

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2000 or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from NA to NA.

Commission File Number 0-16106

APA Optics, Inc.

(Exact name of Registrant as specified in its charter)

Minnesota

(State or other jurisdiction of
incorporation or organization)

41-1347235

(I.R.S. Employer Identification No.)

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

(763) 784-4995
(Registrant's telephone number, including area code)

Indicate by check mark 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 No

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

Class:
Common stock, par value \$.01

Outstanding at October 23, 2000
11,908,506

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

	September 30, 2000	March 31, 2000
ASSETS		
CURRENT ASSETS:		
Cash and short-term investments	\$ 39,280,873	\$ 5,941,906
Accounts receivable	87,179	209,337
Inventories:		
Raw materials	172,841	146,841
Work-in-process & finished goods	127,174	129,684
Prepaid expenses	12,036	19,803
Bond reserve funds	32,500	65,000
TOTAL CURRENT ASSETS	39,712,603	6,512,571
PROPERTY AND EQUIPMENT NET	2,406,881	2,459,760
OTHER ASSETS	640,588	638,060
TOTAL ASSETS	\$ 42,760,072	\$ 9,610,391
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current portion of long-term debt	\$ 379,483	\$ 140,871
Accounts payable	89,681	82,412
Accrued expenses	175,815	172,672
TOTAL CURRENT LIABILITIES	644,979	395,955
LONG-TERM DEBT	2,538,238	2,908,387
SHAREHOLDERS' EQUITY:		
Undesignated shares; 4,999,500 shares authorized - none issued		
Preferred stock; \$.01 par value, 500 shares authorized:		
Issued and outstanding shares -- none on September 30, 2000		
and 500 on March 31, 2000	-	5
Common stock, \$.01 par value; 50,000,000 shares authorized:		
Issued & outstanding shares -- 11,908,506 shares on September 30, 2000		
and 8,997,992 shares on March 31, 2000	119,085	89,980
Paid-in capital	51,189,880	16,408,446
Retained earnings (deficit)	(11,732,110)	(10,192,382)
TOTAL SHAREHOLDERS' EQUITY	39,576,855	6,306,049
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 42,760,072	\$ 9,610,391

APA OPTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS

	Three Months Ended September 30,		Six Months Ended September 30,	
	2000	1999	2000	1999
REVENUES	\$ 123,462	\$ 36,029	\$ 174,979	\$ 102,626
COSTS AND EXPENSES:				
Cost of sales	609,720	531,771	1,015,792	1,029,549
Research and development	293,303	212,579	573,661	421,749
Selling, administrative and general	414,092	227,011	781,978	499,295
	1,317,115	971,361	2,371,431	1,950,593
LOSS FROM OPERATIONS:	(1,193,653)	(935,332)	(2,196,452)	(1,847,967)
OTHER INCOME (EXPENSE):				
Interest income	615,440	15,744	751,842	47,957
Interest expense	(18,536)	(35,674)	(61,564)	(71,592)
	596,904	(19,930)	690,278	(23,635)
LOSS BEFORE INCOME TAXES	(596,749)	(955,262)	(1,506,174)	(1,871,602)
INCOME TAXES	250	250	500	500
NET LOSS	\$ (596,999)	\$ (955,512)	\$ (1,506,674)	\$ (1,872,102)
NET LOSS PER SHARE:				
Basic and diluted	(\$0.05)	(\$0.11)	(\$0.14)	(\$0.22)
WEIGHTED AVERAGE SHARES OUTSTANDING:				
Basic and diluted	11,694,715	8,522,741	10,451,022	8,517,508

APA OPTICS, INC.
CONDENSED STATEMENTS OF CASH FLOWS

	Six Months Ended September 30,	
	2000	1999
OPERATING ACTIVITIES:		
Net income (loss)	\$ (1,506,674)	\$ (1,872,102)
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	192,563	214,157
Changes in operating assets and liabilities:		
Accounts receivable	122,158	3,184
Inventories and prepaid expenses	(15,723)	(129,513)
Accounts payable and accrued expenses	10,412	25,117
Other	(67,472)	(10,509)
Net cash used in operating activities	(1,264,736)	(1,769,666)
INVESTING ACTIVITIES:		
Property and equipment additions, net	(97,685)	(89,164)
Net cash used in investing activities	(97,685)	(89,164)
FINANCING ACTIVITIES:		
Proceeds from the sale of common stock	39,810,534	1,252,700
Redemption of preferred stock	(5,000,000)	-
Repayment of long term debt	(131,537)	(105,191)
Dividend on preferred stock	(33,054)	-
Bond reserve funds	55,445	(3,718)
Net cash provided by financing activities	34,701,388	1,143,791
INCREASE (DECREASE) IN CASH	33,338,967	(715,039)
CASH AND CASH EQUIVALENTS, beginning of period	5,941,906	2,812,849
CASH AND CASH EQUIVALENTS, end of period	\$ 39,280,873	\$ 2,097,810

NOTES TO CONDENSED FINANCIAL STATEMENTS

Note 1. Basis of Presentation

The accompanying condensed financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. For further information, refer to the financial statements and footnotes thereto included in the Company's annual report on Form 10-K for the year ended March 31, 2000.

In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Certain reclassifications of previously reported amounts have been made to conform that presentation to the current period presentation. The reclassifications had no impact on losses previously reported.

Note 2. Shareholders' Equity

On July 18, 2000 the Company redeemed all 500 shares of its outstanding 2% preferred stock for a total of \$5,000,000 plus \$33,055 in accrued dividends.

During the three-month period ended September 30, 2000, the Company sold 1,757,778 shares of its common stock to various institutional investors under a Registration Statement on Form S-3. Net proceeds from the sales totaled \$24,689,657. During the six months ended September 30, 2000, the Company sold a total of 2,845,868 shares of its common stock. Net proceeds to the company were \$39,585,257.

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

General

Prior to 1998, APA Optics, Inc. ("APA") generated significant revenues by providing research and development services in connection with projects sponsored by various government agencies. In fiscal 1998, APA determined to shift its emphasis from research and development to product development in an effort to capitalize on the proprietary technology it had developed. In so doing, APA realized this shift would significantly reduce revenues and increase losses until APA generates revenues from the sale of its products.

APA focuses on two product areas for development:

- *Fiber Optic Components.* APA manufactures and markets DWDM (Dense Wavelength Division Multiplexing) multiplexer/demultiplexer components. These components enable DWDM systems to increase the bandwidth of a single optical fiber between 8 and 80 times its original capacity. Based on patented and patent pending diffraction grating technology, these products address current and next generation DWDM networking requirements including:
 - High channel counts (up to 80 in a single component),
 - Narrow channel spacing (to 50 GHz),
 - High data transmission rates (10 Gb/sec),
 - Add/drop multiplexing (patent pending), and
 - Fiber free communications (single mode and multimode).
- *Gallium Nitride (GaN) Semiconductors.* APA is a research pioneer in GaN, a next generation semiconductor material. APA manufactures GaN Ultraviolet Radiation (UV) detectors and has integrated this technology into products including the UV Power Meter, UV Lamp monitor, Detector/Amplifier module and Sun^{UV}WatchTM.

Results of Operations

Operating revenues for the three-month and six-month periods ended September 30, 2000, were \$123,462 and \$174,979, reflecting 243% and 71% increases, respectively, over the comparable periods in fiscal 2000. The majority of the increase occurred in sales of DWDM components that totaled \$88,950 and \$103,150 for the three-month and six-month periods ended September 30, 2000, respectively.

Cost of sales increased for the three-month period ended September 30, 2000 to \$609,720, reflecting a 15% increase over the comparable period in fiscal 2000. For the six-month period ended September 30, 2000, cost of sales decreased \$13,757 or 1% from the comparable period in fiscal 2000. Gross margins for sales were negative in both periods. The fluctuation in cost of sales and the negative gross margins are influenced by the low unit production and sales levels relative to the capital equipment and personnel committed to production in the early phases of market penetration of the Company's products. The Company expects to continue to experience negative gross margins until there is a significant increase in sales and production levels.

Research and development expenses increased by \$80,724 and \$151,912 for the three and six-month periods ended September 30, 2000. These amounts represent increases of 38% and 36% over research and development expenses in the comparable periods of fiscal 2000. The increases result from the Company's continued investment in the development of its DWDM and GaN technologies. The Company plans to continue to pursue research and product development and will continue to incur expenses related to these activities.

Selling, general and administrative expenses increased \$187,081 and \$282,683 for the three-month and six-month periods ended September 30, 2000, reflecting 82% and 57% increases, respectively, over the comparable periods in fiscal 2000. The increases were primarily due to an increase in personnel as the Company prepares to meet anticipated demand for its products and costs associated with moving the listing of the Company's stock from the NASDAQ Small Cap Market to the NASDAQ National Market.

Other income and expense increased \$616,834 and \$713,913 for the three-month and six-month periods ended September 30, 2000, respectively, over the comparable periods in fiscal 2000. The increases were due to the increased cash balance over the periods resulting from the issuance of common stock by the Company that netted \$39.6 million. See Note 2 to the Financial Statements.

The net loss was \$596,999 (or \$.05 per basic and diluted share) for the three months ended September 30, 2000, a decrease of \$358,513 or 38% from the loss reported for the same period in fiscal 2000. For the six months ended September 30, 2000, the net loss was \$1,506,674 (or \$.14 per basic and diluted share), a decrease of \$365,428 or 20% from the loss reported for the same period in fiscal 2000. The smaller net loss is attributable to the increase in interest income partially offset by the increase in the operating expenses described above.

Liquidity and Capital Resources

APA's cash and short-term investments primarily consist of certificates of deposits, US Government instruments or commercial paper with maturities of less than one year. The balance of cash and short-term investments at September 30, 2000 is \$39,280,873 compared to \$5,941,906 at March 31, 2000. The increase in cash and short-term investments primarily results from the sale of 2,845,868 shares of APA's common stock under a Registration Statement on Form S-3 for \$100 million worth of common stock, of which approximately \$41.5 million had been sold on or before September 30, 2000. The funds will be used for the capital expenditures described below, product development and marketing, the addition of personnel and to fund operations. APA believes that it has sufficient funds for operations in fiscal 2001 and beyond.

For the six months ended September 30, 2000, APA used \$1,264,736 of cash for operating activities, of which the most significant cause was the net loss of \$1,506,674. APA used \$97,865 net cash in investing activities in the same period, all for the purchase of equipment, primarily for the Aberdeen facility.

APA anticipates a total of approximately \$4 million in capital expenditures in fiscal 2001, primarily for equipment. This is an increase of \$2 million over the amount previously reported by APA. The majority of the capital expenditures relate to the expansion and automation of the Company's production facilities and will be made in phases to meet demand for its products and to allow the Company to respond to new business opportunities.

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 factors, many of which are beyond APA's control. These factors include, but are not limited to, the continued development of APA's products, acceptance of those products by potential customers, APA's ability to sell such products at a profitable price, and APA's ability to fund its operations.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk.

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

Part II

ITEM 1. Not applicable

ITEM 2. Changes in Securities and Use of Proceeds.

During the six months ended September 30, 2000, the Company issued an aggregate of 64,646 shares of common stock to four investors upon the exercise of outstanding warrants. Three of these warrants, for 56,000 shares, had been issued to the placement agent as consideration for services in a private placement of the Company's securities and the fourth, for 8,646 shares, had been issued to NE Venture, Inc. as consideration for the partial forgiveness of a loan made to the Company as part of the financing of its Aberdeen facility. The Company received net proceeds of \$253,230. No underwriter was involved in these sales. The Company relied upon the exemptions provided by Section 4(2) and 4(6) of the Securities Act of 1933 in connection with these sales.

ITEM 3. Not Applicable

ITEM 4. Submission of Matters to a Vote of Security Holders

- (a) The Company held its Annual Shareholders' meeting on August 16, 2000.
- (b) (1) The election of 5 directors to serve for one-year terms was approved.

<u>Name</u>	<u>Affirmative Votes</u>	<u>Voting Authority</u>
		<u>Withheld</u>
Anil K. Jain	8,889,999	7,056
Kenneth A. Olsen	8,888,599	7,056

Gregory J. Von Wald	8,890,099	7,056
William R. Franta	8,890,099	7,056
Michael A. Gort	8,890,099	7,056

- (2) The amendment and restatement of the Company's Articles of Incorporation to increase the authorized common stock from 15,000,000 to 50,000,000 shares was approved. The vote was 8,773,474 shares in favor, 94,991 shares against and 13,790 abstentions. There were no broker non-votes.

ITEM 5. Not Applicable

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

Exhibits:

- 3.1 Restated Articles of Incorporation, including all amendments to date.
27 Financial Data Schedule

Reports:

There were no reports on Form 8-K filed during the three months ended September 30, 2000.

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.

<u>11/10/00</u>	APA OPTICS, INC. <u>/s/ Anil K. Jain</u>
Date	Anil K. Jain President and Principal Executive Officer
<u>11/10/00</u>	<u>/s/ Robert M. Ringstad</u>
Date	Robert M. Ringstad Chief Financial Officer