

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 September 30, 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 September 30, 1998
Common stock, par value \$.01
8,512,274

PART 1, FINANCIAL INFORMATION

ITEM 1, FINANCIAL STATEMENTS

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

ASSETS	September 30 1998	March 31 1998
CURRENT ASSETS:	(Unaudited)	(Audited)
		*
Cash and short-term investments		
Accounts receivable	\$4,195,647	\$5,184,215

Inventories:	147,991	236,284
Raw materials		
Work-in-process & finished goods	28,974	11,965
Prepaid expenses	181,419	145,156
	7,484	22,975
Bond reserve funds		
	24,542	131,667
TOTAL CURRENT ASSETS	4,586,057	5,732,262
PROPERTY AND EQUIPMENT, NET	2,623,405	2,702,887
OTHER ASSETS	1,026,208	1,194,763
	\$	\$
	8,235,670	9,629,912
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current portion of long-term debt	\$	\$
Accounts payable	116,385	226,385
Accrued expenses	97,389	36,960
TOTAL CURRENT LIABILITIES	131,701	123,437
	345,475	386,782
LONG-TERM DEBT	3,168,705	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	9,657,028	9,657,028
Retained earnings (deficit)	(5,020,661)	(3,882,288)
	4,721,490	5,859,863
	\$	\$
	8,235,670	9,629,912

* Derived from audited financial statements

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

	Three months ended	Six months ended
	September 30	September 30
	1998	1998
	1997	1997
REVENUES	\$	\$
	\$	\$
	\$	\$1,315,

	246,437	653,385	494,994	025
COSTS AND EXPENSES:				
Cost of sales and services	549,292	675,651	1,073,811	1,209,710
Selling, general & administrative	251,625	118,339	384,042	240,398
Research & development	129,629	76,625	220,632	135,054
	930,546	870,615	1,678,485	1,585,162
Gain/loss from operations:	(684,109)	(217,230)	(1,183,491)	(270,137)
INTEREST INCOME & EXPENSE:				
Interest income	59,526	86,020	126,439	156,148
Interest expense	(35,145)	(47,306)	(80,821)	(93,162)
	24,381	38,714	45,618	62,986
Loss before Income taxes	(659,728)	(178,516)	(1,137,873)	(207,151)
Income taxes	500	300	500	600
Net Loss	\$ (660,228)	\$ (178,816)	\$ (1,138,373)	\$ (207,751)
Net loss per share Basic and diluted	\$ (.08)	\$ (.02)	\$ (.13)	\$ (.03)
Weighted average shares outstanding				
Basic and diluted	8,512,274	8,307,831	8,512,274	8,307,384

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

Six Months Ended

September 30

1998

1997

OPERATING ACTIVITIES

Net income (loss) \$ (1,138,373)

Adjustments to reconcile net income to net cash provided by operating activities:	373)	(207,751)
Depreciation and amortization	220,724	213,541
Changes in operating assets and liabilities:		
Accounts receivable	88,293	11,143
Inventories and prepaid expenses	69,344	48,674
Accounts payable and accrued expenses	(41,308)	97,018
Other	(11,833)	(1,695)
Net cash (used in) provided by operating activities	(813,153)	160,930
)	
INVESTING ACTIVITIES		
(Purchases) Sales of property and equipment	(93,241)	(635,614)
Net cash used in investing activities	(93,241)	(635,614)
FINANCING ACTIVITIES		
Proceeds from the sale of common stock	---	3,438
Repayment of long term Debt	(214,562)	(194,451)
)	
Bond reserve funds	132,388	(42,222)
Net cash used in financing activities	(82,174)	(233,235)
Decrease in cash	(988,568)	(707,919)
)	
Cash at Beginning of Period	5,184,215	3,875,205
Cash at End of Period	\$4,195,647	\$3,167,286

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 result of any interim period are not necessarily indicative of results for the full year.

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

Results of Operations:

Revenues for the second quarter and first six months of fiscal 1999 ended September 30, 1998 were \$246,437 and \$494,994, respectively, in each case substantially below the levels of the comparable periods of fiscal 1998. The principal reason for the decrease in revenues was the Company's decision to focus professional staff on product development and production activities instead of government research work. While contract research activity would have

produced current revenues, product planning and fabrication do not produce revenues until the products are sold. Revenues are expected to remain in the same range near term.

For the second quarter and first six months of fiscal 1999, the Company incurred net losses of \$660,228 and \$1,138,373, respectively, as compared to net losses of \$178,816 and \$207,751 in the comparable periods of fiscal 1998. The loss in the second quarter of fiscal 1999 is significantly higher, largely because of increased consulting costs due to a contract dispute with the government and higher research and development costs on the Company's UV detectors and wavelength divisional multiplexers (WDM). 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.

APA Optics, Inc. has sold qualification units of its UV detectors to a wide range of customers for diverse applications and now has 2,000 of these detector units on hand. The Company has written off all labor costs on these units so as not to overstate inventories. In addition, evaluation units of the new WDM product have been sold to three large corporations, significant factors in the communications equipment industry. The Company believes that these products represent its future and is dedicated to successfully producing and marketing these advanced products.

Liquidity and Capital Resources:

The Company's cash balance at September 30, 1998 is \$4,195,647 compared to \$5,184,215 at March 31, 1998. This decrease in cash is attributed primarily to the \$1,138,373 loss during the first six months of fiscal 1999. The Company believes it has sufficient working capital to sustain its operations through the end of fiscal 1999 and beyond.

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Forward-Looking Statements:

Forward-looking statements contained herein are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act 1995. These statements are based upon the Company's current expectations and judgements 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. The Company is comfortable with the Year 2000 compliance externally. The Company believes that internally there will be little or no impact on operations at the turn of the century. However, the Company will be testing its computers and software in the next few months in order to ensure there will be no disruption to normal operations in the year 2000. When this assessment is complete, the Company will determine the need for and draft an appropriate contingency plan.

ITEMS 1-4. Not Applicable

ITEM 5. Other Information

The proxy rules of the Securities and Exchange Commission

permit shareholders of a company, after timely notice to the company, to present for shareholder consideration for inclusion in the company's proxy statement unless such proposals can be properly omitted by the company in accordance with the proxy rules. The APA Optics, Inc. 1999 Annual Meeting of Shareholders is expected to be held on or about August 18, 1999, and proxy materials in connection with that meeting are expected to be mailed on or about July 20, 1999. In order to be included in the Company's proxy materials for the 1999 Annual Meeting, shareholder proposals prepared in accordance with the proxy rules, must be received by the Company on or before March 23, 1999.

In addition, pursuant to a recent amendment to Commission Rule 14a-4, a shareholder must give notice to the Company prior to June 6, 1999, of any proposal which such shareholder intends to raise at the 1999 Annual Meeting. If the Company receives notice of such proposal after June 6, 1999, under Rule 14a-4, the persons named in the proxy solicited by the Company's Board of Directors for the 1999 Annual Meeting may exercise discretionary voting power with respect to such proposal.

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

(a) Exhibit 27: Financial Data Schedules

(b) There were no reports on Form 8-K filed during the three months ended September 30, 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.

November 13, 1998
/s/ Anil K. Jain

Date
Anil K. Jain

President

Principal Executive Officer

Treasurer & Principal Financial

Officer

November 13, 1998
/s/ Randal J. Becker

Date
Randal J. Becker

Principal Accounting Officer

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