UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM	8-K
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CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 9, 2004

OSI Systems, Inc. (Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation or organization) No. 000-23125

(Commission File Number)

330238801 (I.R.S. Employer Identification No.)

12525 Chadron Avenue Hawthorne, California 90250 (Address of Principal Executive Offices) (Zip Code)

(310) 978-0516

(Registrant's telephone number, including area code)

Not Applicable

(Former name or address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:	
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On September 9, 2004, OSI Systems, Inc. (the "Company") announced that it completed the purchase of 107,500 shares of the Company's common stock on the open market at an average purchase price of \$14.73 per share. This purchase was made under a stock purchase plan that the Company's board of directors had authorized in March of 1999 for the purchase of up to 2,000,000 shares of common stock (the "Plan"). In addition, the Company announced that the board of directors recently authorized the purchase of an additional 1,000,000 shares of common stock under the Plan, increasing the number of shares available for repurchase from 2,000,000 to 3,000,000 shares. A copy of the press release is attached as Exhibit 99.1 to this report.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits

99.1 Press Release, dated September 9, 2004, issued by OSI Systems, Inc.

SIGNATURES

Pursuant to the requirements of the Securities and Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

OSI SYSTEMS, INC.

Date: September 9, 2004

By: /s/ Victor Sze

Victor Sze

Secretary and General Counsel

EXHIBIT INDEX

Exhibit Number Description

99.1 Press Release, dated September 9, 2004, issued by OSI Systems, Inc.

FINAL

For Further Information

Sky Investor Relations

4712 Admiralty Way, Suite 375 Marina del Rey CA 90292 (310) 821-5880

Contact: Dilek Mir

Sky Investor Relations 110 Wall Street, 2nd Floor New York, NY 10005 (212) 440-5000 Contact: Laurel Moody

OSI SYSTEMS ANNOUNCES STOCK REPURCHASE

- Recently purchased 107,500 shares on the open market
- Board authorizes purchase of additional 1,000,000 shares

HAWTHORNE, Calif.—September 9, 2004—OSI Systems, Inc. (Nasdaq: OSIS) today announced that it has recently completed the purchase of 107,500 shares of the company's common stock on the open market at an average purchase price of \$14.73 per share.

This purchase was made under a stock purchase plan that the company's board of directors had authorized in March of 1999 for the purchase of up to 2,000,000 shares. Of the 2,000,000 shares authorized, 1,404,500 shares were purchased through fiscal 2001. Including the recent purchase of 107,500 shares, the company has purchased 1,512,000 out of the 2,000,000 shares authorized. OSI Systems has a balance of 488,000 shares authorized for purchase under the 1999 stock purchase plan. In addition, OSI Systems' board has recently authorized the purchase of an additional 1,000,000 shares of stock. With this increase, the company has a balance 1,488,000 shares authorized for purchase.

The company may continue to purchase shares of its common stock in the open market at a time and price that supports shareholder value. Following its recent purchase of stock, the company's liquidity and cash position remains strong for the foreseeable future.

About OSI Systems, Inc.

OSI Systems Inc. is a Hawthorne, California based diversified global developer, manufacturer and seller of security and inspection systems, medical monitoring products, and optoelectronic-based components, as well as a provider of engineering and manufacturing services. The company has more than 30 years of experience in electronics engineering and manufacturing and maintains offices and production facilities located in more than a dozen countries. OSI Systems implements a strategy of expansion by leveraging its electronics and contract manufacturing capabilities into selective end product markets through organic growth and acquisitions. For more information on OSI Systems Inc. or any of its subsidiary companies, visit www.osi-systems.com.

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include information regarding our expectations, goals or intentions about the future, including, but not limited to, statements regarding the company's repurchase of shares of its common stock and the company's liquidity and cash position. The actual results may differ materially from those described in or implied by any forward-looking statement. In

particular, there can be no assurance that the company will in the future repurchase additional shares of its stock or that its liquidity and cash position will continue to remain strong. Other important factors are set forth in our Securities and Exchange Commission filings. All forward-looking statements speak only as of the date made, and we undertake no obligation to update these forward-looking statements.