

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

OMB APPROVAL

OMB Number: 3235-0287

Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

|  |  |  |
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| 1. Name and Address of Reporting Person*<br><u>HOU HONG Q</u><br><br>(Last) (First) (Middle)<br><u>10420 RESEARCH ROAD, SE</u><br><u>ALBUQUERQUE, NM 87123</u><br><br>(Street)<br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>EMCORE CORP</u> [ <u>EMKR</u> ]<br><br>3. Date of Earliest Transaction (Month/Day/Year)<br><u>04/13/2012</u><br><br>4. If Amendment, Date of Original Filed (Month/Day/Year) | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><br><input checked="" type="checkbox"/> Director 10% Owner<br><br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><br><u>CEO &amp; President</u><br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><br>Form filed by More than One Reporting Person |
|--|--|--|

| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |   |   |                                |   |   |            |        |   |  |   |
|--|---|---|--------------------------------|---|---|------------|--------|---|--|---|
| 1. Title of Security (Instr. 3)  | 2. Transaction Date<br>(Month/Day/Year) | 2A. Deemed Execution Date, if any<br>(Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |        | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|  |   |   | Code                           | V | Amount  | (A) or (D) | Price  |   |  |   |
| Emcore Common Stock  | 04/13/2012                              |   | A                              |   | 356 <sup>(1)</sup>  | A          | \$4.22 | 76,611 <sup>(2)</sup>   | D  |   |
| Emcore Common Stock  |   |   |                                |   |   |            |        | 6,346 <sup>(3)</sup>  | I  | By Trust 401(k)                                       |

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned<br>(e.g., puts, calls, warrants, options, convertible securities) |  |  |   |                                      |   |   |     |  |                    |   |  |   |  |   |  |
|---|--|--|---|--------------------------------------|---|---|-----|--|--------------------|---|--|---|--|---|--|
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)   | 2. Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4. Transaction<br>Code (Instr.<br>8) |   | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3, 4<br>and 5) |     | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                    | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr. 3<br>and 4) |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | 10. Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|   |  |  |   |                                      |   |   |     |  |                    |   |  |   |  |   |  |
|   |  |  |   | Code                                 | V | (A)   | (D) | Date<br>Exercisable  | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of<br>Shares |   |  |   |  |

Explanation of Responses:

1. Shares were purchased under the Company's Officer and Director Share Purchase Plan in a transaction exempt from Section 16b pursuant to Rule 16b-3(d).

2. Includes 25,000 shares of restricted stock granted under the Company's 2010 Equity Incentive Plan, vesting in two equal annual installments beginning on January 28, 2013.

3. Shares attributable to EMCORE Corporation 401(k) account as of March 31, 2012.

Alfredo Gomez, attorney-in-  
fact 04/17/2012

\*\* Signature of Reporting Person Date

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

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.