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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Che | eck this box if no longer subject to |
|------|--------------------------------------|
| | tion 16. Form 4 or Form 5 |
| | |
| | gations may continue. See |
| Inst | ruction 1(b). |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

OMB APPROVAL 2005 000

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| hours per response: | 0.5 |

| 1. Name and Addres <u>ALIABADI N</u> | 1 0 | | 2. Issuer Name and Ticker or Trading Symbol OSI SYSTEMS INC [OSIS] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify | | | | | | | |
|--------------------------------------|--|----------|--|--|--|--|--|--|--|--|--|
| (Last) 12525 CHADRC | (First) ON AVE | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 02/24/2010 | X Onler (give the Other (specify below) below) President/GM OSI Optoelectroni | | | | | | | |
| (Street) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | | | | |
| HAWTHORNE | CA | 90250 | | X Form filed by One Reporting Person | | | | | | | |
| (City) | (State) | (Zip) | | Form filed by More than One Reporting Person | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) 3. Transaction Code (Instr. 8) | | | | | 5. Amount of Securities Beneficially Owned Following Reported | 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 | Transaction(s) (Instr. 3 and 4) | | (1150.4) |
| Common Stock | 02/24/2010 | | F ⁽¹⁾ | | 207 | D | \$28.9 | 44,148 | D | |
| Common Stock | 02/25/2010 | | S | | 4,000 | D | \$28.61 | 40,148 | D | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transa Code (8) | | of Deriv Secu Acqu (A) or Dispo of (D) (Instr | Derivative (Month/Day/Year) Securities Acquired (A) or Disposed | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | Amount of Securities Security Underlying (Instr. 5) Derivative Security (Instr. 3 | | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---|---|--|---|------------------------------|---|--|---|---------------------|---|-------|---|--|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. Shares sold to satisfy tax withholding liability of vested restricted stock.

/s/ Manoocher Mansouri <u>Aliabadi</u>

02/26/2010

** 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.