SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

X Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended December 31, 1998 or

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act 1934

For the transition period from
to .

Commission File Number 0-16106

APA Optics, Inc.
(exact name of small business issuer as specified in its charter)

Minnesota
41-1347235
(State or other jurisdiction of
(I.R.S. Employer Identification No.)
incorporation or organization)

2950 N.E. 84th Lane, Blaine, Minnesota 55449
(Address of principal executive offices and zip code)

Issuer's telephone number, including area code: (612) 784-4995

Indicate whether the issuer (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the issuer was required to file such reports), and (2) has been subject to the filing requirement for the past 90 days.

Yes X No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date:

Class:
Outstanding at December 31, 1998
Common stock, par value $.01
8,512,274



PART 1, FINANCIAL INFORMATION

ITEM 1, FINANCIAL STATEMENTS

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

| ASSETS | December 31 1998 | March 31 1998 |
|---|---|---|
| CURRENT ASSETS: | (Unaudited) | (Audited) |
| Cash and short-term investments | $3,532,075 | $5,184,215 |

| | | |
|---|---|---|
| Accounts receivable | 98,309 | 236,284 |
| Inventories: | | |
| Raw materials | 41,976 | 11,965 |
| Work-in-process & finished goods | 169,038 | 145,156 |
| Prepaid expenses | 23,898 | 22,975 |
| Bond reserve funds | 38,291 | 131,667 |
| TOTAL CURRENT ASSETS | 3,903,587 | 5,732,262 |
| PROPERTY AND EQUIPMENT, NET | 2,566,638 | 2,702,887 |
| OTHER ASSETS | 1,019,254 | 1,194,763 |
| | $ 7,489,479 | $ 9,629,912 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Current portion of long-term debt | $ 118,906 | $ 226,385 |
| Accounts payable | 26,356 | 36,960 |
| Accrued expenses | 129,961 | 123,437 |
| TOTAL CURRENT LIABILITIES | 275,223 | 386,782 |
| LONG-TERM DEBT | 3,110,724 | 3,383,267 |
| SHAREHOLDERS' EQUITY | | |
| Undesignated shares; 5,000,000 shares authorized; none issued | --- | --- |
| Common stock, $.01 par value; 15,000,000 shares authorized; 8,512,274 & 8,512,274 Issued | 85,123 | 85,123 |
| Paid-in-capital | 9,656,050 | 9,657,028 |
| Retained earnings (deficit) | (5,637,641) | (3,882,288) |
| | 4,103,532 | 5,859,863 |
| | $ 7,489,479 | $ 9,629,912 |

* Derived from audited financial statements



APA OPTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS
(UNAUDITED)

| Three months ended | | Nine months ended | |
|---|---|---|---|
| December 31 | | December 31 | |
| 1998 | 1997 | 1998 | 1997 |

| | | | | |
|---|---|---|---|---|
| REVENUES | $ 134,128 | $ 457,274 | $ 629,122 | $1,772,299 |
| COSTS AND EXPENSES: | | | | |
| Cost of sales and services | 536,709 | 555,047 | 1,610,520 | 1,764,757 |
| Selling, general & administrative | 143,710 | 127,760 | 527,752 | 368,158 |
| Research & development | 84,119 | 128,553 | 304,751 | 263,607 |
| | 764,538 | 811,360 | 2,443,023 | 2,396,522 |
| Gain/loss from operations: | (630,410) | (354,086) | (1,813,901) | (624,223) |
| INTEREST INCOME & EXPENSE: | | | | |
| Interest income | 51,578 | 67,052 | 178,017 | 223,200 |
| Interest expense | (37,898) | (44,410) | (118,719) | (137,572) |
| | 13,680 | 22,642 | 59,298 | 85,628 |
| Loss before income taxes | (616,730) | (331,444) | (1,754,603) | (538,595) |
| Income taxes | 250 | 250 | 750 | 850 |
| Net loss | $ (616,980) | $ (331,694) | $(1,755,353) | $ (539,445) |
| Net loss per share-Basic and diluted | $ (.07) | $ (.04) | $ (.21) | $ (.06) |
| Weighted average shares outstanding Basic and diluted | 8,512,274 | 8,424,765 | 8,512,274 | 8,346,653 |



APA OPTICS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
(UNAUDITED)

Nine Months Ended

December 31

1998 1997

OPERATING ACTIVITIES

| | | |
|---|---|---|
| Net income (loss) | $(1,755,353) | $ (539,445) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 331,304 | 314,127 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 137,975 | 37,669 |
| Inventories and prepaid expenses | 38,560 | (2,016) |
| Accounts payable and accrued Expenses | (111,559) | 19,303 |
| Other | (25,142) | (15,346) |
| Net cash (used in) operating Activities | (1,384,215) | (185,708) |
| INVESTING ACTIVITIES | | |
| (Purchases) Sales of property and equipment | (123,055) | (855,310) |
| Net cash used in investing activities | (123,055) | (855,310) |
| FINANCING ACTIVITIES | | |
| Proceeds from the sale of common stock | --- | 1,353,789 |
| Earnest money deposit on bond financing | --- | 315,000 |
| Repayment of long term debt | (272,543) | (210,563) |
| Bond reserve funds | 127,673 | 1,278,837 |
| Net cash (used in) provided by financing activities | (144,870) | 2,737,063 |
| Decrease in cash | (1,652,140) | 1,696,045 |
| Cash at beginning of period | 5,184,215 | 3,875,205 |
| Cash at end of period | $ 3,532,075 | $ 5,571,250 |

NOTE TO CONDENSED FINANCIAL STATEMENTS

1. In the opinion of management, the information furnished reflects all adjustments which are necessary to a fair statement of the results of the interim periods presented. All adjustments were of a normal recurring nature. The results of any interim period are not necessarily indicative of results for the full year.



ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Results of Operations:

Revenues for the third quarter of fiscal 1999 ended December 31,1998 were $134,128, a decrease of 71% from the third quarter of fiscal 1998. The third quarter revenues of fiscal 1999 are also down 46% as compared to the second quarter of fiscal 1999. Revenues for the first three quarters of fiscal 1999 are down 65% as compared to the first three quarters of fiscal 1998. The decrease in revenues can be attributed to a shift in work from government contracts to internal research and development. The Company continues to devote personnel toward product development associated with the Aberdeen facility.

For the third quarter of fiscal 1999, the Company incurred a net loss of $616,980 as compared to a net loss of $331,694 in the third quarter of fiscal 1998. For the first nine months of fiscal 1999, the Company incurred a loss of $1,755,353 as compared to a loss of $539,445 for the first nine months of fiscal 1998. The Company's increased loss for the third quarter and first nine months of fiscal 1999, as compared to the third quarter and first nine months of fiscal 1998 is mainly due to decreased revenues. Significant quarterly losses are expected in the next quarter. Quarterly losses will continue until the Company receives sufficient revenues from sales of its new products.

Liquidity and Capital Resources:

The Company's cash balance at December 31, 1998 is $3,532,075 compared to $5,184,215 at March 31, 1998. The decrease in cash during the first nine months ended December 31, 1998 is attributable primarily to the decreased revenues and increased losses incurred in the first nine months of fiscal 1999. The Company believes it has sufficient cash to sustain operations through the end of fiscal 1999 and beyond. However, if sales of products do not increase, the Company may need to seek additional funding for operations. There can be no assurance that such funding will be available on terms favorable to the Company if at all.



Forward-looking statements contained herein are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are based upon the Company's current expectations and judgments about future developments in the Company's performance and may be affected by several factors, including, without limitation, delays in or increased costs of production, delays in or lower than anticipated sales of the Company's new products, and other factors discussed from time to time in the Company's filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on forward-looking statements. The Company undertakes no obligation to update such statements to reflect actual events.

Year 2000 Issues:

The Company continues to assess the impact of the Year 2000 issues on its reporting systems and operations. To date, the Company has requested and received confirmations regarding Year 2000 compliance from its major suppliers and principal financial institutions, and believes that these entities will be ready. The Company has updated its accounting software for year 200 compliance and believes there will be no disruption to its normal operations at the turn of the century. The Company has spent approximately $5,000 on the year 2k issue and believes this will be the total costs expensed. The Company may develop a contingency plan in the event either it or its various business partners encounters problems.

ITEMS 1-5. Not Applicable.

ITEM 6. Exhibits and Reports on Form 8-K.

(a) Exhibit 27: Financial Data Schedule

There were no reports on Form 8-K filed during the three months ended December 31, 1998.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

APA OPTICS, INC.

February 15, 1999
/s/ Anil K. Jain

Date
Anil K. Jain

President

Principal Executive Officer

Treasurer & Principal Financial

Officer

February 15, 1999
/s/ Randal J. Becker

Date
Randal J. Becker

Principal Accounting Officer

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