212,730,867 shares with a par value of \$10 each designated as Common Stock and 1,500 shares with a par value of \$1,000,000 each designated as Series Preferred Stock.

WITNESS, my hand and official seal of the Banking Department at the City of New York, this 18TH day of DECEMBER in the Year of our Lord one thousand nine hundred and NINETY-EIGHT.

/s/ P. Vincent Conlon

Deputy Superintendent of Banks

CERTIFICATE OF AMENDMENT

OF THE

ORGANIZATION CERTIFICATE

OF BANKERS TRUST

Under Section 8005 of the Banking Law

We, James T. Byrne, Jr. and Lea Lahtinen, being respectively a Managing Director and Secretary and a Vice President and an Assistant Secretary of Bankers Trust Company, do hereby certify:

1. The name of the corporation is Bankers Trust Company.
2. The organization certificate of said corporation was filed by the Superintendent of Banks on the 5th of March, 1903.
3. The organization certificate as heretofore amended is hereby amended to increase the aggregate number of shares which the corporation shall have authority to issue and to increase the amount of its authorized capital stock in conformity therewith.
4. Article III of the organization certificate with reference to the authorized capital stock, the number of shares into which the capital stock shall be divided, the par value of the shares and the capital stock outstanding, which reads as follows:

"III. The amount of capital stock which the corporation is hereafter to have is Three Billion, Five Hundred One Million, Six Hundred Sixty-Six Thousand, Six Hundred Seventy Dollars (\$3,501,666,670), divided into Two Hundred Million, One Hundred Sixty-Six Thousand, Six Hundred Sixty-Seven (200,166,667) shares with a par value of \$10 each designated as Common Stock and 1500 shares with a par value of One Million Dollars (\$1,000,000) each designated as Series Preferred Stock."

is hereby amended to read as follows:

"III. The amount of capital stock which the corporation is hereafter to have is Three Billion, Six Hundred Twenty-Seven Million, Three Hundred Eight Thousand, Six Hundred Seventy Dollars (\$3,627,308,670), divided into Two Hundred Twelve Million, Seven Hundred Thirty Thousand, Eight Hundred Sixty-Seven (212,730,867) shares with a par value of \$10 each designated as Common Stock and 1500 shares with a par value of One Million Dollars (\$1,000,000) each designated as Series Preferred Stock."

5. The foregoing amendment of the organization certificate was authorized by unanimous written consent signed by the holder of all outstanding shares entitled to vote thereon.

IN WITNESS WHEREOF, we have made and subscribed this certificate this 16th day of December, 1998

/s/ James T. Byrne, Jr.

James T. Byrne, Jr.

Managing Director and Secretary

/s/ Lea Lahtinen

Lea Lahtinen
Vice President and Assistant Secretary

State of New York)
) ss:
County of New York)

Lea Lahtinen, being fully sworn, deposes and says that she is a Vice President and an Assistant Secretary of Bankers Trust Company, the corporation described in the foregoing certificate; that she has read the foregoing certificate and knows the contents thereof, and that the statements herein contained are true.

/s/ Lea Lahtinen

Lea Lahtinen

Sworn to before me this 16th day
of December, 1998

/s/ Sandra L. West

Notary Public

SANDRA L. WEST
Notary Public State of New York
No. 31-4942101
Qualified in New York County
Commission Expires September 19, 2000

BANKERS TRUST COMPANY

ASSISTANT SECRETARY'S CERTIFICATE

I, Lea Lahtinen, Vice President and Assistant Secretary of Bankers Trust Company, a corporation duly organized and existing under the laws of the State of New York, the United States of America, do hereby certify that attached copy of the Certificate of Amendment of the Organization Certificate of Bankers Trust Company, dated February 27, 2002, providing for a change of name of Bankers Trust Company to Deutsche Bank Trust Company Americas and approved by the New York State Banking Department on March 14, 2002 to effective on April 15, 2002, is a true and correct copy of the original Certificate of Amendment of the Organization Certificate of Bankers Trust Company on file in the Banking Department, State of New York.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of Bankers Trust Company this 4th day of April, 2002.

[SEAL]

/s/ Lea Lahtinen

Lea Lahtinen, Vice President and Assistant Secretary
Bankers Trust Company

State of New York)
) ss.:
County of New York)

On the 4th day of April in the year 2002 before me, the undersigned, a Notary Public in and for said state, personally appeared Lea Lahtinen, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person on behalf of which the individual acted, executed the instrument.

/s/ Sonja K. Olsen

Notary Public

SONJA K. OLSEN
Notary Public, State of New York
No. 010L4974457
Qualified in New York County
Commission Expires November 13, 2002

State of New York,

Banking Department

I, P. VINCENT CONLON, Deputy Superintendent of Banks of the State of New York, DO HEREBY APPROVE the annexed Certificate entitled "CERTIFICATE OF AMENDMENT OF THE ORGANIZATION CERTIFICATE OF BANKERS TRUST COMPANY under Section 8005 of the Banking Law" dated February 27, 2002, providing for a change of name of BANKERS TRUST COMPANY to DEUTSCHE BANK TRUST COMPANY AMERICAS.

Witness, my hand and official seal of the Banking Department at the City of
New York, this 14th day of March two thousand and two.

/s/ P. Vincent Conlon

Deputy Superintendent of Banks

CERTIFICATE OF AMENDMENT
OF THE
ORGANIZATION CERTIFICATE
OF
BANKERS TRUST COMPANY
Under Section 8005 of the Banking Law

We, James T. Byrne Jr., and Lea Lahtinen, being respectively the Secretary, and
Vice President and an Assistant Secretary of Bankers Trust Company, do hereby
certify:

1. The name of corporation is Bankers Trust Company.
2. The organization certificate of said corporation was filed by the
Superintendent of Banks on the 5th day of March, 1903.
3. Pursuant to Section 8005 of the Banking Law, attached hereto as Exhibit A is
a certificate issued by the State of New York, Banking Department listing all of
the amendments to the Organization Certificate of Bankers Trust Company since
its organization that have been filed in the Office of the Superintendent of
Banks.
4. The organization certificate as heretofore amended is hereby amended to
change the name of Bankers Trust Company to Deutsche Bank Trust Company Americas
to be effective on April 15, 2002.
5. The first paragraph number 1 of the organization of Bankers Trust Company
with the reference to the name of the Bankers Trust Company, which reads as
follows:

"1. The name of the corporation is Bankers Trust Company."

is hereby amended to read as follows effective on April 15, 2002:

"1. The name of the corporation is Deutsche Bank Trust Company
Americas."

6. The foregoing amendment of the organization certificate was authorized by
unanimous written consent signed by the holder of all outstanding shares
entitled to vote thereon.

IN WITNESS WHEREOF, we have made and subscribed this certificate this 27th day
of February, 2002.

/s/ James T. Byrne Jr.

James T. Byrne Jr.
Secretary

/s/ Lea Lahtinen

Lea Lahtinen
Vice President and Assistant Secretary

State of New York)
) ss.:
County of New York)

Lea Lahtinen, being duly sworn, deposes and says that she is a Vice President
and an Assistant Secretary of Bankers Trust Company, the corporation described
in the foregoing certificate; that she has read the foregoing certificate and
knows the contents thereof, and that the statements therein contained are true.

/s/ Lea Lahtinen

Lea Lahtinen

Sworn to before me this 27th day
of February, 2002

/s/ Sandra L. West

Notary Public

SANDRA L. WEST
Notary Public, State of New York
No. 01WE4942401
Qualified in New York County
Commission Expires September 19, 2002

State of New York

Banking Department

I, P. VINCENT CONLON, Deputy Superintendent of Banks of the State of New York,
DO HEREBY CERTIFY:

THAT, the records in the Office of the Superintendent of Banks indicate that BANKERS TRUST COMPANY is a corporation duly organized and existing under the laws of the State of New York as a trust company, pursuant to Article III of the Banking Law; and

THAT, the Organization Certificate of BANKERS TRUST COMPANY was filed in the Office of the Superintendent of Banks on March 5, 1903, and such corporation was authorized to commence business on March 24, 1903; and

THAT, the following amendments to its Organization Certificate have been filed in the Office of the Superintendent of Banks as of the dates specified:

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on January 14, 1905

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on August 4, 1909

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on February 1, 1911

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on June 17, 1911

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on August 8, 1911

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on August 8, 1911

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on March 21, 1912

Certificate of Amendment of Certificate of Incorporation providing for a decrease in number of directors - filed on January 15, 1915

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Certificate of Amendment of Certificate of Incorporation providing for a decrease in number of directors - filed on December 18, 1916

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on April 20, 1917

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on April 20, 1917

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on December 28, 1918

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on December 4, 1919

Certificate of Amendment of Certificate of Incorporation providing for an increase in number of directors - filed on January 15, 1926

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on June 12, 1928

Certificate of Amendment of Certificate of Incorporation providing for a change in shares - filed on April 4, 1929

Certificate of Amendment of Certificate of Incorporation providing for a minimum and maximum number of directors - filed on January 11, 1934

Certificate of Extension to perpetual - filed on January 13, 1941

Certificate of Amendment of Certificate of Incorporation providing for a minimum and maximum number of directors - filed on January 13, 1941

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on December 11, 1944

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed January 30, 1953

Restated Certificate of Incorporation - filed November 6, 1953

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on April 8, 1955

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Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on February 1, 1960

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on July 14, 1960

Certificate of Amendment of Certificate of Incorporation providing for a change in shares - filed on September 30, 1960

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on January 26, 1962

Certificate of Amendment of Certificate of Incorporation providing for a change in shares - filed on September 9, 1963

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on February 7, 1964

Certificate of Amendment of Certificate of Incorporation providing for an increase in capital stock - filed on February 24, 1965

Certificate of Amendment of the Organization Certificate providing for a decrease in capital stock - filed January 24, 1967

Restated Organization Certificate - filed June 1, 1971

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed October 29, 1976

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 22, 1977

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed August 5, 1980

Restated Organization Certificate - filed July 1, 1982

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 27, 1984

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed September 18, 1986

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Certificate of Amendment of the Organization Certificate providing for a minimum and maximum number of directors - filed January 22, 1990

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed June 28, 1990

Restated Organization Certificate - filed August 20, 1990

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed June 26, 1992

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed March 28, 1994

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed June 23, 1995

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 27, 1995

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed March 21, 1996

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 27, 1996

Certificate of Amendment to the Organization Certificate providing for an increase in capital stock - filed June 27, 1997

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed September 26, 1997

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 29, 1997

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed March 26, 1998

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed June 23, 1998

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Restated Organization Certificate - filed August 31, 1998

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed September 25, 1998

Certificate of Amendment of the Organization Certificate providing for an increase in capital stock - filed December 18, 1998; and

Certificate of Amendment of the Organization Certificate providing for a change in the number of directors - filed September 3, 1999; and

THAT, no amendments to its Restated Organization Certificate have been filed in the Office of the Superintendent of Banks except those set forth above; and attached hereto; and

I DO FURTHER CERTIFY THAT, BANKERS TRUST COMPANY is validly existing as a banking organization with its principal office and place of business located at 130 Liberty Street, New York, New York.

WITNESS, my hand and official seal of the Banking Department at the City of New York this 16th day of October in the Year Two Thousand and One.

/s/ P. Vincent Conlon

Deputy Superintendent of Banks

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DEUTSCHE BANK TRUST COMPANY AMERICAS

BY-LAWS

APRIL 15, 2002

DEUTSCHE BANK TRUST COMPANY AMERICAS

NEW YORK

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BY-LAWS
OF

DEUTSCHE BANK TRUST COMPANY AMERICAS

ARTICLE I

MEETINGS OF STOCKHOLDERS

SECTION 1. The annual meeting of the stockholders of this Company shall be held at the office of the Company in the Borough of Manhattan, City of New York, in January of each year, for the election of directors and such other business as may properly come before said meeting.

SECTION 2. Special meetings of stockholders other than those regulated by statute may be called at any time by a majority of the directors. It shall be the duty of the Chairman of the Board, the Chief Executive Officer, the President or any Co-President to call such meetings whenever requested in writing to do so by stockholders owning a majority of the capital stock.

SECTION 3. At all meetings of stockholders, there shall be present, either in person or by proxy, stockholders owning a majority of the capital stock of the Company, in order to constitute a quorum, except at special elections of directors, as provided by law, but less than a quorum shall have power to adjourn any meeting.

SECTION 4. The Chairman of the Board or, in his absence, the Chief Executive Officer or, in his absence, the President or any Co-President or, in their absence, the senior officer present, shall preside at meetings of the stockholders and shall direct the proceedings and the order of business. The Secretary shall act as secretary of such meetings and record the proceedings.

ARTICLE II

DIRECTORS

SECTION 1. The affairs of the Company shall be managed and its corporate powers exercised by a Board of Directors consisting of such number of directors, but not less than seven nor more than fifteen, as may from time to time be fixed by resolution adopted by a majority of the directors then in office, or by the stockholders. In the event of any increase in the number of directors, additional directors may be elected within the limitations so fixed, either by the stockholders or within the limitations imposed by law, by a majority of directors then in office. One-third of the number of directors, as fixed from time to time, shall constitute a quorum. Any one or more members of the Board of Directors or any Committee thereof may participate in a meeting of the Board of Directors or Committee thereof by means of a conference telephone, video conference or similar communications equipment which allows all persons participating in the meeting to hear each other at the same time. Participation by such means shall constitute presence in person at such a meeting.

All directors hereafter elected shall hold office until the next annual meeting of the stockholders and until their successors are elected and have qualified.

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No Officer-Director who shall have attained age 65, or earlier relinquishes his responsibilities and title, shall be eligible to serve as a director.

SECTION 2. Vacancies not exceeding one-third of the whole number of the Board of Directors may be filled by the affirmative vote of a majority of the directors then in office, and the directors so elected shall hold office for the balance of the unexpired term.

SECTION 3. The Chairman of the Board shall preside at meetings of the Board of Directors. In his absence, the Chief Executive Officer or, in his absence the President or any Co-President or, in their absence such other director as the Board of Directors from time to time may designate shall preside at such meetings.

SECTION 4. The Board of Directors may adopt such Rules and Regulations for the conduct of its meetings and the management of the affairs of the Company as it may deem proper, not inconsistent with the laws of the State of New York, or these By-Laws, and all officers and employees shall strictly adhere to, and be bound by, such Rules and Regulations.

SECTION 5. Regular meetings of the Board of Directors shall be held from time to time provided, however, that the Board of Directors shall hold a regular meeting not less than six times a year, provided that during any three consecutive calendar months the Board of Directors shall meet at least once, and its Executive Committee shall not be required to meet at least once in each thirty day period during which the Board of Directors does not meet. Special meetings of the Board of Directors may be called upon at least two day's notice whenever it may be deemed proper by the Chairman of the Board or, the Chief Executive Officer or, the President or any Co-President or, in their absence, by such other director as the Board of Directors may have designated pursuant to Section 3 of this Article, and shall be called upon like notice whenever any three of the directors so request in writing.

SECTION 6. The compensation of directors as such or as members of committees shall be fixed from time to time by resolution of the Board of Directors.

ARTICLE III

COMMITTEES

SECTION 1. There shall be an Executive Committee of the Board consisting of not less than five directors who shall be appointed annually by the Board of Directors. The Chairman of the Board shall preside at meetings of the Executive Committee. In his absence, the Chief Executive Officer or, in his absence, the

President or any Co-President or, in their absence, such other member of the Committee as the Committee from time to time may designate shall preside at such meetings.

The Executive Committee shall possess and exercise to the extent permitted by law all of the powers of the Board of Directors, except when the latter is in session, and shall keep minutes of its proceedings, which shall be presented to the Board of Directors at its next subsequent meeting. All acts done and powers and authority conferred by the Executive Committee from time to time

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shall be and be deemed to be, and may be certified as being, the act and under the authority of the Board of Directors.

A majority of the Committee shall constitute a quorum, but the Committee may act only by the concurrent vote of not less than one-third of its members, at least one of who must be a director other than an officer. Any one or more directors, even though not members of the Executive Committee, may attend any meeting of the Committee, and the member or members of the Committee present, even though less than a quorum, may designate any one or more of such directors as a substitute or substitutes for any absent member or members of the Committee, and each such substitute or substitutes shall be counted for quorum, voting, and all other purposes as a member or members of the Committee.

SECTION 2. There shall be an Audit Committee appointed annually by resolution adopted by a majority of the entire Board of Directors which shall consist of such number of directors, who are not also officers of the Company, as may from time to time be fixed by resolution adopted by the Board of Directors. The Chairman shall be designated by the Board of Directors, who shall also from time to time fix a quorum for meetings of the Committee. Such Committee shall conduct the annual directors' examinations of the Company as required by the New York State Banking Law; shall review the reports of all examinations made of the Company by public authorities and report thereon to the Board of Directors; and shall report to the Board of Directors such other matters as it deems advisable with respect to the Company, its various departments and the conduct of its operations.

In the performance of its duties, the Audit Committee may employ or retain, from time to time, expert assistants, independent of the officers or personnel of the Company, to make studies of the Company's assets and liabilities as the Committee may request and to make an examination of the accounting and auditing methods of the Company and its system of internal protective controls to the extent considered necessary or advisable in order to determine that the operations of the Company, including its fiduciary departments, are being audited by the General Auditor in such a manner as to provide prudent and adequate protection. The Committee also may direct the General Auditor to make such investigation as it deems necessary or advisable with respect to the Company, its various departments and the conduct of its operations. The Committee shall hold regular quarterly meetings and during the intervals thereof shall meet at other times on call of the Chairman.

SECTION 3. The Board of Directors shall have the power to appoint any other Committees as may seem necessary, and from time to time to suspend or continue the powers and duties of such Committees. Each Committee appointed pursuant to this Article shall serve at the pleasure of the Board of Directors.

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ARTICLE IV

OFFICERS

SECTION 1. The Board of Directors shall elect from among their number a Chairman of the Board and a Chief Executive Officer; and shall also elect a President, or two or more Co-Presidents, and may also elect, one or more Vice Chairmen, one or more Executive Vice Presidents, one or more Managing Directors, one or more Senior Vice Presidents, one or more Directors, one or more Vice Presidents, one or more General Managers, a Secretary, a Controller, a Treasurer, a General Counsel, a General Auditor, a General Credit Auditor, who need not be directors. The officers of the corporation may also include such other officers or assistant officers as shall from time to time be elected or appointed by the Board. The Chairman of the Board or the Chief Executive Officer or, in their absence, the President or any Co-President, or any Vice Chairman, may from time to time appoint assistant officers. All officers elected or appointed by the Board of Directors shall hold their respective offices during the pleasure of the Board of Directors, and all assistant officers shall hold office at the pleasure of the Board or the Chairman of the Board or the Chief Executive Officer or, in their absence, the President, or any Co-President or any Vice Chairman. The Board of Directors may require any and all officers and employees to give security for the faithful performance of their duties.

SECTION 2. The Board of Directors shall designate the Chief Executive Officer of the Company who may also hold the additional title of Chairman of the Board, or President, or any Co-President, and such person shall have, subject to the supervision and direction of the Board of Directors or the Executive Committee, all of the powers vested in such Chief Executive Officer by law or by these By-Laws, or which usually attach or pertain to such office. The other officers shall have, subject to the supervision and direction of the Board of Directors or the Executive Committee or the Chairman of the Board or, the Chief Executive Officer, the powers vested by law or by these By-Laws in them as holders of their respective offices and, in addition, shall perform such other duties as shall be assigned to them by the Board of Directors or the Executive Committee or the Chairman of the Board or the Chief Executive Officer.

The General Auditor shall be responsible, through the Audit Committee, to the Board of Directors for the determination of the program of the internal audit function and the evaluation of the adequacy of the system of internal controls. Subject to the Board of Directors, the General Auditor shall have and may exercise all the powers and shall perform all the duties usual to such office and shall have such other powers as may be prescribed or assigned to him from time to time by the Board of Directors or vested in him by law or by these By-Laws. He shall perform such other duties and shall make such investigations, examinations and reports as may be prescribed or required by the Audit Committee. The General Auditor shall have unrestricted access to all records and premises of the Company and shall delegate such authority to his subordinates. He shall have the duty to report to the Audit Committee on all matters concerning the internal audit program and the adequacy of the system of internal controls of the Company which he deems advisable or which the Audit Committee may request. Additionally, the General Auditor shall have the duty of reporting independently of all officers of the Company to the Audit Committee at least quarterly on any matters concerning the internal audit program and the adequacy of the system of internal controls of the Company that should be brought to the attention of the directors except those matters responsibility for which has been vested in the General Credit Auditor. Should the General Auditor deem any

matter to be of special immediate importance, he shall

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report thereon forthwith to the Audit Committee. The General Auditor shall report to the Chief Financial Officer only for administrative purposes.

The General Credit Auditor shall be responsible to the Chief Executive Officer and, through the Audit Committee, to the Board of Directors for the systems of internal credit audit, shall perform such other duties as the Chief Executive Officer may prescribe, and shall make such examinations and reports as may be required by the Audit Committee. The General Credit Auditor shall have unrestricted access to all records and may delegate such authority to subordinates.

SECTION 3. The compensation of all officers shall be fixed under such plan or plans of position evaluation and salary administration as shall be approved from time to time by resolution of the Board of Directors.

SECTION 4. The Board of Directors, the Executive Committee, the Chairman of the Board, the Chief Executive Officer or any person authorized for this purpose by the Chief Executive Officer, shall appoint or engage all other employees and agents and fix their compensation. The employment of all such employees and agents shall continue during the pleasure of the Board of Directors or the Executive Committee or the Chairman of the Board or the Chief Executive Officer or any such authorized person; and the Board of Directors, the Executive Committee, the Chairman of the Board, the Chief Executive Officer or any such authorized person may discharge any such employees and agents at will.

ARTICLE V

INDEMNIFICATION OF DIRECTORS, OFFICERS AND OTHERS

SECTION 1. The Company shall, to the fullest extent permitted by Section 7018 of the New York Banking Law, indemnify any person who is or was made, or threatened to be made, a party to an action or proceeding, whether civil or criminal, whether involving any actual or alleged breach of duty, neglect or error, any accountability, or any actual or alleged misstatement, misleading statement or other act or omission and whether brought or threatened in any court or administrative or legislative body or agency, including an action by or in the right of the Company to procure a judgment in its favor and an action by or in the right of any other corporation of any type or kind, domestic or foreign, or any partnership, joint venture, trust, employee benefit plan or other enterprise, which any director or officer of the Company is servicing or served in any capacity at the request of the Company by reason of the fact that he, his testator or intestate, is or was a director or officer of the Company, or is serving or served such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise in any capacity, against judgments, fines, amounts paid in settlement, and costs, charges and expenses, including attorneys' fees, or any appeal therein; provided, however, that no indemnification shall be provided to any such person if a judgment or other final adjudication adverse to the director or officer establishes that (i) his acts were committed in bad faith or were the result of active and deliberate dishonesty and, in either case, were material to the cause of action so adjudicated, or (ii) he personally gained in fact a financial profit or other advantage to which he was not legally entitled.

SECTION 2. The Company may indemnify any other person to whom the Company is permitted to provide indemnification or the advancement of expenses by applicable law, whether pursuant to rights granted pursuant to, or provided by, the New York Banking Law or other rights

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created by (i) a resolution of stockholders, (ii) a resolution of directors, or (iii) an agreement providing for such indemnification, it being expressly intended that these By-Laws authorize the creation of other rights in any such manner.

SECTION 3. The Company shall, from time to time, reimburse or advance to any person referred to in Section 1 the funds necessary for payment of expenses, including attorneys' fees, incurred in connection with any action or proceeding referred to in Section 1, upon receipt of a written undertaking by or on behalf of such person to repay such amount(s) if a judgment or other final adjudication adverse to the director or officer establishes that (i) his acts were committed in bad faith or were the result of active and deliberate dishonesty and, in either case, were material to the cause of action so adjudicated, or (ii) he personally gained in fact a financial profit or other advantage to which he was not legally entitled.

SECTION 4. Any director or officer of the Company serving (i) another corporation, of which a majority of the shares entitled to vote in the election of its directors is held by the Company, or (ii) any employee benefit plan of the Company or any corporation referred to in clause (i) in any capacity shall be deemed to be doing so at the request of the Company. In all other cases, the provisions of this Article V will apply (i) only if the person serving another corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise so served at the specific request of the Company, evidenced by a written communication signed by the Chairman of the Board, the Chief Executive Officer, the President or any Co-President, and (ii) only if and to the extent that, after making such efforts as the Chairman of the Board, the Chief Executive Officer, the President or any Co-President shall deem adequate in the circumstances, such person shall be unable to obtain indemnification from such other enterprise or its insurer.

SECTION 5. Any person entitled to be indemnified or to the reimbursement or advancement of expenses as a matter of right pursuant to this Article V may elect to have the right to indemnification (or advancement of expenses) interpreted on the basis of the applicable law in effect at the time of occurrence of the event or events giving rise to the action or proceeding, to the extent permitted by law, or on the basis of the applicable law in effect at the time indemnification is sought.

SECTION 6. The right to be indemnified or to the reimbursement or advancement of expense pursuant to this Article V (i) is a contract right pursuant to which the person entitled thereto may bring suit as if the provisions hereof were set forth in a separate written contract between the Company and the director or officer, (ii) is intended to be retroactive and shall be available with respect to events occurring prior to the adoption hereof, and (iii) shall continue to exist after the rescission or restrictive modification hereof with respect to events occurring prior thereto.

SECTION 7. If a request to be indemnified or for the reimbursement or advancement of expenses pursuant hereto is not paid in full by the Company within thirty days after a written claim has been received by the Company, the

claimant may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled also to be paid the expenses of prosecuting such claim. Neither the failure of the Company (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such action that indemnification of or reimbursement or advancement of expenses to the claimant is proper in the circumstance, nor an actual determination by the Company (including its Board of Directors,

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independent legal counsel, or its stockholders) that the claimant is not entitled to indemnification or to the reimbursement or advancement of expenses, shall be a defense to the action or create a presumption that the claimant is not so entitled.

SECTION 8. A person who has been successful, on the merits or otherwise, in the defense of a civil or criminal action or proceeding of the character described in Section 1 shall be entitled to indemnification only as provided in Sections 1 and 3, notwithstanding any provision of the New York Banking Law to the contrary.

ARTICLE VI

SEAL

SECTION 1. The Board of Directors shall provide a seal for the Company, the counterpart dies of which shall be in the charge of the Secretary of the Company and such officers as the Chairman of the Board, the Chief Executive Officer or the Secretary may from time to time direct in writing, to be affixed to certificates of stock and other documents in accordance with the directions of the Board of Directors or the Executive Committee.

SECTION 2. The Board of Directors may provide, in proper cases on a specified occasion and for a specified transaction or transactions, for the use of a printed or engraved facsimile seal of the Company.

ARTICLE VII

CAPITAL STOCK

SECTION 1. Registration of transfer of shares shall only be made upon the books of the Company by the registered holder in person, or by power of attorney, duly executed, witnessed and filed with the Secretary or other proper officer of the Company, on the surrender of the certificate or certificates of such shares properly assigned for transfer.

ARTICLE VIII

CONSTRUCTION

SECTION 1. The masculine gender, when appearing in these By-Laws, shall be deemed to include the feminine gender.

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ARTICLE IX

AMENDMENTS

SECTION 1. These By-Laws may be altered, amended or added to by the Board of Directors at any meeting, or by the stockholders at any annual or special meeting, provided notice thereof has been given.

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DEUTSCHE BANK TRUST COMPANY AMERICAS	FFIEC 031

Legal Title of Bank	RC-1
NEW YORK	

City	11
NY	

State	Zip Code
FDIC Certificate Number	- 00623

CONSOLIDATED REPORT OF CONDITION FOR INSURED COMMERCIAL
AND STATE-CHARTERED SAVINGS BANKS FOR SEPTEMBER 30, 2003

All schedules are to be reported in thousands of dollars. Unless otherwise indicated, reported the amount outstanding as of the last business day of the quarter.

SCHEDULE RC--BALANCE SHEET

Dollar Amounts in Thousands

ASSETS

1.	Cash and balances due from depository institutions (from Schedule RC-A):
a.	Noninterest-bearing balances and currency and coin (1)
b.	Interest-bearing balances (2)
2.	Securities:
a.	Held-to-maturity securities (from Schedule RC-B, column A)
b.	Available-for-sale securities (from Schedule RC-B, column D).....

3.	Federal funds sold and securities purchased under agreements to resell.....			
a.	Federal funds sold in domestic offices.....			
b.	Securities purchased under agreements to resell (3).....			
4.	Loans and lease financing receivables (from Schedule RC-C):			
a.	Loans and leases held for sale			
b.	Loans and leases, net unearned income.....	B528	10,097,000	
c.	LESS: Allowance for loan and lease losses	3123	406,000	
d.	Loans and leases, net of unearned income and allowance (item 4.b minus 4.c)			
5.	Trading Assets (from schedule RC-D)			
6.	Premises and fixed assets (including capitalized leases)			
7.	Other real estate owned (from Schedule RC-M)			
8.	Investments in unconsolidated subsidiaries and associated companies (from Schedule RC-M)			
9.	Customers' liability to this bank on acceptances outstanding			
10.	Intangible assets			
a.	Goodwill.....			
b.	Other intangible assets (from Schedule RC-M)			
11.	Other assets (from Schedule RC-F)			
12.	Total assets (sum of items 1 through 11)			

		RCFD		
ASSETS				
1.	Cash and balances due from depository institutions (from Schedule RC-A):	/ / / / / / / / / /		
a.	Noninterest-bearing balances and currency and coin (1)	0081	2,807,000	1.a.
b.	Interest-bearing balances (2)	0071	113,000	1.b.
2.	Securities:	/ / / / / / / / / /		
a.	Held-to-maturity securities (from Schedule RC-B, column A)	1754	0	2.a.
b.	Available-for-sale securities (from Schedule RC-B, column D).....	1773	58,000	2.b.
3.	Federal funds sold and securities purchased under agreements to resell.....	RCON		3.
a.	Federal funds sold in domestic offices.....	B987	1,958,000	3.a
		RCFD		
b.	Securities purchased under agreements to resell (3).....	B989	5,503,000	3.b
4.	Loans and lease financing receivables (from Schedule RC-C):	/ / / / / / / / / /		
a.	Loans and leases held for sale	5369	0	4.a.
b.	Loans and leases, net unearned income.....	/ / / / / / / / / /		4.b.
c.	LESS: Allowance for loan and lease losses	/ / / / / / / / / /		4.c.
d.	Loans and leases, net of unearned income and allowance (item 4.b minus 4.c)	/ / / / / / / / / /		
		B529	7,149,000	4.d.
5.	Trading Assets (from schedule RC-D)	3545	12,644,000	5.
6.	Premises and fixed assets (including capitalized leases)	2145	278,000	6.
7.	Other real estate owned (from Schedule RC-M)	2150	60,000	7.
8.	Investments in unconsolidated subsidiaries and associated companies (from Schedule RC-M)	2130	3,046,000	8.
9.	Customers' liability to this bank on acceptances outstanding	2155	0	9.
10.	Intangible assets	/ / / / / / / / / /		
a.	Goodwill.....	3163	0	10.a
b.	Other intangible assets (from Schedule RC-M)	0426	29,000	10.b
11.	Other assets (from Schedule RC-F)	2160	2,193,000	11.
12.	Total assets (sum of items 1 through 11)	2170	35,838,000	12.

- (1) Includes cash items in process of collection and unposted debits.
(2) Includes time certificates of deposit not held for trading.
(3) Includes all securities resale agreements in domestic and foreign offices, regardless of maturity.

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DEUTSCHE BANK TRUST COMPANY AMERICAS FFIEC 031

Legal Title of Bank RC-2
FDIC Certificate Number - 00623 12

SCHEDULE RC--CONTINUED

DOLLAR AMOUNTS IN THOUSANDS

LIABILITIES				
13.	Deposits:	/// / / / / / / / / / /		
a.	In domestic offices (sum of totals of columns A and C from Schedule RC-E, part I)	RCON 2200	8,679,000	13.a.
(1)	Noninterest-bearing(1)	RCON 6631	3,050,000	13.a.(1)
(2)	Interest-bearing	RCON 6636	6,784,000	13.a.(2)
b.	In foreign offices, Edge and Agreement subsidiaries, and IBFs (from Schedule RC-E part II)	/// / / / / / / / / / /		
(1)	Noninterest-bearing	RCFN 2200	8,941,000	13.b.
(2)	Interest-bearing	RCFN 6631	1,814,000	13.b.(1)
		RCFN 6636	7,609,000	13.b.(2)
14.	Federal funds purchased and securities sold under agreements to repurchase:	RCON		
a.	Federal Funds purchased in domestic offices (2).....	B993	7,341,000	14.a
b.	Securities sold under agreements to repurchase (3).....	RCFD		
		B995	0	14.b
15.	Trading liabilities (from Schedule RC-D).....	RCFD 3548	1,331,000	15.
16.	Other borrowed money (includes mortgage indebtedness and obligations under capitalized leases):	/// / / / / / / / / / /		
(from Schedule RC-M):		RCFD 3190	103,000	16.
17.	Not Applicable.	/// / / / / / / / / / /		17.
18.	Bank's liability on acceptances executed and outstanding	RCFD 2920	0	18.
19.	Subordinated notes and debentures (2).....	RCFD 3200	9,000	19.
20.	Other liabilities (from Schedule RC-G)	RCFD 2930	1,711,000	20.
21.	Total liabilities (sum of items 13 through 20)	RCFD 2948	28,115,000	21.
22.	Minority interest in consolidated subsidiaries	RCFD 3000	624,000	22.
EQUITY CAPITAL				
23.	Perpetual preferred stock and related surplus	RCFD 3838	1,500,000	23.
24.	Common stock	RCFD 3230	2,127,000	24.
25.	Surplus (exclude all surplus related to preferred stock)	RCFD 3839	584,000	25.
26.	a. Retained earnings	RCFD 3632	2,879,000	26.a.

b.	Accumulated other comprehensive Income (3)	RCFD B530	9,000	26.b.
27.	Other equity capital components (4)	RCFD A130	0	27.
28.	Total equity capital (sum of items 23 through 27)	RCFD 3210	7,099,000	28.
29.	Total liabilities, minority interest, and equity capital (sum of items 21, 22, and 28)	RCFD 3300	35,838,000	29.

Memorandum
 To be reported only with the March Report of Condition.

1. Indicate in the box at the right the number of the statement below that best describes the most comprehensive level of auditing work performed for the bank by independent external auditors as of any date during 2001.

RCFD 6724

Number

N/A

M.1
- 1 = Independent audit of the bank conducted in accordance with generally accepted auditing standards by a certified public accounting firm which submits a report on the bank

5 = Directors' examination of the bank performed by other external auditors (may be required by state chartering authority)
- 2 = Independent audit of the bank's parent holding company conducted in accordance with generally accepted auditing standards by a certified public accounting firm which submits a report on the consolidated holding company (but not on the bank separately)

6 = Review of the bank's financial statements by external auditors
- 3 = Attestation on bank management's assertion on the effectiveness of the bank's internal control over financial reporting by a certified public accounting firm

7 = Compilation of the bank's financial statements by external auditors
- 4 = Directors' examination of the bank conducted in accordance with generally accepted auditing standards by a certified public accounting firm (may be required by state chartering authority)

8 = Other audit procedures (excluding tax preparation work)
- 9 = No external audit work

- (1) Includes total demand deposits and noninterest-bearing time and savings deposits.

(2) Report overnight Federal Home Loan Bank advances in Schedule RC, Item 16, "other borrowed money."

(3) Includes all securities repurchase agreements in domestic and foreign offices, regardless of maturity.

(4) Includes limited-life preferred stock and related surplus.

(5) Includes net unrealized holding gains (losses) on available-for-sale securities, accumulated net gains (losses) on cash flow hedges, cumulative foreign currency translation adjustments, and minimum pension liability adjustments.

(6) Includes treasury stock and unearned Employee Stock Plan shares.

EMCORE CORPORATION

Exchange Offer

**5% Convertible Senior Subordinated Notes due May 15, 2011 and
Shares of Common Stock for its
5% Convertible Subordinated Notes due May 15, 2006**

THE EXCHANGE OFFER WILL EXPIRE AT 11:59 P.M., NEW YORK CITY TIME, ON JANUARY 1, 2004 UNLESS EXTENDED (THE "EXPIRATION DATE"). TENDERS MAY BE WITHDRAWN PRIOR TO 11:59 P.M., NEW YORK CITY TIME, ON THE EXPIRATION DATE

Delivery To:

Wilmington Trust Company, Exchange Agent

By Regular Mail or Overnight Courier:

By Registered & Certified Mail:

In Person by Hand Only:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

For Information or Confirmation by Telephone Call:
(302) 636-6469

By Facsimile Transmission (For Eligible Institutions Only):
(302) 636-4145

Attention: Christine Kushto

DELIVERY OF THIS INSTRUMENT TO AN ADDRESS OTHER THAN AS SET FORTH ABOVE, OR TRANSMISSION OF INSTRUCTIONS VIA FACSIMILE OTHER THAN AS SET FORTH ABOVE, WILL NOT CONSTITUTE A VALID DELIVERY.

The undersigned acknowledges that he or she has received the preliminary Prospectus, dated December 24, 2003 (the "Prospectus"), of EMCORE Corporation, a New Jersey corporation (the "Company"), and this Letter of Transmittal (the "Letter"), which together constitute the Company's offer (the "Exchange Offer") to exchange an aggregate principal amount of up to \$88,962,500 of the Company's 5% Convertible Senior Subordinated Notes due May 15, 2011 (the "New Notes") and \$56,612,500 payable in our Common Stock, no par value per share ("Common Stock"), up to a maximum of 10,542,365 shares, for an aggregate principal amount of up to \$161,750,000 of the Company's outstanding 5% Convertible Subordinated Notes due May 15, 2006 (the "Existing Notes") from the registered holders thereof (the "Holders").

Holders must tender Existing Notes in a principal amount of \$1,000 or integral multiples thereof. The Company will pay cash for any fractional portion of any New Note that is less than \$1,000 principal amount or fractional share of Common Stock issuable as a result of the exchange offer, after aggregating all of the Existing Notes tendered in the Exchange Offer by each Holder, and the Company will pay any accrued and unpaid interest on the Existing Notes.

tendered into the Exchange Offer in cash. The New Notes will bear interest from the date of issuance. Accordingly, Holders of New Notes on the relevant record date for the first interest payment date following the consummation of the Exchange Offer will receive interest accruing from the date of issuance.

This Letter is to be completed by a Holder of Existing Notes and is to be made by book-entry transfer to the account maintained by the Exchange Agent at The Depository Trust Company (the "Book-Entry Transfer Facility") pursuant to the procedures set forth in "The Exchange Offer—Procedures for Tendering Existing Notes" section of the Prospectus. Holders of Existing Notes who are unable to deliver confirmation of the book-entry tender of their Existing Notes into the Exchange Agent's account at the Book-Entry Transfer Facility (a "Book-Entry Confirmation") and all other documents required by this Letter to the Exchange Agent on or prior to the Expiration Date, must tender their Existing Notes according to the guaranteed delivery procedures set forth in "The Exchange Offer—Guaranteed Delivery Procedures" section of the Prospectus. Delivery of documents to the Book-Entry Transfer Facility does not constitute delivery to the Exchange Agent.

The undersigned has completed the appropriate boxes below and signed this Letter to indicate the action the undersigned desires to take with respect to the Exchange Offer.

List below the Existing Notes to which this Letter relates. If the space provided below is inadequate, the description and principal amount of Existing Notes should be listed and attached on a separate signed schedule.

DESCRIPTION OF EXISTING NOTES

Name(s) and Address(es) of Registered Holder(s) (Please fill in, if blank)	Aggregate Principal Amount of Existing Note(s)	Principal Amount Tendered*
	Total	

* Unless otherwise indicated in this column, a Holder will be deemed to have tendered ALL of the Existing Notes represented by the Existing Notes indicated in column 2. See Instruction 2. Existing Notes tendered hereby must be in denominations of a \$1,000 principal amount or an integral multiple thereof. See Instruction 1.

CHECK HERE IF TENDERED EXISTING NOTES ARE BEING DELIVERED BY BOOK-ENTRY TRANSFER MADE TO THE ACCOUNT MAINTAINED BY THE EXCHANGE AGENT WITH THE BOOK-ENTRY TRANSFER FACILITY AND COMPLETE THE FOLLOWING:

Name of Tendering Institution

Account Number _____

Transaction Code Number

CHECK HERE IF TENDERED EXISTING NOTES ARE BEING DELIVERED PURSUANT TO A NOTICE OF GUARANTEED DELIVERY PREVIOUSLY SENT TO THE EXCHANGE AGENT AND COMPLETE THE FOLLOWING:

Name(s) of Registered Holder(s) _____

Window Ticket Number (if any) _____

Date of Execution of Notice of Guaranteed Delivery _____

Name of Institution which Guaranteed Delivery _____

For Book-Entry Transfer, Complete the Following: _____

Account Number _____

Transaction Code Number _____

PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY

Ladies and Gentlemen:

Upon the terms and subject to the conditions of the Exchange Offer, the undersigned hereby tenders to the Company the aggregate principal amount of Existing Notes indicated above. Subject to, and effective upon, the acceptance for exchange of the Existing Notes tendered hereby, the undersigned hereby sells, assigns and transfers to, or upon the order of, the Company all right, title and interest in and to such Existing Notes as are being tendered hereby.

The undersigned hereby irrevocably constitutes and appoints the Exchange Agent as the undersigned's true and lawful agent and attorney-in-fact with respect to such tendered Existing Notes, with full power of substitution, among other things, to cause the Existing Notes to be assigned, transferred and exchanged. The undersigned hereby represents and warrants that the undersigned has full power and authority to tender, sell, assign and transfer the Existing Notes, and to acquire New Notes and shares of Common Stock issuable upon the exchange of such tendered Existing Notes, and that, when the same are accepted for exchange, the Company will acquire good and unencumbered title thereto, free and clear of all liens, restrictions, charges and encumbrances and not subject to any adverse claim when the same are accepted by the Company. The undersigned hereby further represents that any New Notes and shares of Common Stock acquired in exchange for Existing Notes tendered hereby will have been acquired in the ordinary course of business of the person receiving such New Notes and shares of Common Stock, whether or not such person is the undersigned, that neither the Holder of such Existing Notes nor any such other person is participating in, intends to participate in or has an arrangement or understanding with any person to participate in the distribution of such New Notes and shares of Common Stock and that neither the Holder of such Existing Notes nor any such other person is an "affiliate," as defined in Rule 405 under the Securities Act of 1933, of the Company.

The undersigned will, upon request, execute and deliver any additional documents deemed by the Company to be necessary or desirable to complete the sale, assignment and transfer of the Existing Notes tendered hereby. All authority conferred or agreed to be conferred in this Letter and every obligation of the undersigned hereunder shall be binding upon the successors, assigns, heirs, executors, administrators, trustees in bankruptcy and legal representatives of the undersigned and shall not be affected by, and shall survive, the death or incapacity of the undersigned. This tender may be withdrawn only in accordance with the procedures set forth in "The Exchange Offer—Withdrawal Rights" section of the Prospectus.

Unless otherwise indicated herein in the box entitled "Special Issuance Instructions" below, please credit the account indicated above maintained at the Book-Entry Transfer Facility.

THE UNDERSIGNED, BY COMPLETING THE BOX ENTITLED "DESCRIPTION OF EXISTING NOTES" ABOVE AND SIGNING THIS LETTER, WILL BE DEEMED TO HAVE TENDERED THE EXISTING NOTES AS SET FORTH IN SUCH BOX ABOVE.

SPECIAL ISSUANCE INSTRUCTIONS
(See Instructions 3 and 4)

To be completed ONLY if New Notes and shares of Common Stock not accepted for exchange are to be returned by credit to an account maintained at the Book-Entry Transfer Facility other than the account indicated above.

Issue: New Notes and shares of Common Stock and/or Existing Notes to:

Name(s) _____
(Please Type or Print)

(Please Type or Print)

Address _____

(Zip Code)

(Complete Substitute Form W-9)

☐ Credit unexchanged Existing Notes delivered by book-entry transfer to the Book-Entry Transfer Facility account set forth below.

(Book-Entry Transfer Facility Account Number, if applicable)

IMPORTANT: THIS LETTER OR A FACSIMILE HEREOF, OR AN ELECTRONIC CONFIRMATION PURSUANT TO THE DEPOSITORY TRUST COMPANY'S ATOP SYSTEM (TOGETHER WITH A BOOK-ENTRY CONFIRMATION AND ALL OTHER REQUIRED DOCUMENTS OR THE NOTICE OF GUARANTEED DELIVERY) MUST BE RECEIVED BY THE EXCHANGE AGENT PRIOR TO 11:59 P.M., NEW YORK CITY TIME, ON THE EXPIRATION DATE.

PLEASE READ THIS ENTIRE LETTER OF TRANSMITTAL CAREFULLY BEFORE COMPLETING ANY BOX ABOVE.

PLEASE SIGN HERE
(TO BE COMPLETED BY ALL TENDERING HOLDERS)
(Complete Accompanying Substitute Form W-9 below)

X _____
2004

X _____

2004

(Signature(s) of Owner)

(Date)

Area Code and Telephone Number

If a Holder is tendering any Existing Notes, this Letter must be signed by the registered Holder whose name appears on a security position listing as the Holder of such Existing Notes on the Book-Entry Transfer Facility System. If signature is by a trustee, executor, administrator, guardian, officer or other person acting in a fiduciary or representative capacity, please set forth full title. See Instruction 3.

Name(s)

(Please Type or Print)

Capacity

Address

(Including Zip Code)

SIGNATURE GUARANTEE
(IF REQUIRED BY INSTRUCTION 3)
(If Required — See Instruction 3)

Signature(s) Guaranteed by
an Eligible Instruction:

(Authorized Signature)

(Title)

(Name and Firm)

Date, 2004

INSTRUCTIONS

Forming Part of the Terms and Conditions of the Exchange Offer
by EMCORE Corporation of
5% Convertible Senior Subordinated Notes due May 15, 2011 and
Shares of Common Stock
in Exchange for its
5% Convertible Subordinated Notes due May 15, 2006

PART II Delivery of this Letter; Guaranteed Delivery Procedures.

This Letter, or an electronic confirmation pursuant to the Depository Trust Company's ATOP system, is to be completed by Holders of Existing Notes for tenders that are made pursuant to the procedures for delivery by book-entry transfer set forth in "The Exchange Offer—Procedures for Tendering Existing Notes" section of the Prospectus. Book-Entry Confirmation as well as a properly completed and duly executed Letter (or manually signed facsimile hereof), or an electronic confirmation pursuant to the Depository Trust Company's ATOP system, and any other required documents, must be received by the Exchange Agent at the address set forth herein prior to 11:59 p.m., New York City Time, on the Expiration Date, or the tendering Holder must comply with the guaranteed delivery procedures set forth below. Existing Notes tendered hereby must be in denominations of a \$1,000 principal amount or an integral multiple thereof.

Holders who cannot complete the procedure for book-entry transfer on a timely basis or who cannot deliver all other required documents to the Exchange Agent on or prior to the Expiration Date may tender their Existing Notes pursuant to the guaranteed delivery procedures set forth in "The Exchange Offer—Guaranteed Delivery Procedures" section of the Prospectus. Pursuant to such procedures, (i) such tender must be made through an Eligible Institution, (ii) prior to 11:59 p.m., New York City Time, on the Expiration Date, the Exchange Agent must receive from such Eligible Institution a properly completed and duly executed Letter (or a facsimile thereof), or an electronic confirmation pursuant to the Depository Trust Company's ATOP system, and Notice of Guaranteed Delivery, substantially in the form provided by the Company (by facsimile transmission, mail or hand delivery), setting forth the name and address of the Holder of Existing Notes and the amount of Existing Notes tendered, stating that the tender is being made thereby and guaranteeing that within three trading days after the Expiration Date a Book-Entry Confirmation and any other documents requested by this Letter will be deposited by the Eligible Institution with the Exchange Agent, and (iii) a Book-Entry Confirmation and all other documents required by this Letter, must be received by the Exchange Agent within three trading days after the Expiration Date.

The delivery of the Existing Notes and all other required documents will be deemed made only when confirmed by the Exchange Agent.

See "The Exchange Offer" section of the Prospectus.

PART III Signatures on this Letter; Bond Powers and Endorsements; Guarantee of Signatures.

If this Letter is signed by the registered Holder of the Existing Notes tendered hereby, the signature must correspond exactly with the name as it appears on a security position listing as the Holder of such Existing Notes in the Book-Entry Transfer Facility System without any change whatsoever.

If any tendered Existing Notes are owned of record by two or more joint owners, all of such owners must sign this Letter.

If any tendered Existing Notes are registered in different names, it will be necessary to complete, sign and submit as many separate copies of this Letter as there are different registrations.

When this Letter is signed by the registered Holder or Holders of the Existing Notes specified herein and tendered hereby, no separate bond powers are required. If, however, the New Notes and shares of Common Stock are to be issued to a person other than the registered Holder, then separate bond powers are required.

If this Letter or any bond powers are signed by trustees, executors, administrators, guardians, attorneys-in-fact, officers of corporations or others acting in a fiduciary or representative capacity, such persons should so indicate when signing, and, unless waived by the Company, proper evidence satisfactory to the Company of their authority to so act must be submitted.

Signatures on bond powers required by this Instruction 2 must be guaranteed by a firm which is a financial institution (including most banks, savings and loan associations and brokerage houses) that is a member firm of a registered national securities exchange or of the National Association of Securities Dealers, Inc., a commercial bank or trust company having an office or correspondent in the United States, or an Eligible Guarantor Institution within the meaning of Rule 17Ad-15 under the Securities Exchange Act of 1934 (each an "Eligible Institution").

Signatures on this Letter need not be guaranteed by an Eligible Institution, provided the Existing Notes are tendered: (i) by a registered Holder of Existing Notes (including any participant in the Book-Entry Transfer Facility system whose name appears on a security position listing as the Holder of such Existing Notes) who has not completed the box entitled "Special Issuance Instructions" on this Letter, or (ii) for the account of an Eligible Institution.

PART IV Special Issuance Instructions.

Holders tendering Existing Notes by book-entry transfer may request that Existing Notes not exchanged be credited to such account maintained at the Book-Entry Transfer Facility as such Holder may designate hereon. If no such instructions are given, such Existing Notes not exchanged will be credited to the proper account maintained at the Depository Trust Company. In the case of issuance in a different name, the employer identification or social security number of the person named must also be indicated.

PART V Taxpayer Identification Number.

Federal income tax law generally requires that a tendering Holder whose Existing Notes are accepted for exchange must provide the Company (as payor) with such Holder's correct Taxpayer Identification Number ("TIN") on Substitute Form W-9 below, which in the case of a tendering Holder who is an individual, is his or her social security number. If the Company is not provided with the current TIN or an adequate basis for an exemption from backup withholding, such tendering Holder may be subject to a \$50 penalty imposed by the Internal Revenue Service. In addition, the Exchange Agent may be required to withhold 28% of the amount of any reportable payments made after the exchange to such tendering Holder of New Notes and shares of Common Stock. If withholding results in an overpayment of taxes, a refund may be obtained.

Exempt Holders of Existing Notes (including, among others, all corporations and non-U.S. persons who properly certify as to such by providing on IRS Form W-8BEN or other appropriate form) are not subject to these backup withholding and reporting requirements. See the enclosed Guidelines of Certification of Taxpayer Identification Number on Substitute Form W-9 (the "W-9 Guidelines") for additional instructions. Non-U.S. Holders should provide a properly completed IRS Form W-8BEN or other appropriate form certifying as to such status. Forms are available online at www.irs.gov or from the Exchange Agent.

To prevent backup withholding, each tendering U.S. Holder of Existing Notes must provide its correct TIN by completing the Substitute Form W-9 set forth below, certifying, under penalties of perjury, that the TIN provided is correct, (or that such Holder is awaiting a TIN) and that (i) the Holder is exempt from backup withholding, or (ii) the Holder has not been notified by the Internal Revenue Service that such Holder is subject to backup withholding as a result of a failure to report all interest or dividends or (iii) the Internal Revenue Service has notified the Holder that such Holder is no longer subject to backup withholding. If the tendering Holder of Existing Notes is a nonresident alien or foreign entity not subject to backup withholding, such Holder must give the Exchange Agent a completed Form W-8, Certificate of Foreign Status. These forms may be obtained from the Exchange Agent. If the Existing Notes are in more than one name or are not in the name of the actual owner, such Holder should consult the W-9 Guidelines

for information on which TIN to report. If such Holder does not have a TIN, such Holder should consult the W-9 Guidelines for instructions on applying for a TIN, check the box in Part 2 of the Substitute Form W-9 and write "applied for" in lieu of its TIN. Note: Checking this box and writing "applied for" on the form means that such Holder has already applied for a TIN or that such Holder intends to apply for one in the near future. If the box in Part 2 of the Substitute Form W-9 is checked, the Exchange Agent will nonetheless withhold the applicable percentage of reportable payments made to a Holder during the sixty (60) day period following the date of the Substitute Form W-9. If the Holder furnishes the Exchange Agent with his or her TIN within sixty (60) days of the date of the Substitute Form W-9, the Exchange Agent will remit such amounts retained during such sixty (60) day period to such Holder and no further amounts will be retained or withheld from payments made to the Holder thereafter. If, however, such Holder does not provide its TIN to the Exchange Agent within such sixty (60) day period, the Exchange Agent will remit such previously withheld amounts to the Internal Revenue Service as backup withholding and will backup withhold the applicable percentage of all reportable payments to the Holder thereafter until such Holder furnishes its TIN to the Exchange Agent.

PART VI Transfer Taxes.

The Company will pay all transfer taxes, if any, applicable to the transfer of Existing Notes to it or its order pursuant to the Exchange Offer. If, however, New Notes and shares of Common Stock and/or substitute Existing Notes not exchanged are to be registered or issued in the name of, any person other than the registered Holder of the Existing Notes tendered hereby, or if tendered Existing Notes are registered in the name of any person other than the person signing this Letter, or if a transfer tax is imposed for any reason other than the transfer of Existing Notes to the Company or its order pursuant to the Exchange Offer, the amount of any such transfer taxes (whether imposed on the registered Holder or any other persons) will be payable by the tendering Holder. If satisfactory evidence of payment of such taxes or exemption therefrom is not submitted herewith, the amount of such transfer taxes will be billed directly to such tendering Holder.

PART VII Waiver of Conditions.

The Company reserves the absolute right to waive satisfaction of any or all conditions enumerated in the Prospectus except as set forth in the section of the Prospectus entitled "The Exchange Offer—Conditions for Completion of the Exchange Offer."

PART VIII No Conditional Tenders.

No alternative, conditional, irregular or contingent tenders will be accepted. All tendering Holders of Existing Notes, by execution of this Letter, shall waive any right to receive notice of the acceptance of their Existing Notes for exchange.

Neither the Company, the Exchange Agent nor any other person is obligated to give notice of any defect or irregularity with respect to any tender of Existing Notes nor shall any of them incur any liability for failure to give any such notice.

PART IX Withdrawal Rights.

Tenders of Existing Notes may be withdrawn at any time prior to 11:59 p.m., New York City Time, on the Expiration Date.

For a withdrawal of a tender of Existing Notes to be effective, a written notice of withdrawal must be received by the Exchange Agent at the address set forth above prior to 11:59 p.m., New York City Time, on the Expiration Date. Any such notice of withdrawal must (i) specify the name of the person having tendered the Existing Notes to be withdrawn (the "Depositor"), (ii) contain a statement that such Holder is withdrawing his or her election to have such Existing Notes exchanged, (iii) specify the principal amount of the Existing Notes to be

withdrawn, (iv) be signed by the Holder in the same manner as the original signature on the Letter by which such Existing Notes were tendered (including any required signature guarantees), and (v) if the Holder is tendering Existing Notes in accordance with the procedures

for book-entry transfer, specify the name and number of the account at the Book-Entry Transfer Facility to be credited with the withdrawn Existing Notes and otherwise comply with the procedures of such facility. All questions as to the validity, form and eligibility (including time of receipt) of such notices will be determined by the Company in its sole and absolute discretion, whose determination shall be final and binding on all parties. Any Existing Notes so withdrawn will be deemed not to have been validly tendered for exchange for purposes of the Exchange Offer and no New Notes or shares of Common Stock will be issued with respect thereto unless the Existing Notes so withdrawn are validly retendered. Any Existing Notes that have been tendered for exchange but which are not exchanged for any reason will be credited into the Exchange Agent's account at the Book-Entry Transfer Facility pursuant to the book-entry transfer procedures set forth in "The Exchange Offer—Procedures for Tendering Existing Notes" section of the Prospectus, such Existing Notes will be credited to an account maintained with the Book-Entry Transfer Facility for the Existing Notes as soon as practicable after withdrawal, rejection of tender or termination of the Exchange Offer. Properly withdrawn Existing Notes may be retendered by following the procedures described above at any time prior to 11:59 p.m., New York City Time, on the Expiration Date.

PART X Requests for Assistance or Additional Copies.

Questions relating to the procedure for tendering, as well as requests for additional copies of the Prospectus and this Letter, and requests for Notices of Guaranteed Delivery and other related documents may be directed to the Exchange Agent, at the address and telephone number indicated above or to the Information Agent, DF King & Co., Inc., toll free at (800) 431-9642.

TO BE COMPLETED BY ALL TENDERING HOLDERS
(See Instruction 4)

PAYOR'S NAME: _____

REQUESTER'S NAME: Wilmington Trust Company

SUBSTITUTE FORM W-9	Part 1 — PLEASE PROVIDE YOUR TIN IN THE BOX AT THE RIGHT OR, IF YOU DO NOT HAVE A TIN, WRITE "APPLIED FOR" AND SIGN THE CERTIFICATION BELOW.	Social Security Number OR Taxpayer Identification Number
Department of the Treasury Internal Revenue Service (IRS)	Exempt	
Payer's Request for Taxpayer Identification Number (TIN)	Part 2 — Certification — Under penalties of perjury, I certify that:	
Please fill in your name and address below.	(1) The number shown on this form is my correct Taxpayer Identification Number (or I am waiting for a number to be issued to me),	
Name	(2) I am not subject to backup withholding either because (a) I am exempt from backup withholding, (b) I have not been notified by the IRS that I am subject to backup withholding as a result of failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and	
Address (number and street)	(3) I am a U.S. person (as defined for U.S. federal income tax purposes).	
City, State and Zip Code	Certification Instructions — You must cross out item (2) in Part 2 above if you have been notified by the IRS that you are subject to backup withholding because of under reporting interest or dividends on your tax return. However, if after being notified by the IRS that you were subject to backup withholding, you received another notification from the IRS that you are no longer subject to backup withholding, do not cross out item (2). If you are exempt from backup withholding, check the box in Part 1 and see the enclosed "Guidelines for Certification of Taxpayer Identification Number on Substitute Form W-9".	
SIGNATURE: _____		
DATE: _____		

YOU MUST COMPLETE THE FOLLOWING CERTIFICATION IF YOU WROTE "APPLIED FOR" ON SUBSTITUTE FORM W-9.

CERTIFICATE OF AWAITING TAXPAYER IDENTIFICATION NUMBER

I certify under penalties of perjury that a taxpayer identification number has not been issued to me, and either (a) I have mailed or delivered an application to receive a taxpayer identification number to the appropriate Internal Revenue Service Center or Social Security Administration Office or (b) I intend to mail or deliver an application in the near future. I understand that until I provide a taxpayer identification number, all reportable payments made to me will be subject to backup withholding, but will be refunded if I provide a certified taxpayer identification number within 60 days.

Signature: _____ Dated: _____

THE IRS DOES NOT REQUIRE YOUR CONSENT TO ANY PROVISION OF THIS DOCUMENT OTHER THAN THE CERTIFICATIONS REQUIRED TO AVOID BACKUP WITHHOLDING.

What Name and Number to Give the Requester

**GUIDELINES FOR REQUEST FOR TAXPAYER IDENTIFICATION
NUMBER ON SUBSTITUTE FORM W-9**

Name

If you are an individual, you must generally enter the name shown on your Social Security card. However, if you have changed your last name, for instance, due to marriage, without informing the Social Security Administration of the name change, enter your first name, the last name shown on your Social Security card, and your new last name. If the account is in joint names, list first and then circle the name of the person or entity whose number you enter in Part I of the form.

Sole Proprietor—You must enter your individual name as shown on your Social Security card. You may enter your business, trade or "doing business as" name on the business name line.

Limited Liability Company (LLC)—If you are a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Treasury regulations § 301.7701-3, enter the owner's name. Enter the LLC's name on the business name line. A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

Other Entities—Enter the business name as shown on required federal income tax documents. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade or "doing business as" name on the business name line.

Taxpayer Identification Number (TIN)

You must enter your taxpayer identification number in the appropriate box. If you are a resident alien and you do not have and are not eligible to get a Social Security number, your taxpayer identification number is your IRS individual taxpayer identification number (ITIN). Enter it in the Social Security number box. If you do not have an individual taxpayer identification number, see **How to Get a TIN below**. If you are a sole proprietor and you have an employer identification number, you may enter either your Social Security number or employer identification number. However, using your employer identification number may result in unnecessary notices to the requester, and the IRS prefers that you use your Social Security number. If you are an LLC that is disregarded as an entity separate from its owner under Treasury regulations § 301.7701-3, and are owned by an individual, enter the owner's Social Security number. If the owner of a disregarded LLC is a corporation, partnership, etc., enter the owner's employer identification number. See the chart below for further clarification of name and TIN combinations.

Social Security numbers (SSN's) have nine digits separated by two hyphens: i.e. 000-00-0000. Employer identification numbers (EIN's) have nine digits separated by only one hyphen: i.e. 00-0000000.

The table below will help determine the number to give the requester.

**GUIDELINES FOR REQUEST FOR TAXPAYER IDENTIFICATION
NUMBER ON SUBSTITUTE FORM W-9**

For this type of account:		Give Name and TIN of:
1.	Individual	The individual
2.	Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ⁽¹⁾
3.	Custodian account of a minor (Uniform Gift to Minors Act)	The minor ⁽²⁾
4.	a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ⁽¹⁾
	b. The so-called trust account that is not a legal or valid trust under state law	The actual owner ⁽¹⁾
5.	Sole proprietorship	The owner ⁽³⁾
6.	A valid trust, estate or pension trust	Legal entity ⁽⁴⁾
7.	Corporation	The corporation
8.	Association, club, religious, charitable, educational or other tax-exempt organization	The organization
9.	Partnership	The partnership
10.	A broker or registered nominee	The broker or nominee
11.	Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

⁽¹⁾ List first and circle the name of the person whose number you furnish. If only one person on a joint account has a Social Security number, that person's number must be furnished.

⁽²⁾ Circle the minor's name and furnish the minor's Social Security number.

⁽³⁾ You must show your individual name, but you may also enter your business or "doing business as" name. You may use either your Social Security number or employer identification number (if you have one).

⁽⁴⁾ List first and circle the name of the legal trust, estate or pension trust. (Do not furnish the taxpayer identification number of the personal representative or trustee unless the legal entity itself is not designated in the account title.)

NOTE: IF NO NAME IS CIRCLED WHEN MORE THAN ONE NAME IS LISTED, THE NUMBER WILL BE CONSIDERED TO BE THAT OF THE FIRST NAME LISTED.

**GUIDELINES FOR REQUEST FOR TAXPAYER IDENTIFICATION
NUMBER ON SUBSTITUTE FORM W-9**

How to Get a TIN

If you do not have a taxpayer identification number, apply for one immediately. To apply for a Social Security number, get **Form SS-5, Application for a Social Security Number Card**, from your local Social Security Administration office. Get **Form W-7** to apply for an individual taxpayer

identification number or **Form SS-4, Application for Employer Identification Number**, to apply for an employer identification number. You can get Forms W-7 and SS-4 from the IRS.

If you do not have a taxpayer identification number, write "Applied For" in the space for the taxpayer identification number, sign and date the form (including the Certificate of Awaiting Taxpayer Identification Number), and give it to the requester. For interest and dividend payments and certain payments made with respect to readily tradable instruments, you will generally have 60 days to get a taxpayer identification number and give it to the requester before you are subject to backup withholding. Other payments are subject to backup withholding without regard to the 60-day rule, until you provide your taxpayer identification number.

Note: Writing "Applied For" means that you have already applied for a taxpayer identification number or that you intend to apply for one soon.

Exemption From Backup Withholding

Payees Exempt From Backup Withholding

Individuals (including sole proprietors and LLCs disregarded as entities separate from their individual owners) are NOT automatically exempt from backup withholding.

For interest and dividends, the following payees are generally exempt from backup withholding:

- 1) An organization exempt from tax under section 501(a) of the Internal Revenue Code of 1986, as amended (the "Code"), an individual retirement account (IRA), or a custodial account under section 403(b)(7) of the Code if the account satisfies the requirements of section 401(f)(2) of the Code.
- 2) The United States or any of its agencies or instrumentalities.
- 3) A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities.
- 4) A foreign government or any of its political subdivisions, agencies or instrumentalities.
- 5) An international organization or any of its agencies or instrumentalities.
- 6) A corporation.
- 7) A foreign bank of central issue.
- 8) A dealer in securities or commodities required to register in the United States, the District of Columbia or a possession of the United States.
- 9) A real estate investment trust.
- 10) An entity registered at all times during the tax year under the Investment Company Act of 1940.
- 11) A common trust fund operated by a bank under section 584(a) of the Code.
- 12) A financial institution (as defined for purposes of section 3406 of the Code).
- 13) A middleman known in the investment community as a nominee or who is listed in the most recent publication of the American Society of Corporate Secretaries, Inc., Nominee List.
- 14) A trust exempt from tax under section 664 of the Code or described in section 4947 of the Code.

For broker transactions, persons listed in items 1-12, above, as well the persons listed in items 15-16, below, are exempt from backup withholding.

- 15) A futures commission merchant registered with the Commodity Futures Trading Commission.
- 16) A person registered under the Investment Advisors Act of 1940 who regularly acts as a broker.

Payments Exempt From Backup Withholding

Dividends and patronage dividends that are generally exempt from backup withholding include:

- Payments to nonresident aliens subject to withholding under section 1441 of the Code.
- Payments to partnerships not engaged in a trade or business in the United States and that have at least one nonresident alien partner.
- Payments of patronage dividends not paid in money.
- Payments made by certain foreign organizations.
- Payments made by an ESOP pursuant to section 404(k) of the Code.

Interest payments that are generally exempt from backup withholding include:

- Payments of interest on obligations issued by individuals. Note, however, that such a payment may be subject to backup withholding if the amount of interest paid during a taxable year in the course of the payor's trade or business is \$600 or more, and you have not provided your correct taxpayer identification number or you have provided an incorrect taxpayer identification number to the payer.
- Payments of tax-exempt interest (including exempt-interest dividends under section 852 of the Code).
- Payments described in section 6049(b)(5) of the Code to nonresident aliens.
- Payments on tax-free covenant bonds under section 1451 of the Code.
- Payments made by certain foreign organizations.

Payments that are not subject to information reporting are also not subject to backup withholding. For details, see sections 6041, 6041A, 6042, 6044, 6045, 6049, 6050A and 6050N of the Code, and the Treasury regulations thereunder.

**GUIDELINES FOR REQUEST FOR TAXPAYER IDENTIFICATION
NUMBER ON SUBSTITUTE FORM W-9**

Page 3

If you are exempt from backup withholding, you should still complete and file Substitute Form W-9 to avoid possible erroneous backup withholding. Enter your correct taxpayer identification number in Part 1, write "Exempt" in Part 2, and sign and date the form and return it to the requester.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed **Form W-8**.

Privacy Act Notice. — Section 6109 of the Code requires you to give your correct taxpayer identification number to persons who must file information returns with the IRS to report interest, dividends and certain other income paid to you. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation and to cities, states, and the District of Columbia to carry out their tax laws. You must provide your taxpayer identification number whether or not you are required to file a tax return. Payers must generally withhold at the applicable rate on payments of taxable interest, dividends and certain other items to a payee who does not furnish a taxpayer identification number to a payer. Certain penalties may also apply.

Penalties

- (1) **Failure to Furnish Taxpayer Identification Number.** — If you fail to furnish your correct taxpayer identification number to a requester, you are subject to a penalty of \$50.00 for each such failure unless your failure is due to reasonable cause and not to willful neglect.
- (2) **Civil Penalty for False Information With Respect to Withholding.** — If you make a false statement with no reasonable basis which results in no backup withholding, you are subject to a \$500.00 penalty.
- (3) **Criminal Penalty for Falsifying Information.** — Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

FOR ADDITIONAL INFORMATION, CONTACT YOUR TAX CONSULTANT OR THE INTERNAL REVENUE SERVICE.

NOTICE OF GUARANTEED DELIVERY**EMCORE CORPORATION****Exchange Offer****5% Convertible Senior Subordinated Notes due May 15, 2011 and
Shares of Common Stock for its
5% Convertible Subordinated Notes due May 15, 2006**

**THE EXCHANGE OFFER WILL EXPIRE AT 11:59 P.M., NEW YORK CITY TIME,
ON JANUARY , 2004 UNLESS EXTENDED (THE "EXPIRATION DATE"). TENDERS
MAY BE WITHDRAWN PRIOR TO 11:59 P.M., NEW YORK CITY
TIME, ON THE EXPIRATION DATE**

You must use this form or one substantially equivalent to this form to accept the Exchange Offer of EMCORE Corporation. (the "Company") made pursuant to the preliminary Prospectus, dated December 24, 2003 (the "Prospectus"), if the procedures for book-entry transfer cannot be completed on a timely basis or time will not permit all required documents to reach Wilmington Trust Company, as exchange agent (the "Exchange Agent"), prior to 11:59 p.m., New York City Time, on the Expiration Date of the Exchange Offer. Such form may be delivered or transmitted by facsimile transmission, mail or hand delivery to the Exchange Agent as set forth below. In addition, in order to utilize the guaranteed delivery procedure to tender Existing Notes pursuant to the Exchange Offer, a Letter of Transmittal (or a facsimile thereof) or an electronic confirmation pursuant to the Depository Trust Company's ATOP system, with any required signature guarantees and any other required documents must also be received by the Exchange Agent prior to 11:59 p.m., New York City Time, on the Expiration Date. Capitalized terms not defined herein are defined in the Letter of Transmittal accompanying the Prospectus.

*Delivery To:***Wilmington Trust Company, Exchange Agent***By Regular Mail or Overnight Courier:*

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

By Registered & Certified Mail:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

In Person by Hand Only:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

For Information or Confirmation by Telephone Call:

(302) 636-6469

By Facsimile Transmission (For Eligible Institutions Only):

(302) 636-4145

Attention: Christine Kushto

**DELIVERY OF THIS INSTRUMENT TO AN ADDRESS OTHER THAN AS SET FORTH ABOVE, OR
TRANSMISSION OF INSTRUCTIONS VIA FACSIMILE OTHER THAN AS SET FORTH ABOVE, WILL NOT
CONSTITUTE A VALID DELIVERY.**

Ladies and Gentlemen:

Upon the terms and conditions set forth in the Prospectus and the accompanying Letter of Transmittal, the undersigned hereby tenders to the Company the principal amount of Existing Notes set forth below pursuant to the guaranteed delivery procedure described in "The Exchange Offer—Guaranteed Delivery Procedures" section of the Prospectus.

Total Principal Amount of Existing Notes Tendered:*

For book-entry transfer to the Depository Trust Company,
please provide account number:

\$ _____

Account No. _____

All authority herein conferred or agreed to be conferred shall survive the death or incapacity of the undersigned and every obligation of the undersigned hereunder shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

PLEASE SIGN HERE

x _____

Date

x _____

Signature(s) of Owner(s) or Authorized Signatory

Date

Area Code and Telephone Number: _____

Must be signed by the Holder(s) of Existing Notes as their name(s) appear(s) on a security position listing, or by person(s) authorized to become registered Holder(s) by endorsement and documents transmitted with this Notice of Guaranteed Delivery. If signature is by a trustee, executor, administrator, guardian, attorney-in-fact, officer or other person acting in a fiduciary or representative capacity, such person must set forth his or her full title below:

Please print name(s) and address(es)

Name(s)

Capacity:

Address(es):

* Must be in denominations of principal amount of \$1,000 and any integral multiple thereof.

LETTER TO REGISTERED HOLDERS

EMCORE CORPORATION

Exchange Offer

5% Convertible Senior Subordinated Notes due May 15, 2011 and Shares of Common Stock for its 5% Convertible Subordinated Notes due May 15, 2006

THE EXCHANGE OFFER WILL EXPIRE AT 11:59 P.M., NEW YORK CITY TIME,
ON JANUARY , 2004 UNLESS EXTENDED (THE "EXPIRATION DATE"). TENDERS
MAY BE WITHDRAWN PRIOR TO 11:59 P.M., NEW YORK CITY
TIME, ON THE EXPIRATION DATE

Delivery To:

Wilmington Trust Company, Exchange Agent

By Regular Mail or Overnight Courier:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

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Attention: Christine Kushto

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TRANSMISSION OF INSTRUCTIONS VIA FACSIMILE OTHER THAN AS SET FORTH ABOVE, WILL NOT
CONSTITUTE A VALID DELIVERY.**

To: Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees:

EMCORE Corporation (the "Company") is offering, upon and subject to the terms and conditions set forth in the preliminary Prospectus, dated December 24, 2003 (the "Prospectus"), and the enclosed Letter of Transmittal (the "Letter of Transmittal"), to exchange (the "Exchange Offer") its 5 % Convertible Senior Subordinated Notes due May 15, 2011 and shares of its common stock for its outstanding 5% Convertible Subordinated Notes due May 15, 2006 (the "Existing Notes").

We are requesting that you contact your clients for whom you hold Existing Notes regarding the Exchange Offer. For your information and for forwarding to your clients for whom you hold Existing Notes registered in your name or in the name of your nominee, or who hold Existing Notes registered in their own names, we are enclosing the following documents:

1. A preliminary Prospectus dated December 24, 2003;
2. A Letter of Transmittal for your use and for the information of your clients;
3. A Notice of Guaranteed Delivery to be used to accept the Exchange Offer if time will not permit all required documents to reach the Exchange Agent prior to the Expiration Date (as defined below) or if the procedure for book-entry transfer cannot be completed on a timely basis;
4. A form of letter which may be sent to your clients for whose account you hold Existing Notes registered in your name or the name of your nominee, with space provided for obtaining such clients' instructions with regard to the Exchange Offer;
5. Guidelines for Certification of Taxpayer Identification Number on Substitute Form W-9; and
6. Return envelopes addressed to Wilmington Trust Company, 520 Madison Avenue, 33rd Floor, New York, NY 10022, Attn: Christine Kushto, the Exchange Agent for the Exchange Offer.

Your prompt action is requested. The Exchange Offer will expire at 11:59 p.m., New York City Time, on January , 2004, unless extended by the Company (the "Expiration Date"). Existing Notes tendered pursuant to the Exchange Offer may be withdrawn at any time before the Expiration Date.

To participate in the Exchange Offer, a duly executed and properly completed Letter of Transmittal (or facsimile thereof), or an electronic confirmation pursuant to the Depository Trust Company's ATOP system, with any required signature guarantees and any other required documents, should be sent to the Exchange Agent all in accordance with the instructions set forth in the Letter of Transmittal and the Prospectus.

If a registered holder of Existing Notes desires to tender, but the procedure for book-entry transfer cannot be completed on a timely basis, a tender may be effected by following the guaranteed delivery procedures described in the Prospectus under "The Exchange Offer—Guaranteed Delivery Procedures."

The Company will, upon request, reimburse brokers, dealers, commercial banks and trust companies for reasonable and necessary costs and expenses incurred by them in forwarding the Prospectus and the related documents to the beneficial owners of Existing Notes held by them as nominee or in a fiduciary capacity. The Company will pay or cause to be paid all stock transfer taxes applicable to the exchange of Existing Notes pursuant to the Exchange Offer, except as set forth in Instruction 5 of the Letter of Transmittal.

Any inquiries you may have with respect to the Exchange Offer, or requests for additional copies of the enclosed materials, should be directed to Wilmington Trust Company, the Exchange Agent for the Exchange Offer, at its address and telephone number set forth on the front of the Letter of Transmittal, or to the Information Agent, DF King & Co., Inc., toll free at (800) 431-9642.

Very truly yours,

EMCORE CORPORATION

NOTHING HEREIN OR IN THE ENCLOSED DOCUMENTS SHALL CONSTITUTE YOU OR ANY PERSON AS AN AGENT OF THE COMPANY OR THE EXCHANGE AGENT, OR AUTHORIZE YOU OR ANY OTHER PERSON TO USE ANY DOCUMENT OR MAKE ANY STATEMENTS ON BEHALF OF EITHER OF THEM WITH RESPECT TO

LETTER TO CLIENTS
EMCORE CORPORATION

Exchange Offer

**5% Convertible Senior Subordinated Notes due May 15, 2011
and Shares of Common Stock for its
5% Convertible Subordinated Notes due May 15, 2006**

THE EXCHANGE OFFER WILL EXPIRE AT 11:59 P.M., NEW YORK CITY TIME,
ON JANUARY , 2004 UNLESS EXTENDED (THE "EXPIRATION DATE"). TENDERS
MAY BE WITHDRAWN PRIOR TO 11:59 P.M., NEW YORK CITY TIME,
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Delivery To:

WILMINGTON TRUST COMPANY, EXCHANGE AGENT

By Regular Mail or Overnight Courier:

Christine Kushto, CCTS
Financial Services Officer
Wilmington Trust Company
1100 North Market Street
Rodney Square North
Wilmington, DE 19890-1615

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TRANSMISSION OF INSTRUCTIONS VIA FACSIMILE OTHER THAN AS SET FORTH ABOVE, WILL NOT
CONSTITUTE A VALID DELIVERY.**

To Our Clients:

Enclosed for your consideration is a preliminary Prospectus, dated December 24, 2003 (the "Prospectus"), and the related Letter of Transmittal (the "Letter of Transmittal"), relating to the offer (the "Exchange Offer") by EMCORE Corporation (the "Company") to exchange its 5% Convertible Senior Subordinated Notes due May 15, 2011 and shares of Common Stock for its outstanding 5% Convertible Subordinated Notes due May 15, 2006 (the "Existing Notes"), upon the terms and subject to the conditions described in the Prospectus and the Letter of Transmittal.

This material is being forwarded to you as the beneficial owner of the Existing Notes held by us for your account but not registered in your name. A tender of such Existing Notes may only be made by us as the holder of record and pursuant to your instructions.

Accordingly, we request instructions as to whether you wish us to tender on your behalf the Existing Notes held by us for your account, pursuant to the terms and conditions set forth in the enclosed Prospectus and Letter of Transmittal.

Your instructions should be forwarded to us as promptly as possible in order to permit us to tender the Existing Notes on your behalf in accordance with the provisions of the Exchange Offer. The Exchange Offer will expire at 11:59 p.m., New York City Time, on January , 2004, unless extended by the Company. Any Existing Notes tendered pursuant to the Exchange Offer may be withdrawn at any time before the Expiration Date.

Your attention is directed to the following:

1. The Exchange Offer is for any and all Existing Notes.
2. The Exchange Offer is subject to certain conditions set forth in the section of the Prospectus captioned "The Exchange Offer—Conditions for Completion of the Exchange Offer."
3. Any transfer taxes incident to the transfer of Existing Notes from the holder to the Company will be paid by the Company, except as set forth in Instruction 5 of the Letter of Transmittal.
4. The Exchange Offer expires at 11:59 p.m., New York City Time, on January , 2004, unless extended by the Company.

If you wish to have us tender your Existing Notes, please so instruct us by completing, executing and returning to us the instruction form on the back of this letter. The Letter of Transmittal is furnished to you for information only and may not be used directly by you to tender Existing Notes.

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**INSTRUCTIONS WITH RESPECT TO
THE EXCHANGE OFFER**

The undersigned acknowledge(s) receipt of your letter and the enclosed material referred to therein relating to the Exchange Offer made by EMCORE Corporation with respect to its Existing Notes.

This will instruct you to tender the Existing Notes indicated below (or, if no number is indicated below, all Existing Notes) held by you for the account of the undersigned, upon and subject to the terms and conditions set forth in the Prospectus and the related Letter of Transmittal.

Please tender the Existing Notes held by you for my account as indicated below:

5% Convertible Subordinated Notes due May 15, 2006

\$_____ (Aggregate Principal Amount of Existing Notes)

☐ Please do not tender any Existing Notes held by you for my account.

Dated: _____, 20____

Signature(s): _____

Print name(s) here: _____

Print Address(es) here: _____

Area Code and Telephone Number(s): _____

Tax Identification or Social Security Number(s): _____

None of the Existing Notes held by us for your account will be tendered unless we receive written instructions from you to do so. After receipt of instructions to tender, unless we receive specific contrary instructions we will tender all the Existing Notes held by us for your account.