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, 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 41-1347235

(State or other jurisdiction of incorporation or organization)

(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 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:
Common stock, par value \$.01

Outstanding at January 11, 2001

11,913,631

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PART I. FINANCIAL INFORMATION ITEM 1. FINANCIAL STATEMENTS

APA OPTICS, INC. CONDENSED BALANCE SHEETS

	December 31, 2000	March 31, 2000		
ASSETS				
<pre><s> CURRENT ASSETS:</s></pre>	<c></c>	<c></c>		
Cash and short-term investments Accounts receivable Inventories:	\$ 38,293,785 197,669	\$ 5,941,906 209,337		
Raw materials Work-in-process & finished goods Prepaid expenses Bond reserve funds	201,272 146, 106,508 129, 89,399 19, - 65,			
TOTAL CURRENT ASSETS	38,888,633	6,512,571		
PROPERTY AND EQUIPMENT NET	2,631,690	2,459,760		
OTHER ASSETS	798 , 088	638,060		
TOTAL ASSETS	\$ 42,318,411 ========	\$ 9,610,391		

CURRENT LIABILITIES:		0.7.5.74.0	_	
Current portion of long-term debt	\$	•		140,871
Accounts payable		•		82,412
Accrued expenses		295,934		172,672
TOTAL CURRENT LIABILITIES		827,374		395,955
LONG-TERM DEBT		2,526,397		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 December 31, 2000				
and 500 on March 31, 2000		-		5
Common stock, \$.01 par value, 50,000,000 shares authorized:				
Issued and outstanding shares - 11,913,631 shares on				
December 31, 2000 and 8,997,992 shares on March 31, 2000		119,136		89,980
Paid-in-capital		51,214,451		16,408,446
Retained earnings (deficit)		(12,368,947)	(10,192,382)
TOTAL SHAREHOLDERS' EQUITY		38,964,640		6,306,049
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$	42,318,411	\$	9,610,391
	==		==	

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APA OPTICS, INC. CONDENSED STATEMENTS OF OPERATIONS

			Nine Months Ended December 31,	
	2000	1999	2000	1999
<s> REVENUES</s>			<c> \$ 455,924</c>	
COSTS AND EXPENSES: Cost of sales Research and development Selling, general and administrative	285,478 504,300	231,481 170,736	1,752,855 859,139 1,286,278	653,230 670,031
LOSS FROM OPERATIONS	(1,245,896)	(978,444)	(3,442,348)	(2,826,411)
OTHER INCOME (EXPENSE): Interest income Interest expense	(32,878)	(35,711)	1,394,029 (94,442) 1,299,587	(107, 303)
LOSS BEFORE INCOME TAXES	·		(2,142,761)	
INCOME TAXES	250	250	750	750
NET LOSS			\$(2,143,511) ======	
NET LOSS PER SHARE: Basic and diluted	(\$0.05)	(\$0.11) =====	(\$0.20)	(\$0.33)
WEIGHTED AVERAGE SHARES OUTSTANDING Basic and diluted			10,940,216 ======	

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Nine Months Ended December 31,

		1999
<\$>	<c></c>	
OPERATING ACTIVITIES:		
Net loss	\$(2,143,511)	\$(2,860,842)
Adjustments to reconcile net loss to cash used		
in operating activities:		
Depreciation and amortization	297,518	312,703
Changes in operating assets and liabilities: Accounts receivable	11 660	(05 700)
Inventories and prepaid expenses	11,008 (52 101)	(95,700) (61,072)
Accounts payable and accrued expenses	195,578	36,366
Other	(93.235)	(24,271)
00.01		
Net cash used in operating activities	(1,784,083)	(2,692,816)
INVESTING ACTIVITIES:		
Property and equipment additions, net	(406,448)	(177,622)
Net cash used in investing activities		(177,622)
FINANCING ACTIVITIES:		
Proceeds from the sale of common stock	39,835,156	1,880,075
Redemption of preferred stock	(5,000,000)	-
Repayment of long-term debt	(146,149)	(119 , 153)
Dividend on preferred stock	(33,054)	
Bond reserve funds	(113,543)	(9,019)
Net cash provided by financing activities		1,751,903
INCREASE (DECREASE) IN CASH	32,351,879	(1,118,535)
CASH AND CASH EQUIVALENTS, beginning of period		2,812,849
CASH AND CASH EQUIVALENTS, end of period		\$ 1,694,314

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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 \$33,054 in accrued dividends.

During the nine months ended December 31, 2000, the Company sold a total of 2,845,868 shares of its common stock to various institutional investors under a Registration Statement on Form S-3. Net proceeds to the Company were \$39,557,303.

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NOTE 3. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended December 31,		•		
		1999		1999	
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	
Numerator: Net loss Preferred stock dividends	\$ (636,837)	\$ (988,740)	\$ (2,143,511) (33,054)		
Numerator for basic and diluted earnings per share-loss available to common shareholders	\$ (636,837)	\$ (988,740)	\$(2,176,565)	\$(2,860,842)	
Denominator for basic and diluted earnings per share-weighted-average shares	11,913,287	8,955,187 ======	10,940,216	8,663,912 ======	
Basic and diluted earnings per share	(\$0.05)	(\$0.11)	(\$0.20) ======	(\$0.33)	
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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 shifted its emphasis from research and development to product development in an effort to capitalize on the proprietary technology it had developed. 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:
 - o High channel counts (up to 80 in a single component),
 o Narrow channel spacing (to 50 GHz),
 o High data transmission rates (10 Gb/sec),

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- o 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 the SunUVWatchTM.

RESULTS OF OPERATIONS _ _____

Operating revenues for the three-month and nine-month periods ended December 31, 2000, were \$280,945 and \$455,924, reflecting 106% and 91% increases, respectively, over the comparable periods in fiscal 2000. The majority of the increase occurred in sales of DWDM components that totaled \$229,080 and \$332,230 for the three-month and nine-month periods ended December 31, 2000, respectively. In November 2000, the Company decided to temporarily postpone large-scale production of its SunUVWatchTM in order to focus on improving the performance and reliability of the watch. The Company has

completed the improvements and expects to begin large-scale production of the modified SunUVWatchTM by the first quarter of fiscal 2002.

Cost of sales increased for the three-month period ended December 31, 2000 to \$737,063 reflecting a 3% increase over the comparable period in fiscal 2000. For the nine-month period ended December 31, 2000, cost of sales increased to \$1,752,855, a 1% increase 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 \$53,997 and \$205,909 for the three and nine-month periods ended December 31, 2000. These amounts represent increases of 23% and 32% 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 expand its research and product development activities in the future and will incur increased expenses related to these activities.

Selling, general and administrative expenses increased \$333,564 and \$616,247 for the three-month and nine-month periods ended December 31, 2000, reflecting 195% and 92% 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.

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Other income increased \$619,355 and \$1,333,268 for the three-month and nine-month periods ended December 31, 2000, respectively, over the comparable periods in fiscal 2000. The increases were due to interest income on the increased cash balance during 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 \$636,837 (or \$.05 per basic and diluted share) for the three months ended December 31, 2000, a decrease of \$351,903 or 36% from the loss reported for the same period in fiscal 2000. For the nine months ended December 31, 2000, the net loss was \$2,143,511 (or \$.20 per basic and diluted share), a decrease of \$717,331 or 25% from the loss reported for the same period in fiscal 2000. The smaller net loss is attributable to an increase in interest income and revenues primarily from DWDM sales, 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 December 31, 2000 is \$38,293,785 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 December 31, 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 for the remainder of fiscal 2001 and beyond.

For the nine months ended December 31, 2000, APA used \$1,784,083 of cash for operating activities, of which the most significant cause was the net loss of \$2,143,511. APA used \$406,448 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. 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

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 business. Certain important factors could have been a material impact on the Company's performance, including,

without limitation, delays in or increased costs of production, delays in or lower than anticipated sales of the Company's new products, the Company's ability to sell such products at a profitable price, the Company's ability to sell such products at a profitable price, the Company's ability to sell such products at a profitable price, the Company's ability to fund operations, and other factors discussed from time to time in the Company's filings with the Securities and Exchange Commision. 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.

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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 rature

PART II

ITEM 1. NOT APPLICABLE

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ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS.

On October 23, 2000, the Company adopted a shareholder rights plan. Details regarding the plan are contained in the report on Form 8-K filed by the company on November 8, 2000.

ITEM 3. NOT APPLICABLE

ITEM 4. NOT APPLICABLE

ITEM 5. NOT APPLICABLE

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits:

- Share Rights Agreement dated October 23, 2000, by and between the Company and Wells Fargo Bank Minnesota N.A. as Rights Agent (filed as Exhibit 1 to the Registration Statements on Form 8-A filed November 8, 2000 and incorporated herein by reference.)
- (b) Reports on Form 8-K:

On November 8, 2000, the Company filed a Form 8-K, dated October 23, 2000, reporting under Items 5 and 7 the adoption of a shareholder rights plan.

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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.
2/7/01 /s/ Anil K. Jain

Anil K. Jain
President and
Principal Executive Officer

2/7/01 /s/ Robert M. Ringstad

Robert M. Ringstad Chief Financial Officer

Date

Date