FORM	5
------	---

	Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may	AN
_	continue. See Instruction 1(b). Form 3 Holdings Reported	

Form 4 Transactions
 Reported

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES hours per response...

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

1. Name and Address of NICHOLS STUAR			2. Issuer Name and T KLA TENCOR (0	Symbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) C/O KLA-TENCOI	(First) R CORP, 160 RI	(3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 06/30/2003					r) X_Officer (give title below)Other (specify below)Other			
	(Street)	2	4. If Amendment, Date Original Filed(Month/Day/Year)				6. Individual or Joint/Group Reporting (check applicable line)				
SAN JOSE, CA 95134								_X_Form Filed by One Reporting Person Form Filed by More than One Reporting Person			
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned								
1. Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	Execution Date, if	(Instr. 8)	(A) or Disposed of (D)				Ownership Form:	Beneficial Ownership	
Common Stock								1,117 (1)	D		

Reminder: Report on a separate line for each class of securities beneficially Persons who respond to the collection of information contained in this form owned directly or indirectly. SEC 2270 (9-02) are not required to respond unless the form displays a currently valid OMB control number.

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

	(e.g., puts, calls, warrants, options, convertible securities)																					
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)	Code	Number		Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3,		Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3,		Expiration Date (Month/Day/Year) /e s		Expiration Date		Expiration Date		7. Title and of Underlyin Securities (Instr. 3 and	ng	(Instr. 5)	of Derivative Securities Beneficially Owned at End of Issuer's	Ownership Form of Derivative	Beneficial
					(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares												
Non- Qualified Stock Option	\$ 26.25						11/10/2001	11/10/2010	Common Stock	4,300		4,300	D									
Non- Qualified Stock Option	\$ 29.31						10/02/2002	10/02/2011	Common Stock	12,000		12,000	D									
Non- Qualified Stock Option	\$ 32.75						04/04/2002	04/04/2011	Common Stock	6,000		6,000	D									
Non- Qualified Stock Option	\$ 33.75						10/27/2000	10/27/2009	Common Stock	21,000		21,000	D									
Non- Qualified Stock Option	\$ 34.67						11/08/2003	01/28/2013	Common Stock	6,500		6,500	D									

Non- Qualified Stock Option	\$ 37.05			11/08/2003	11/08/2012	Common Stock	3,250	3,250	D	
Non- Qualified Stock Option	\$ 44.6875			08/13/2000	08/13/2010	Common Stock	12,000	12,000	D	

Reporting Owners

Reporting Owner Name /		Relationships								
Address	Director	10% Owner	Officer	Other						
NICHOLS STUART J C/O KLA-TENCOR CORP 160 RIO ROBLES SAN JOSE, CA 95134			VP and General Counsel							

Signatures

Stuart J. Nichols	08/11/2003	
***Signature of Reporting Person	Date	

Explanation of Responses:

- * 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).
- (1) Securities adjusted for Non-Reportable Transaction (384 ESPP shares acquired)

Remarks:

Form 5 filed to voluntarily report all holdings

Note: File three copies of this Form, one of which must be manually signed. If space provided is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.