Washingt SCHEDULE	IES AND ton, D.C E 13G	EXCHANGE COMMIS . 20549 ities Exchange		
Electro	-Optical	Sciences, Inc.		
(Name of Issuer)				
Common	Stock			
(Title	of Class	of Securities)		_
28519210	90			
(CUSIP	Number)			<u> </u>
527 Mad		nue, Suite 2600 ork 10022 Rosela	B. Levithan, Esq.	
		and Telephone N eceive Notices	umber of Person and Communications)	
	r 31, 20 f Event		Filing of this Statement)	
	he appro e is fil		esignate the rule pursuant to wh	ich this
	_x	Rule 13d-1(b) Rule 13d-1(c) Rule 13d-1(d)		
*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.  The information required on the remainder of this cover page shall not be				
deemed to be ?filed? for the purpose of Section 18 of the Securities Exchange Act of 1934 (?Act?) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the				
Notes).		-	·	,
1.Names	o. 28519 of Repo es only)	rting Persons.	Page 2 I.R.S. Identification Nos. of a	of 6 Pages bove persons
Austin W. Marxe and David M. Greenhouse				
Instruct	2.	Check the Appr	opriate Box if a Member of a Gro	up (See
	(a) (b)	[ ]	Not Applicable	
	3.	SEC Use Only		
	4.	Source of Fund	s (See Instructions): 00	
<ol> <li>Check if Disclosure of Legal Proceedings Is Required Purs</li> </ol>				quired Pursuant to
Items 2	(d) or 2	(e):	Not Applicable	
	6.	Citizenship or	Place of Organization: Un	ited States
	Number Shares Owned b	Beneficially	Sole Voting Power: 0 8. Shared Voting Power:	1,064,786*
	Each Re Person	porting 9.	Sole Dispositive Power: 0 Shared Dispositive Power:	1,064,786*

- 11. Aggregate Amount Beneficially Owned by Each Reporting Person: 1,064,786\*
- 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): Not Applicable
- 13. Percent of Class Represented by Amount in Row (11): 9.9%\*
- 14. Type of Reporting Person (See Instructions): IA, IN
- \* This is a joint filing by Austin W. Marxe (?Marxe?) and David M. Greenhouse (?Greenhouse?). Marxe and Greenhouse share sole voting and investment power over 978,974 shares of Common Stock owned by Special Situations Fund III QP, L.P. and 85,812 shares of Common Stock owned by Special Situations Fund III, L.P. See Items 2 and 4 of this Schedule for additional information.

Page 3 of 6 Pages

- Item 1. Security and Issuer:
  - (a) Electro-Optical Sciences, Inc.
  - (b) 3 West Main Street, Suite 201, Irving, New York 10533
- Item 2. (a) Name of Person Filing:

The persons filing this report are Austin W. Marxe (?Marxe?) and David M. Greenhouse (?Greenhouse?), who are the controlling principals of AWM Investment Company, Inc. (?AWM?), which serves as the general partner of MGP Advisers Limited Partnership (?MGP?), the general partner of and investment adviser to Special Situations Fund III, L.P. (?SSF3?) and Special Situations Fund III QP, L.P.\* (?SSFQP). (SSF3 and SSFQP will hereafter be referred to as, the ?Funds?). The principal business of each Fund is to invest in equity and equity-related securities and other securities of any kind or nature.

\*Pursuant to that certain Exchange Tender Offer described in the Schedule TO-I of the Special Situations Fund III, L.P. (SSF3) as filed by SSF3 with the Securities and Exchange Commission on November 17, 2005, SSF3 transferred the securities included in this Schedule 13G to Special Situations Fund III QP, L.P. (SSFQP) on December 31, 2005.

(b) Address of Principal Business Office or, if none, Residence:

The principal business address for Marxe and Greenhouse is 527 Madison Avenue, Suite 2600, New York, NY 10022.

(c) Citizenship:

 $\mbox{Austin W. Marxe and David M. Greenhouse are United States citizens.}$ 

- (d) Title of Class of Securities: Common Stock, no par value. (e) CUSIP Number: 285192100.
- Item 3. If this statement is filed pursuant to \$240.13d-1(b) or 240.13d-2(b), check whether

the person filing is a: Not Applicable

- (a) ( ) Broker or Dealer registered under section 15 of the  $\operatorname{Act};$
- (b) ( ) Bank as defined in section 3(a) (6) of the Act;
- (c) ( ) Insurance Company as defined in section 3(a) (19) of the Act;
- (d) ( ) Investment Company registered under section 8 of the Investment Company Act of 1940;
- (e) ( ) An Investment Adviser in accordance with \$240.13d -1(b)(I)(ii)(E);
- (f) ( ) An employee benefit plan or endowment fund in accordance with 240.13d-1(b)(I)(ii)(F);

Page 4 of 6 Pages

- (g) ( ) A parent holding company or control person in accordance with \$240.13d-
  - 1(b)(1)(ii)(G);
- (h) ( ) A savings association as defined in Section 3(b) of the Federal Deposit Insurance

Act

(i) ( ) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment

Company Act of 1940; (j) ( ) Group, in accordance with 240.13d-1(b)(1)(ii)(J).

## Item 4. Ownership:

- (a) Amount Beneficially Owned: Messrs. Marxe and Greenhouse beneficially own a total of 1,064,786 shares of Common Stock. This amount includes 978,974 shares of Common Stock owned by SSFQP and 85,812 shares of Common Stock owned by SSF3.
- (b) Percent of Class: Messrs. Marxe and Greenhouse beneficially own 9.9% of the shares outstanding. SSFQP owns 9.1% of the outstanding shares and SSF3 owns 0.8% of the outstanding shares.
  - (c) Number of Shares as to which the person has:
    - (i) Sole power to vote or to direct the vote: 0
    - (ii) Shared power to vote or to direct the vote: 1,064,786
    - (iii) Sole power to dispose or to direct the disposition of: 0
- (iv) Shared power to dispose or to direct the disposition of: 1,064,786
- Item 5. Ownership of Five Percent or Less of a Class: If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more that five percent of the class of securities, check the following \_\_.
- Item 6.0wnership of More than Five Percent on Behalf of Another Person: Not Applicable.
- Item 7. Identification and Classification of the Subsidiary Which Acquired the Security being Reported on By the Parent Holding Company: Not Applicable.
- Item 8. Identification and Classification of Members of the Group: Not applicable
- Item 9. Notices of Dissolution of Group: Not applicable.

Page 5 of 6 Pages

## Item 10.Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities

referred to above were acquired and are held in the ordinary course of business and were not

acquired and are not held for the purpose of or with the effect of changing or influencing the  $\,$ 

control of the issuer of the securities and were not acquired and are not held in connection with

or as a participant in any transaction having that purpose or effect.

## SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2006

## /s/David M Greenhouse DAVID M. GREENHOUSE

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001).

Page 6 of 6 Pages

JOINT FILING AGREEMENT

Austin W. Marxe and David M. Greenhouse hereby agree that the Schedule 13G to which this agreement is attached is filed on behalf of each of them.

/s/\_Austin W. Marxe Austin W. Marxe

 $\begin{tabular}{ll} $/s/_David M. Greenhouse \\ David M. Greenhouse \\ \end{tabular}$ 

- -6-

S5313/1 1319328.02