FORM 5

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

	OMB APPROVAL							
	OMB Number:	3235-0362						
	Estimated average bu	rden						
cs	hours per response	1.0						

subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). Form 3 Holdings Reported

Form 4 Transactions

Reported

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 Reporti Glasser Lance A	ng Person*	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [klac]					5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner			
(Last) (First) C/O KLA-TENCOR COR	(,	3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 06/30/2005					X Officer (give title below) Other (specify below) Executive Vice President			
(Stree	4. If Amendment, Date Original Filed(Month/Day/Year)					6. Individual or Joint/Group Reporting (check applicable line) _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/Yea	2A. Deemed Execution Date, if any (Month/Day/Year)	(Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) (A) or Amount (D) Price		of (D)	5. Amount of Securities Beneficially Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)	Ownership Form:	Beneficial Ownership	
Common Stock							3,508	D		
Common Stock-Restricted Units	Stock						33,333	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.

are not required to respond unless the form displays a currently valid OMB

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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	(Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	Code	of	vative rities sired or osed b) : 3,	6. Date Exercisable and Expiration Date (Month/Day/Year)		ation Date of Underlying Securities (Instr. 3 and 4		of Underlying Securities		Derivative Security (Instr. 5)	Derivative Securities Beneficially Owned at End of Issuer's	Ownership Form of Derivative Security: Direct (D) or Indirect (I)	Beneficial
					(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares						
Non- Qualified Stock Option	\$ 10.63						08/31/1999	08/31/2008	Common Stock	27,000		27,000	D			
Non- Qualified Stock Option	\$ 26.25						11/10/2001	11/10/2010	Common Stock	5,000		5,000	D			
Non- Qualified Stock Option	\$ 29.31						10/02/2002	10/02/2011	Common Stock	22,500		22,500	D			
Non- Qualified Stock Option	\$ 32.75						04/04/2002	04/04/2011	Common Stock	5,000		5,000	D			
Non- Qualified Stock Option	\$ 33.75						10/27/2000	10/27/2009	Common Stock	20,000		20,000	D			

Non- Qualified Stock Option	\$ 34.67		11/08/2003	01/28/2013	Common Stock	9,000	9,000	D	
Non- Qualified Stock Option	\$ 37.05		11/08/2003	11/08/2012	Common Stock	4,500	4,500	D	
Non- Qualified Stock Option	\$ 40.66		10/27/2004	08/02/2014	Common Stock	3,750	3,750	D	
Non- Qualified Stock Option	\$ 41.79		09/21/2005	09/21/2014	Common Stock	75,000	75,000	D	
Non- Qualified Stock Option	\$ 42.28		11/30/2000	11/30/2009	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option	\$ 44.6875		08/13/2000	08/13/2010	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option	\$ 45.16		10/27/2004	04/26/2014	Common Stock	6,250	6,250	D	
Non- Qualified Stock Option	\$ 51.229		11/08/2003	07/30/2013	Common Stock	4,500	4,500	D	
Non- Qualified Stock Option	\$ 53.86		10/27/2004	10/27/2013	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option	\$ 58.10		10/27/2004	01/27/2014	Common Stock	5,000	5,000	D	

Reporting Owners

Departing Owner Name /	Relationships							
Reporting Owner Name / Address	Director	10% Owner	Officer	Other				
Glasser Lance A C/O KLA-TENCOR CORP. 160 RIO ROBLES SAN JOSE, CA 95134			Executive Vice President					

Signatures

Lance A. Glasser	08/11/2005
**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).

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.