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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Check this box if no longer subject to
Section 16. Form 4 or Form 5
obligations may continue. See
Instruction 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 OMB Number: 3235-0287 Estimated average burden hours per response: 0.5

1. Name and Address of Reporting F EDRICK ALAN I	Person*	2. Issuer Name and Ticker or Trading Symbol OSI SYSTEMS INC [OSIS]		tionship of Reporting Pe all applicable) Director	10% Owner
(Last) (First) 12525 CHADRON AVE	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 07/02/2010	X	Officer (give title below) CFO & E	Other (specify below)
(Street) HAWTHORNE CA (City) (State)	90250 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	idual or Joint/Group Fili Form filed by One Re Form filed by More the Person	porting Person

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)	Transaction Code (Instr.					5. Amount of Securities Beneficially Owned Following Reported	Form: Direct	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(Instr. 4)
Common Stock	07/02/2010		A		870 ⁽¹⁾	Α	\$12.21	39,860	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)		5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instr and 5	ative rities ired osed . 3, 4	6. Date Exercisable and Expiration Date (Month/Day/Year)		d 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	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. Acquired pursuant to issuer's Employee Stock Purchase Plan

<u>/s/ Alan Edrick</u>

07/12/2010

Date

** Signature of Reporting Person

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.