
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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): November 4, 2005

KLA-Tencor Corporation

(Exact name of registrant as specified in its charter)

000-09992

(Commission File Number)

Delaware

(State or other jurisdiction
of incorporation)

04-2564110

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

160 Rio Robles
San Jose, California
95134

(Address of principal executive offices, with zip code)

(408) 875-3000

(Registrant's telephone number, including area code)

N/A

(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:

- 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))
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Item 5.02 Departure of Directors

On November 4, 2005, as a result of KLA-Tencor's mandatory director retirement policy, Mr. Richard J. Elkus, Jr. retired from the Board of Directors of KLA-Tencor.

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 hereunto duly authorized.

KLA-TENCOR CORPORATION

Date: November 4, 2005

By: /s/ John H. Kispert
John H. Kispert
Executive Vice President and Chief Financial Officer