UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the

Securities Exchange Act of 1934

Date of report (Date of earliest event reported): July 19, 2006

TERADYNE, INC.

(Exact Name of Registrant as Specified in Charter)

Massachusetts (State or Other Jurisdiction 001-06462 (Commission File Number) 04-2272148 (IRS Employer

of Incorporation)

Identification No.)

321 Harrison Avenue, Boston, Massachusetts
(Address of Principal Executive Offices)

Registrant s telephone number, including area code (617) 482-2700

(Former Name or Former 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 (see General Instruction A.2. below):

- " 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 2.02 Results of Operations and Financial Condition

On July 19, 2006, Teradyne, Inc. (the Company) issued a press release regarding its financial results for the quarter ended July 2, 2006. The Company s press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 8.01 Other Events

On July 17, 2006, Teradyne s Board of Directors authorized a stock repurchase program. Under the program, the Company may spend an aggregate of \$400 million to repurchase shares of its common stock in open market purchases, in privately negotiated transactions or through other appropriate means over the next two (2) years. Shares are to be repurchased at the company s discretion, subject to market conditions and other factors. The Company s press release regarding this authorization is furnished as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The exhibit listed below and in the accompanying Exhibit Index is furnished as part of this Current Report on Form 8-K.

Exhibit No. Description

99.1* Press Release dated July 19, 2006 of Teradyne, Inc.

^{*} Furnished, not filed.

SIGNATURES

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

TERADYNE, INC.

Dated: July 19, 2006 By: /s/ Gregory R. Beecher

Name: Gregory R. Beecher

Title: V.P. & Chief Financial Officer

EXHIBIT INDEX

Exhibit No.

DescriptionPress Release dated July 19, 2006 of Teradyne, Inc. 99.1