## SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13G

## INFORMATION STATEMENT PURSUANT TO RULES 13d-1 AND 13d-2(1)

(1) The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

EMCORE CORPORATION (Name of issuer)

Common Stock, no par value (Title of class of securities)

290846104 (CUSIP number)

Check the following box if a fee is being paid with this statement (). (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

(CONTINUED ON FOLLOWING PAGE(S))

(Page 1 of 6 Pages)

| USIP No. | 290846   |        |                                | 13G      |                                | Page 2 of |            | _ |
|----------|--|--------|--------------------------------|----------|--------------------------------|-----------|------------|---|
| :        | <br>1  | S.S.   | OF REPORTING PEOR I.R.S. IDENT |          | ON NO. OF ABOVE F              | PERSONS   |            |   |
|          | 2  | CHECK  | THE APPROPRIAT                 | TE BOX I | F A MEMBER OF A G              | ROUP      | (a)<br>(b) |   |
| ;        | 3  |        | SE ONLY                        |          |                                |           |            |   |
|          |  | CITIZ: | ENSHIP OR PLACE<br>da          | OF ORG   | ANIZATION                      |           |            |   |
|          | NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY EACH<br>REPORTING<br>PERSON WITH |        |                                |          | SOLE VOTING POWE               |           |            |   |
|          |  |        |                                | 6        | SHARED VOTING PC<br>1,960,469* | WER       |            |   |

SOLE DISPOSITIVE POWER

190,775

8 SHARED DISPOSITIVE POWER 1,960,469\*

\_\_\_\_\_

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
REPORTING PERSON
2,151,244\*

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
CERTAIN SHARES ( )

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9
21.5%

12 TYPE OF REPORTING PERSON
IN

<sup>\*</sup> See footnote on page 4.

| 0. 29084                   |   | 13G  |                             | Page 3 of 6 | 6 Pages |  |
|----------------------------|---|--|-----------------------------|-------------|---------|--|
| 1                          | NAME OF REPORTING                                 |  |                             | PERSONS     |         |  |
|                            | The AER 1997 Trus                                 | st   |                             |             |         |  |
| 2                          | CHECK THE APPROPI                                 | K THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (x) (b) ( ) |                             |             |         |  |
| 3                          | SEC USE ONLY                                      |  |                             |             |         |  |
| 4                          | CITIZENSHIP OR PI<br>Florida                      | LACE OF O  | RGANIZATION                 |             |         |  |
| BENEF:<br>OWNED I<br>REPOI | ARES ICIALLY BY EACH RTING N WITH                 | <br>6  | 1,960,469  SHARED VOTING    |             |         |  |
|                            |   |  | 0                           |             |         |  |
|                            |   | 7  | SOLE DISPOSITI<br>1,960,469 |             |         |  |
|                            |   | 8  | SHARED DISPOSI<br>0         |             |         |  |
| 9                          | AGGREGATE AMOUNT<br>REPORTING PERSON<br>1,960,469 | BENEFICIA  | ALLY OWNED BY EAC           | Н           |         |  |
| 10                         | CHECK BOX IF THE<br>CERTAIN SHARES                | AGGREGATI  | E AMOUNT IN ROW (           | 9) EXCLUDES | ( )     |  |
| 11                         | PERCENT OF CLASS                                  | REPRESEN'  | FED BY AMOUNT IN            | ROW 9       |         |  |
| 12                         | TYPE OF REPORTING                                 |  |                             |             |         |  |

- ITEM 1(A). NAME OF ISSUER: EMCORE Corporation
- ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

394 Elizabeth Avenue Somerset, New Jersey 08873

ITEM 2(A). NAME OF PERSON FILING:

This statement is filed on behalf of:

- (a) Thomas J. Russell
- (b) The AER 1997 Trust

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

The principal business address of the Reporting Persons is:

- (a) Thomas J. Russell: Two North Tamiami Trail Suite 1200 Sarasota, Florida 34236
- (b) The AER 1997 Trust: c/o Thomas J. Russell Two North Tamiami Trail Sarasota, Florida 34236

ITEM 2(C). CITIZENSHIP:

- (a) Thomas J. Russell: Florida
- (b) The AER 1997 Trust: New York

ITEM 2(D). TITLE OF CLASS OF SECURITIES:

Common Stock, no par value.

\* Includes 1,446,559 shares and warrants to purchase 513,910 shares held by The AER 1997 Trust. Thomas J. Russell is one of three trustees of The AER 1997 Trust. Such trustees share authority over the assets of the trust. These shares and warrants wer acquired prior to the time that EMCORE Corporation common stock was registered under the Securities and Exchange Act of 1934.

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ITEM 2(E). CUSIP NUMBER: 290846104

ITEM 3. Not applicable.

ITEM 4. OWNERSHIP.

| Entity             | Amount<br>Beneficially<br>Owned | Percent<br>of Class | Sole<br>Voting<br>Power | Shared<br>Voting Power | Sole<br>Dispositive<br>Power | Shared<br>Dispositive<br>Power |  |  |  |
|--------------------|---------------------------------|---------------------|-------------------------|------------------------|------------------------------|--------------------------------|--|--|--|
| Thomas J. Russell  | 2,151,244(a)                    | 21.5%               | 190,775                 | 1,960,469(a)           | 190,775                      | 1,960,469(a)                   |  |  |  |
| The AER 1997 Trust | 1,960,469                       | 19.9%               | 1,960,469               | 0                      | 1,960,469                    | 0                              |  |  |  |

- (a) Includes 1,446,559 shares and warrants to purchase 513,910 shares held by The AER 1997 Trust. Thomas J. Russell is one of three trustees of The AER 1997 Trust. Such trustees share authority over the assets of the trust.
- ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Not applicable.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

ITEM 10. CERTIFICATION.

Not applicable.

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## SIGNATURE

After reasonable inquiry and to the best of the knowledge and belief of the undersigned, the undersigned certify that the information set forth in this statement is true, complete and correct.

February 10, 1998

Thomas J. Russell

Name: Thomas G. Werthan
Title: Attorney-in-fact

The AER 1997 Trust

Name: Thomas G. Werthan Title: Attorney-in-fact

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