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, 1999 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 registrant 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)

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

Indicate by checkmark whether the registrant (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 registrant 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, 1999
Common stock, par value $.01
8,978,774

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PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

ASSETS	December 31 1999	March 31 1999
<S>	<C>	<C>
CURRENT ASSETS:	(Unaudited)	(Audited) *
Cash and short-term investments	$1,694,314	$2,812,849

Accounts receivable	180,791	85,091
Inventories:		
Raw materials	132,833	54,208
Work-in-process & finished goods	154,767	167,659
Prepaid expenses	25,500	18,911
Bond reserve funds	48,750	60,000
TOTAL CURRENT ASSETS	2,236,955	3,198,718
PROPERTY AND EQUIPMENT, NET	2,529,422	2,592,503
OTHER ASSETS	975,044	1,013,755
	$ 5,741,421	$ 6,804,976
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILTIES:		
Current portion of long-term debt	$ 139,462	$ 133,200
Accounts payable	75,192	53,416
Accrued expenses	162,143	147,553
TOTAL CURRENT LIABILITIES	376,797	334,169
LONG-TERM DEBT	2,956,097	3,081,512
SHAREHOLDERS' EQUITY		
Undesignated shares; 5,000,000 shares Authorized; none issued	---	---
Common stock, $.01 par value; 15,000,000 shares authorized; 8,978,774 & 8,512,274 issued	89,788	85,123
Paid-in-Capital	11,575,668	9,700,258
Retained earnings (deficit)	(9,256,929)	(6,396,086)
	2,408,527	3,389,295
	$ 5,741,421	$ 6,804,976

</TABLE>
* Derived from audited financial statements

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

	Three months ended December 31		Nine months ended December 31	
	1999	1998	1999	1998
<S>	<C>	<C>	<C>	<C>
REVENUES	$	$	$	$

	136,516	134,128	239,142	629,122
COSTS AND EXPENSES:				
Cost of sales and services	908,359	536,709	2,221,454	1,610,520
Selling, general & administrative	166,192	143,710	590,556	527,752
Research & development	40,409	84,119	253,543	304,751
	1,114,960	764,538	3,065,553	2,443,023
Gain/loss from operations:	(978,444)	(630,410)	(2,826,411)	(1,813,901)
INTEREST INCOME & EXPENSE:				
Interest income	25,665	51,578	73,622	178,017
Interest expense	(35,711)	(37,898)	(107,303)	(118,719)
	(10,046)	13,680	(33,681)	59,298
Loss before income taxes	(988,490)	(616,730)	(2,860,092)	(1,754,603)
Income taxes	250	250	750	750
Net loss	$ (988,740)	$ (616,980)	$(2,860,842)	$(1,755,353)
Net loss per share-basic and diluted	$ (.11)	$ (.07)	$ (.33)	$ (.21)
Weighted average shares outstanding- Basic and diluted	8,955,187	8,512,274	8,663,912	8,512,274

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

Nine Months Ended

December 31

1999 1998

OPERATING ACTIVITIES

<S>	<C>	<C>
Net income (loss)	$(2,860,842)	$(1,755,353)
Adjustments to reconcile net income to net cash provided by operating activities: (loss)		
Depreciation and amortization	312,703	331,304
Changes in operating assets and liabilities:		
Accounts receivable	(95,700)	137,975
Inventories and prepaid expenses	(61,072)	38,560
Accounts payable and accrued expenses	36,366	(4,080)
Other	(24,271)	(25,142)
Net cash used in operating activities	(2,692,816)	(1,276,736)
INVESTING ACTIVITIES		
(Purchases) sales of property and equipment	(177,622)	(123,055)
Net cash used in investing activities	(177,622)	(123,055)
FINANCING ACTIVITIES		
Proceeds from the sale of common stock	1,880,075	---
Repayment of long term debt	(119,153)	(380,022)
Bond reserve funds	(9,019)	127,673
Net cash (used in) provided by financing activities	1,751,903	(252,349)
Decrease in cash	(1,118,535)	(1,652,140)
Cash at beginning of period	2,812,849	5,184,215
Cash at end of period	$1,694,314	$3,532,075

</TABLE>

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

General

The Company is engaged in the business of designing, manufacturing, and marketing optical components and various optoelectronic products. For the last several years the

Company's goal has been to manufacture and market products/components based on its technology developments. The Company is focused on two product areas: dense wavelength division multiplexer (DWDM) components for fiber optic communications and gallium nitride-based ultraviolet (UV) detectors (both components and integrated detector/electronic/display packages), both selected due to significant potential markets and the Company's expertise and/or patent positions.

In order to perform product development and production, the Company must devote its personnel and facilities to that effort. For several years, the Company received significant revenues from providing research and development services in connection with projects sponsored by various government agencies. In fiscal 1998, the Company determined to shift its emphasis from research and development to product development, realizing that this shift would significantly reduce revenues and increase losses until the Company realized revenues from its products. If the Company is successful in manufacturing and marketing these products, the Company expects to significantly increase its revenues and achieve profitability. Although the Company has purchased a significant amount of equipment in recent fiscal years, it will still need additional equipment as well as additional personnel to meet its objectives.

Results of Operations:

Revenues for the third quarter and the first nine months of fiscal year 2000, ended December 31, 1999, were $136,516 and $239,142, respectively, as compared to revenues of $134,128 and $629,122 for the same periods in the prior year. Although sales of new products have been minimal, the Company believes it has made significant progress in developing its new products and the related manufacturing process.

Cost of sales increased by approximately 69% and 38% to $908,359 and $2,221,454, respectively, in the third quarter and first nine months of fiscal 2000 from $536,709 and $1,610,520 in the same periods of fiscal 1999. Research and development expenses decreased by 52% and 17% to $40,409 and $253,543, respectively, for the third quarter and the first nine months of fiscal 2000 as compared to $84,119 and $304,751 in the same periods of the prior year.

The Company reported a loss from operations for the third quarter and first nine months of fiscal 2000 of $978,444 and $2,826,411, respectively, substantially increased over the loss from operations of $630,410 and $1,813,901 in the comparable periods of the prior year. This loss resulted mainly from increased production costs.

The Company realized interest income of $25,665 and $73,622, respectively, during the third quarter and the first nine months of fiscal 2000, down 50% and 59%, respectively, from $51,578 and $178,017 in the same periods of the prior year, reflecting lower average cash balances during fiscal 2000. Interest expense in the third quarter and the first nine months of fiscal 2000 totaled $35,711 and $107,303, respectively, decreases of 6% and 10%, respectively, from $37,898 and $118,719 in the comparable prior periods, primarily as a result of lower average borrowing in fiscal 2000.

Liquidity and Capital Resources:

The Company's cash and equivalents at December 31, 1999 is $1,694,314 as compared to $2,812,849 at March 31, 1999. This reduction primarily results from the use of $2,692,816 net cash in operating activities, of which the most significant cause was the Company's net loss of $2,860,842.

The Company used $177,622 net cash in investing activities during the first nine months, all for purchases of property and equipment. This compares to use of net cash of $123,055 in the first nine months of fiscal 1999. In both periods, the property and equipment was purchased primarily for the Aberdeen facility.

During the first nine months of fiscal 2000, the Company received $1,751,903 from financing activities, the principal portion of which was $1,880,075 from a private placement of the Company's Common Stock, offset by debt repayment of $119,153.

In connection with the construction of the manufacturing facility in Aberdeen, the Company took advantage of certain economic incentive programs offered by the State of South Dakota and the City of Aberdeen. At December 31, 1999, the total principal outstanding on the several loans obtained in connection with these financing packages was $3,095,559. Interest on the loans ranges from 0% to 6.75%, and the loans are due between 2003 and 2016. These loans require that the Company maintain certain levels of net worth and income to outstanding debt ratios. The Company was out of compliance with these covenants in fiscal 1999. Such noncompliance does not constitute an event of default but triggers further covenants under the loan agreement, with which the Company was in compliance at December 31, 1999.

The Company anticipates approximately $250,000 in capital expenditures in fiscal 2000, primarily for equipment. The funds for these purchases will come from funds available under the financing packages with the State of South Dakota and the City of Aberdeen. The Company also expects to receive reimbursement from certain bond funds for purchases of equipment made in fiscal 1999.

The Company's use of net cash in operating activities during fiscal 1999 and the first three quarters of fiscal 2000 and the related decrease in its cash balance emphasize the Company's need to increase sales in order to maintain operations. The auditor's report on the fiscal 1999 financial statements contained a qualification as to the Company's ability to continue as a going concern in light of its low sales and high costs. For the past several years, the Company has been working on the design and development of new optoelectronic products, in particular a dense wavelength division multiplexer and products based on Gallium Nitride technology. In order to focus on these efforts, beginning in fiscal 1998 the Company reduced its emphasis on contract research and development, resulting in significantly reduced revenues. This shift in emphasis was necessary to utilize the Company's personnel and facilities in the product development effort. The Company believes that design of the new products and the manufacturing process is now essentially complete, and it has stepped up its efforts to market these products. During September and October 1999, the Company raised approximately $1,800,000 in a private placement of its common stock. These funds should enable the Company to keep operating through fiscal year 2000. There can be no assurance, however, that the Company will be successful in increasing sales of its new products, or obtaining additional financing, if needed.

Year 2000 Readiness

The Company's year 2000 plan was primarily directed toward ensuring that the Company be able to perform critical functions, such as manufacturing, handling of all financial transactions, and maintaining integrity of other business operations, controls, financial reporting, security and other matters. The Company engaged in an assessment of year 2000 readiness both internally and with its various business partners, including vendors and service providers. The Company determined that substantially all software, operating systems, and accounting systems were corrected or year 2000 ready. Its security system and telephone systems were year 2000 compliant. The Company contacted its various business partners to receive assurances that such entities are year 2000 ready. The cost associated with the Company's year 2000 readiness program was not material and had no adverse effect on the Company's earnings or financial position.

To date, the Company has not experienced any problems related to year 2000 issues. There can be no assurance, however, that the Company will not encounter problems as yet undetected.

Forward-Looking Statements

Statements in this report with respect to future sales prospects and other matters to occur in the future are forward looking statements and are subject to uncertainties from many factors, some of which are beyond the Company's control. These factors include, but are not limited to, the continued development of the Company's products, acceptance of those products by potential customers, the Company's ability to sell such products at a profitable price, the Company's readiness for year 2000, and the Company's ability to fund its operations.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk.

The Company's operations are not currently subject to market risks for interest rates, foreign currency exchange rates, commodity prices or other market price risks of a material nature.

Part II

ITEMS 1, 3 4 and 5. Not Applicable

ITEM 2. Changes in Securities and Use of Proceeds.

The Company recently completed a private placement of its common stock, par value $.01 per share (the "Stock"). On September 28, 1999, the Company sold 310,000 shares, and on October 15, 1999 the Company sold 155,000 shares of the Stock. The shares were sold at a price of $4.375 per share, or an aggregate consideration of $2,034,375. The shares were purchased only by accredited investors and were exempt from registration pursuant to Rule 506 of Regulation D of the Securities and Exchange Commission. Broker-dealers involved in placing the Stock will receive up to 8% of the placement price of the shares, plus three-year warrants to purchase, at a price of $4.875 per share, not more than 10% of the number of shares sold.

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 December 31, 1999.

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 14, 2000
/s/ Anil K. Jain

Date
Anil K. Jain

President

Principal Executive Officer

Treasurer & Principal Financial

Officer

February 14, 2000
/s/ Randal J. Becker

Date
Randal J. Becker

Principal Accounting Officer

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