

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>SMITH ARTHUR D</u> (Last) (First) (Middle) <u>C/O CIENA CORPORATION</u> <u>1201 WINTERSON ROAD</u> (Street) <u>LINTHICUM, MD 21090</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>CIENA CORP [CIEN]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>CHIEF OPERATING OFFICER</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>04/09/2007</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	04/09/2007		M		2,514	A	\$19.95	57,771	D	
Common Stock	04/09/2007		s ⁽¹⁾		2,514	D	\$28.9655 ⁽²⁾	55,257	D	
Common Stock	04/09/2007		M		1,785	A	\$16.52	57,042	D	
Common Stock	04/09/2007		s ⁽¹⁾		1,785	D	\$28.9655 ⁽³⁾	55,257	D	

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	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Amount or Number of Shares
Non-Qualified Stock Option (right to buy)	\$16.52	04/09/2007		M		1,785		(4)	11/02/2015	Common Stock	1,785	\$0	44,643	D	
Non-Qualified Stock Option (right to buy)	\$19.95	04/09/2007		M		2,514		(5)	12/10/2014	Common Stock	2,514	\$0	15,343	D	

Explanation of Responses:

- Sales were effected pursuant to Rule 10b5-1 trading plan dated 3/19/07.
- Reflects the average sale price of the total shares sold. Actual sales prices are as follows: 199 shares at \$28.92; 700 shares at \$28.94; 1000 shares at \$28.95; 600 shares at \$28.96; and 15 shares at \$28.98.
- Reflects the average sale price of the total shares sold. Actual sales prices are as follows: 185 shares at \$28.98; 1229 shares at \$28.99; and 371 shares at \$29.00.
- Option vests at a rate of 25% on the last day of the month of the one year anniversary of the grant date and 2.084% for each of the 36 months thereafter.
- Option is fully vested. On October 26, 2005, the Board of Directors accelerated the vesting of Ciena's then unvested, "out-of-the-money" stock options.

By: Erik Lichter For: Arthur D. Smith 04/09/2007

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* 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 is insufficient, see Instruction 6 for procedure.

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