UNITED STATES SECURITES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 11-K

(Mark one)

[X] ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (FEE REQUIRED)

For the calendar year ended December 31, 1997

[] TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

For the transition period from _____ to ____

Commission File No.: 0-22175

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

EMCORE CORPORATION 401(k) SAVINGS PLAN

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

EMCORE CORPORATION 394 ELIZABETH AVENUE SOMERSET, NJ 08873

REQUIRED INFORMATION

EMCORE Corporation 401(k) Savings Plan ("Plan") is subject to the Employee Retirement Income Security Act of 1974 ("ERISA"). Therefore, in lieu of the requirements of Items 1-3 of Form 11-K, the financial statements and schedules of the Plan for the two calendar years ended December 31, 1997 and 1996, which have been prepared in accordance with the financial reporting requirements of ERISA, are attached hereto as Appendix I and incorporated herein by this reference.

SIGNATURES

The Plan. Pursuant to the requirements of the Securities and Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

EMCORE Corporation 401(k) Savings Plan

Date

Thomas G. Werthan Vice President Chief Financial Officer Trustee

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the registration statement of EMCORE Corporation on Form S-8 (File No. 333-27507, & 333-39547 & 333-36445 & 333-45827) of our report dated July 17, 1998, on our audits of the financial statements of the EMCORE Corporation 401(k) Savings Plan as of December 31, 1997 and 1996, and for the year ended December 31, 1997, which is included in this Form 11-K

Florham Park, NJ October 15, 1998 EMCORE CORPORATION 401(k) SAVINGS PLAN

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULES

AS OF DECEMBER 31, 1997 AND 1996 AND FOR THE YEAR ENDED DECEMBER 31, 1997

REPORT OF INDEPENDENT ACCOUNTANTS

July 17, 1998

To the Participants and Administrator of the EMCORE Corporation 401(k) Savings Plan:

In our opinion, the accompanying statements of net assets available for plan benefits and the related statement of changes in net assets available for plan benefits present fairly, in all material respects, the net assets available for plan benefits of EMCORE Corporation 401(k) Savings Plan (the "Plan") as of December 31, 1997 and 1996, and the changes in net asset available for plan benefits for the year ended December 31, 1997, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Plan's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules, Item 27a - Schedule of Assets Held for Investment Purposes as of December 31, 1997 and Item 27d - Schedule of Reportable Transactions for the year ended December 31, 1997, are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan's management. The Fund Information in the statement of changes in net assets available for plan benefits is presented for purposes of additional analysis rather than to present the changes in net assets available for benefits of each fund. The supplemental schedules and Fund Information have been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

STATEMENTS OF NET ASSETS AVAILABLE FOR PLAN BENEFITS AS OF DECEMBER 31, 1997 and 1996

	1997	1996
ASSETS		
Investments, at fair value: (Note 3)		
Mutual Funds	\$1,824,981	\$ 983,462
Money Market	105,560	61,414
EMCORE Corporation stock	80,511	-
Participants' notes receivable	50,361	35,107
Total investments	2,061,413	1,079,983
Receivables:		
Participants' contributions	48,155	44,156
Employer's contributions	16,684	-
Total receivables	64,839	44,156
Net assets available for plan benefits	\$2,126,252	\$1,124,139
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The accompanying notes are an integral part of these financial statements.

EMCORE CORPORATION 401(K) SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS

1. DESCRIPTION OF PLAN

The following description of the EMCORE Corporation (the "Company") 401(k) Plan (the "Plan") provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

- General. The Plan is a defined contribution plan covering all full-time employees of the Company who have completed one month of service and are age twenty or older. It is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).
- 2. Contributions. Each year, participants may contribute up to 15% percent of pretax annual compensation, as defined in the Plan. Participants may also contribute amounts representing distributions from other qualified defined benefit or contribution plans. Effective August 1, 1997, the Company began contributing 50 percent of the first 6 percent of base compensation that a participant contributes to the Plan. Additional amounts may be contributed at the option of the Company's board of directors. All employer contributions are invested in EMCORE Corporation common stock. Contributions are subject to certain limitations.
- 3. Participant Accounts. Each participant's account is credited with the participant's contribution and allocations of (a) the Company's contribution and (b) Plan earnings. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.
- 4. Vesting. Participants are immediately vested in their contributions plus actual earnings thereon. Vesting in the Company's matching and discretionary contributions plus actual earnings thereon is based on years of continuous service. A participant becomes 100 percent vested after five years of credited service, with vesting taking place ratably over such period.
- 5. Investment Options. Upon enrollment in the Plan, a participant may direct employee contributions in any percent increments in any of the available investment options. Participants may change their investment options at any time.

Description of investment options:

Money Market: Prudential Government Securities Trust - Funds are invested in United States Government securities.

Mutual Funds:

Prudential Utility - Funds are invested in equity and debt securities of utility companies, including electric, gas, telephone and cable companies.

 $\ensuremath{\mathsf{Prudential}}$ Equity - Funds are invested in common stocks of major & established corporations.

Prudential Small Company - Funds are invested in commons stocks selected for their potential for high return on equity, increased earnings, increasing or expected dividends and low P/E ratios.

Prudential Allocation Strategy/Balanced - Funds are invested in allocations between stocks, bonds, convertibles and cash.

Prudential Government Income - Funds are invested on bonds backed by the United States Government or by government-linked agencies.

Putnam Voyager - Funds are invested in primarily common stocks of mid size firms.

Alliance Growth - Funds are invested in equity securities issued by companies with favorable earnings and long-term growth prospects.

Mutual Beacon - Funds are invested in common and preferred stocks and corporate debt.

Aim Aggressive Growth - Funds are invested in equity securities of small-to medium-sized companies.

Oppenheimer Quest Opportunity Value - Funds are invested among stocks, bonds and cash.

Kemper-Dreman High Return - Funds are invested in common stocks that pay high dividends relative to the dividend yield of the S&P 500 index.

 $\ensuremath{\mathsf{EMCORE}}$ Corporation Stock - Funds are invested in common stock of $\ensuremath{\mathsf{EMCORE}}$ Corporation.

 Participant Loans. Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50% percent of their vested account balance. Loan transactions are treated as a transfer to (from) the investment fund(s) from (to) the Participants' Loan Fund. Loan terms range from 1-5 years or up to 25 years for the purchase of a primary residence. Loans are collateralized by the balance in the participant's account and bear interest at a rate commensurate with local prevailing rates as determined quarterly by the Plan administrator. Interest rates in 1997 ranged from 7.5 percent to 8.5 percent. Principal and interest is paid ratably through bi-weekly payroll deductions.

- 7. Payment of Benefits. On termination of service due to death, disability or retirement, a participant or their beneficiary may elect to receive either a lump sum amount equal to the value of the participant's vested interest in his or her account, or annual installments over a ten-year period. For termination of service due to other reasons, a participant receives the value of the vested interest in his or her account as a lump-sum distribution.
- Forfeited Accounts. At December 31, 1997, forfeited nonvested accounts amounted to approximately \$800. These accounts will be used to reduce future employer contributions.
- 9. Administrative Fees. The Company pays all administrative fees of the Plan. Fees paid by the Company for the investment management services amounted to approximately \$8,200 for the year ended December 31, 1997.

2. SUMMARY OF ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the $\ensuremath{\mathsf{Plan}}$ are prepared under the accrual method of accounting.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. The Company stock is valued at its quoted market price. Participants' notes receivable is valued at cost which approximates fair value.

The Plan presents in the statement of changes in net assets available for plan benefits the net appreciation (depreciation) in the fair value of its investments which consists of both realized gains or losses and the unrealized appreciation (depreciation) on those investments.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Payment of Benefits

Benefits are recorded when paid.

3. INVESTMENTS

The following table presents the fair values of the Plan's investments held by Prudential Investments as of December 31, 1997 and 1996:

		1997		1996	
Money Market:					
Prudential Government Securities Trust	\$	105,560	*	\$ 61,414	*
Mutual Funds:					
Prudential Utility Class B		258,979	*	345,251	*
Prudential Utility Class A		237,469	*	-	
Prudential Equity Class B		234,969	*	302,991	*
Prudential Small Company Class B		175,835		207,832	*
Prudential Equity Class A		352,389	*	-	
Prudential Small Company Class A		325,478	*	-	
Prudential Allocation Strategy Class A		-		-	
Prudential Allocation Balanced Class A		84,932		-	
Prudential Allocation Strategy Class B		-		112,624	*
Prudential Allocation Balanced Class B		57,176		-	
Prudential Government Income Class B		7,311		14,764	
Prudential Government Income Class A		9,063		-	
Putnam Voyager Class A		5,878		-	
Alliance Growth Class A		5,368		-	
Mutual Beacon Class I		38,848		-	
Aim Aggressive Growth		13,215		-	
Oppenheimer Quest Opportunity value - Cl		6,355		-	
Kemper-Dreman High Return Class A		11,716		-	
EMCORE Corporation Stock Fund		80,511		-	
Participants' Loans Fund		50,361		35,107	
Total Trust		,061,413		1,079,983	
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 * - greater than 5% of net assets available for plan benefits

4. PARTICIPANT SHARES AND SHARE VALUES

Total participant shares and share values as of December 31, 1997 and 1996:

	199	7	1996		
	NUMBER OF SHARES	SHARE VALUE	NUMBER OF SHARES	SHARE VALUE	
Money Market:					
Prudential Government Securities Trust	105,560	\$ 1.00	61,414	\$ 1.00	
Mutual Funds:				40.00	
Prudential Utility Class B	21,021	12.32	31,733	10.88	
Prudential Utility Class A	19,259	12.33	-	-	
Prudential Equity Class B	11,849	19.83	,	17.24	
Prudential Small Company Class B	11,366	15.47	- /	13.11	
Prudential Equity Class A	17,753	19.85	-	-	
Prudential Small Company Class A	19,385	16.79	-	-	
Prudential Allocation Strategy Class B Prudential Allocation Balanced Class A	-	- 12.27	9,239	12.19	
Prodential Allocation Balanced Class A Prudential Allocation Balanced Class B	6,922	12.27	-	-	
Prudential Government Income Class B	4,675 808	9.05	1,670	- 8.84	
Prudential Government Income Class A	1,001	9.05	1,070	0.04	
Putnam Voyager Class A	309	19.05		_	
Alliance Growth Class A	125	42.98	_	_	
Mutual Beacon Class 1	2,757	14.09	_	-	
Aim Aggressive Growth	286	46.21	-	_	
Oppenheimer Quest Opportunity Value Clas	179	35.42	_	-	
Kemper-Dreman High Return Class A	357	32.78	-	-	
EMCORE Corporation Stock	4,129	19.50	-	-	

5. NUMBER OF PARTICIPANTS IN EACH FUND

A total of 168 and 88 active and former employees have investments in the Plan as of December 31, 1997 and 1996, respectively.

The number of participant accounts invested in each fund at December 31, 1997 and 1996 are summarized as follows:

	1997	1996
Money Market:		
Prudential Government Securities Trust	30	16
Notice 1. Friedric		
Mutual Funds:	40	10
Prudential Utility Class B	43	43
Prudential Utility Class A	79	-
Prudential Equity Class B	68	47
Prudential Small Company Class B	63	44
Prudential Equity Class A	123	-
Prudential Small Company Class A	100	-
Prudential Allocation Strategy Class B	-	15
Prudential Allocation Balanced Class A	34	-
Prudential Allocation Balanced Class B	19	-
Prudential Government Income Class B	5	5
Prudential Government Income Class A	10	-
Putnam Voyager Class A	10	-
Alliance Growth Class A	6	-
Mutual Beacon Class I	11	-
Aim Aggressive Growth	12	-
Oppenheimer Quest Opportunity Value Clas	13	-
Kemper-Dreman High Return Class A	14	-
EMCORE Corporation Stock	153	-
Participants' Loans	11	5

6. PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants receive the value of the vested interest in his or her account as a lump-sum distribution.

7. TAX STATUS

In a letter dated March 11, 1994, the Prudential Investments' Prototype Non-standardized 401(k) Plan, which is utilized by employers participating in the Prudential Mutual Fund Management Trust, was accepted by the Internal Revenue Service under Section 401 of the Internal Revenue Code. The Company is in the process of filing with the Internal Revenue Service and expects to receive a favorable determination that the Plan qualifies under Section 401(a) of the Internal Revenue Code. Item 27a - Schedule of Assets Held for Investment Purposes as of December 31, 1997

IDENTITY OF ISSUE	TYPE	SHARE TYPE VALUE COS		CURRENT VALUE	
Prudential Government Securities Trust	Money Market	\$ 1.00	\$105,560	\$105,560	
Prudential Utility Class B	Mutual Fund	12.32	207,540	258,979	
Prudential Utility Class A	Mutual Fund	12.33	203,972	237,469	
Prudential Equity Class B	Mutual Fund	19.83	195,725	234,969	
Prudential Small Company Class B	Mutual Fund	15.47	151,087	175,835	
Prudential Equity Class A	Mutual Fund	19.85	323,689	352,389	
Prudential Small Company Class A	Mutual Fund	16.79	295,701	325,478	
Prudential Allocation Balanced Class A	Mutual Fund	12.27	94,274	84,932	
Prudential Allocation Balanced Class B	Mutual Fund	12.23	63,585	57,176	
Prudential Government Income Class B	Mutual Fund	9.05	7,267	7,311	
Prudential Government Income Class A	Mutual Fund	9.05	8,957	9,063	
Putnam Voyager Class A	Mutual Fund	19.05	6,063	5,878	
Alliance Growth Class A	Mutual Fund	42.98	5,487	5,368	
Mutual Beacon Class I	Mutual Fund	14.09	42,903	38,848	
Aim Aggressive Growth	Mutual Fund	46.21	14,196	13,215	
Oppenheimer Quest Opportunity Value Class	Mutual Fund	35.42	6,506	6,355	
Kemper-Dreman High Return Class A	Mutual Fund	32.78	11,722	11,716	
EMCORE Corporation Stock	Stock Fund	19.50	76,860	80,511	
Participants' Loans	Loan Fund 7.50% - 8.50% 10/25/2001		-	50,361	

ASSET NAME	PURCHASE PRICE	SELLING PRICE	COST OF ASSET	CURRENT VALUE OF ASSET ON TRANSACTION DATE	NET GAIN
Prudential Utility Class B	\$ -	\$ 98,904	\$ 82,769	\$ 98,904	\$16,135
Prudential Utility Class B	-	177,448	150,413	177,448	27,035
Prudential Utility Class A	98,904	, -	98,904	98,904	-
Prudential Utility Class A	258,997	-	258,997	258,997	-
Prudential Equity Class B	-	99,197	79,531	99,197	19,666
Prudential Equity Class B	71,880	-	71,880	71,880	-
Prudential Equity Class B	-	188,079	151,851	188,079	36,228
Prudential Small Company Class B	-	83,031	70,145	83,031	12,886
Prudential Small Company Class B	75,577	-	75,577	75,577	-
Prudential Small Company Class B	-	154,001	127,544	154,001	26,457
Prudential Equity Class A	99,197	-	99,197	99,197	-
Prudential Equity Class A	359,088	-	359,088	359,088	-
Prudential Small Company Class A	83,031	-	83,031	83,031	-
Prudential Small Company Class A	327,540	-	327,540	327,540	-
Prudential Allocation Strategy Class A	55,221	-	55,221	55,221	-
Prudential Allocation Balanced Class A	94,215	-	94,215	94,215	-
Prudential Allocation Strategy Class B	-	72,952	71,873	72,952	1,079
Prudential Allocation Strategy Class B	-	129,285	125,098	129,285	4,187
Prudential Allocation Balanced Class B	72,952	-	72,952	72,952	-
Prudential Allocation Balanced Class B	81,337	-	81,337	81,337	-
EMCORE Corporation Stock	78,121	-	78,121	78,121	-