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

                                  FORM 3

            INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

       Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
          Section 17(a) of the Public Utility Holding Company Act of 1935 or
                Section 30(f) of the Investment Company Act of 1940

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1. Name and Address of Reporting Person*

   Rotella, Paul
- --
   (Last, First Middle)

   c/o EMCORE Corporation, 145 Belmont Drive
- --
   (Street)

   Somerset, NJ 08873
- --
   (City, State Zip)

==
2. Date of Event Requiring Statement (Month/Day/Year)

   07/25/00
==
3. IRS or Social Security Number of Reporting Person (Voluntary)

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4. Issuer Name and Ticker or Trading Symbol

   EMCORE Corporation (EMKR)
==
5. Relationship of Reporting Person(s) to Issuer
   (Check all applicable)

   [   ]   Director   [   ]   10% Owner
   [X]   Officer (give title below)   [   ]   Other (specify below)

                 Vice President - Turbo Disc Systems Division
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6. If Amendment, Date of Original (Month/Day/Year)

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7. Individual or Joint/Group Filing (Check applicable line)

   [X] Form Filed by One Reporting Person

   [   ] Form Filed by More than One Reporting Person

*   If the Form is filed by more than one Reporting Person, see Instruction
     5(b)(v)

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           Table I -- Non-Derivative Securities Beneficially Owned
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1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr.5)
(1) Common Stock	261	D	

Reminder: Report on a separate line for each class of securities beneficially
owned directly or indirectly.

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                      Table II -- Derivative Securities Beneficially Owned
                     (e.g., puts, calls, warrants, options, convertible securities)
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                                                  3. Title and Amount of Securities
                                                     Underlying Derivative Security
                                2. Date Exercisable    (Instr. 4)
                                   and Expiration Date  ---------------------------------
                                   (Month/Day/Year)                               Amount
                                   ---------------------                          or
                                   Date     Expira-                               Number
1. Title of Derivative             Exer-    tion                                  of
   Security (Instr. 4)             cisable  Date        Title                     Shares
- ------------------------          -------------------------------------------------------------------------
(1) Incentive Common Stock Options (1)      10/21/06    Common Stock               7,353
- -------------------------------------------------------------------------------------------------------
(2) Incentive Common Stock Options (2)      11/22/06    Common Stock               1,593
- -------------------------------------------------------------------------------------------------------
(3) Incentive Common Stock Options (3)      12/01/08    Common Stock              16,054
- -------------------------------------------------------------------------------------------------------
(4) Incentive Common Stock Options (4)      04/14/10    Common Stock              12,500
- -------------------------------------------------------------------------------------------------------
- -------------------------------------------------------------------------------------------------------
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(1) 60% of the options are currently vested and thus immediately exercisable.
    Remainder vest 20% annually beginning 10/21/00.
(2) 60% of the options are currently vested and thus immediately exercisable.
    Remainder vest 20% annually beginning 11/22/00.
(3) 20% of the options are currently vested and thus immediately exercisable.
    Remainder vest 20% annually beginning 12/1/00.
(4) 40% of the options vest 40% on 9/30/00 and 20% annually thereafter beginning
    2/16/01.

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                    Table II (cont.) -- Derivative Securities Beneficially Owned
                     (e.g., puts, calls, warrants, options, convertible securities)
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                                                 5. Owner-
                                                    ship
                                                    Form of
                                                    Derivative
                                 4. Conver-         Security:
                                    sion or         Direct        6. Nature of
                                    Exercise        (D) or           Indirect
                                    Price of        Indirect         Beneficial
   1. Title of Derivative            Derivative     (I)              Ownership
      Security (Instr. 4)            Security       (Instr.5)        (Instr. 5)
- --------------------------------------------------------------------------------

(1) Incentive Common Stock Options   $10.20              D
- --------------------------------------------------------------------------------
(2) Incentive Common Stock Options   $10.20              D
- --------------------------------------------------------------------------------
(3) Incentive Common Stock Options   $12.875             D
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(4) Incentive Common Stock Options   $44.00              D
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Explanation of Responses:

  /s/ Paul Rotella   08/11/00
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     **Signature of Reporting Person   Date