FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

| Lufkin Dan W | | | | ELECTRO OPTICAL SCIENCES INC /NY [MELA] | | | | | | | | (Che | (Check all applicable) X Director 10% Owner Officer (give title Other (specify | | | | | | |
|---|-------------------------|--|-------------|---|---|--|-------|-------------------|---|------------------------|--|---|--|--|--|---|--|--|--|
| (Last) (First) (Middle) C/O ELECTRO-OPTICAL SCIENCES, INC. 3 WEST MAIN ST. SUITE #201 | | | | 03/09 | 3. Date of Earliest Transaction (Month/Day/Year) 03/09/2009 | | | | | | | | belo | w) | below | | | | |
| (Street) | et) /INGTON NY 10533 | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| (City) | (Si | | Zip) | | | | | | | | | | | | | | | | |
| | | | le I - Nor | | | | | | Dis | | | | | | | | | | |
| 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) | | | | | Secur Benef Owne | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | | | | |
| | | | | | | | | Code | v | Amount | (A (D |) or) | Price | Trans | action(s) 3 and 4) | | (, | | |
| Common | Stock | | | 03/09 | /2009 | 03/09 | /2009 | P | | 3,760 | | A | \$4.15 | 4 | 23,525 | D | | | |
| Common | Stock | | | 03/09 | /2009 | 03/09 | /2009 | P | | 40 | | A | \$4.19 | 4 | 23,565 | D | | | |
| Common | Stock | | | 03/09 | /2009 | 03/09 | /2009 | P | | 1,200 | | A | \$4.2 | 4 | 24,765 | D | | | |
| Common | Stock | | | | | | | | | | | | | (| 50,142 | I | Margaret L. Bishop Trust | | |
| Common | Stock | | | | | | | | | | | | | (| 50,142 | I | Abigail Lufkin Trust | | |
| Common | Stock | | | | | | | | | | | | | (| 60,143 | I | Allison Lufkin Trust | | |
| Common | Stock | | | | | | | | | | | | | (| 60,143 | I | Elise G.B. Lufkin Living Trust | | |
| Common Stock | | | | | | | | | | 6,847 | | I | Aster Lee Moulton Lufkin Trust | | | | | | |
| Common Stock | | | | | | | | | | | | | 10,000 | | I | Schuyler Hazard Trust | | | |
| Common Stock | | | | | | | | | | | | | | 1 | 0,000 | I | Cynthia Lufkin | | |
| | | Ta | able II - D | | | | | | | sed of, onvertib | | | | Owned | | | | | |
| Derivative Conversion [| | 3. Transaction Date (Month/Day/Year) (Month/Day/Year) (Month/Day/Year) | | ed 4. Transaction Code (Ins | | 5. Number of | | 6. Date E | 6. Date Exercisa Expiration Date (Month/Day/Yea | | 7. Title and Amount of Securities Underlying Derivative Security (Instr and 4) | | 8. De Se (In | Price of erivative ecurity estr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | Code V | (A) | (D) | Date Exercisal | | Expiration Date | Title | Amo or Num of Shar | ber | | | | | | |

Explanation of Responses:

Remarks:

/s/ Philip DeBellis as attorneyin-fact for Dan W. Lufkin 03/10/2009

** 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.