

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13G
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULES 13d-1(b)(c), AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO RULE 13d-2(b)

(Amendment No.)

Electro-Optical Sciences, Inc. (MELA)

(Name of Issuer)

Common Stock

(Title of Class of Securities)

285192100

(CUSIP Number)

August 1, 2007

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this
Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

The information required in 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 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).

CUSIP No. 285192100

1. NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Bonanza Capital, Ltd.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a)
(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

6. SHARED VOTING POWER

1,506,700

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,506,700

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,506,700 (1)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

9.8%

12. TYPE OF REPORTING PERSON*

PN

(1) This number does not include 250,000 of the Issuer's Common Stock Purchase Warrants which are not exercisable because their exercise is currently subject to a 4.99% beneficial ownership limitation.

CUSIP No. 285192100

1. NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Bonanza Master Fund, Ltd.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a)
(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

1,506,700

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,506,700

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,506,700(1)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

9.8%

12. TYPE OF REPORTING PERSON*

CO

(1) This number does not include 250,000 of the Issuer's Common Stock Purchase Warrants which are not exercisable because their exercise is currently subject to a 4.99% beneficial ownership limitation.

CUSIP No. 285192100

Item 1(a). Name of Issuer:

Electro-Optical Sciences, Inc. (MELA)

Item 1(b). Address of Issuer's Principal Executive Offices:

3 West Main Street, Suite 201, Irvington, New York 10533

Item 2(a). Name of Person Filing:

Bonanza Capital, Ltd.
Bonanza Master Fund, Ltd.

Item 2(b). Address of Principal Business Office, or if None, Residence:

300 Crescent Court, Suite 250
Dallas, Texas 75201

Item 2(c). Citizenship:

Bonanza Capital, Ltd. - Texas
Bonanza Master Fund, Ltd. - Cayman Islands

Item 2(d). Title of Class of Securities:

Common Stock

Item 2(e). CUSIP Number:

285192100

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) Broker or dealer registered under Section 15 of the Exchange Act.
- (b) Bank as defined in Section 3(a)(6) of the Exchange Act.
- (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act.
- (d) Investment company registered under Section 8 of the Investment Company Act.
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 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;
- (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

Bonanza Capital, Ltd. - 1,506,700

(b) Percent of class:

Bonanza Capital, Ltd. - 9.8%
 Bonanza Master Fund, Ltd. - 9.8%

(c) Number of shares as to which such person has:

Bonanza Capital, Ltd.:

(i) Sole power to vote or to direct the vote	0	-----,
(ii) Shared power to vote or to direct the vote	1,506,700	-----,
(iii) Sole power to dispose or to direct the disposition of	0	-----,
(iv) Shared power to dispose or to direct the disposition of	1,506,700	-----.

Bonanza Master Fund, Ltd.:

(i) Sole power to vote or to direct the vote	0	-----,
(ii) Shared power to vote or to direct the vote	1,506,700	-----,
(iii) Sole power to dispose or to direct the disposition of	0	-----,
(iv) Shared power to dispose or to direct the disposition of	1,506,700	-----.

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 than five percent of the class of securities check the following [].

Not applicable

Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

Not applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

If a parent holding company or Control person has filed this schedule, pursuant to Rule 13d-1(b)(1)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company or control person has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

Not applicable

Item 8. Identification and Classification of Members of the Group.

If a group has filed this schedule pursuant to s.240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to s.240.13d-1(c) or s.240.13d-1(d), attach an exhibit stating the identity of each member of the group.

Not applicable

Item 9. Notice of Dissolution of Group.

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

Not applicable

Item 10. Certifications.

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

August 8, 2007

(Date)

Bonanza Capital, Ltd.*

By: Bonanza Fund Management, Inc.
Its General Partner

By: /s/ Bernay Box

Bernay Box
President

Bonanza Master Fund, Ltd.*

By: Bonanza Capital, Ltd.
Its General Partner

By: Bonanza Fund Management, Inc.
Its General Partner

By: /s/ Bernay Box

Bernay Box
President

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties for whom copies are to be sent.

Attention. Intentional misstatements or omissions of fact constitute federal criminal violations (see 18 U.S.C. 1001).

* The Reporting Persons disclaim beneficial ownership in the Shares reported herein except to the extent of their pecuniary interest therein.

AGREEMENT

The undersigned agree that this Schedule 13G dated August 8, 2007 relating to the Common Stock of Electro-Optical Sciences, Inc. (MELA) shall be filed on behalf of the undersigned.

Bonanza Capital, Ltd.*

By: Bonanza Fund Management, Inc.
Its General Partner

By: /s/ Bernay Box

Bernay Box
President

Bonanza Master Fund, Ltd.*

By: Bonanza Capital, Ltd.
Its General Partner

By: Bonanza Fund Management, Inc.
Its General Partner

By: /s/ Bernay Box

Bernay Box
President