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 June 30, 2001, 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:	Outstanding at July 19, 2001
Common stock, par value $.01	11,919,081

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

<S>	June 30, 2001 <C>	March 31, 2001 <C>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 35,469,255	$ 21,225,492
Short-term investments	-	15,759,000
Accounts receivable	309,315	370,859
Inventories:		
Raw materials	339,587	405,238
Work-in-process & finished goods	64,257	10,078
Prepaid expenses	18,968	30,064
Bond reserve funds	17,500	65,000
TOTAL CURRENT ASSETS	36,218,882	37,865,731
PROPERTY AND EQUIPMENT, NET	3,547,816	3,248,191
OTHER ASSETS	804,967	800,529
TOTAL ASSETS	$ 40,571,665	$ 41,914,451

LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 44,298	$ 495,410
Accrued expenses	365,902	301,911
Current portion of long-term debt	2,022,992	2,337,221
TOTAL CURRENT LIABILITIES	2,433,192	3,134,542
LONG-TERM DEBT	478,803	499,610
SHAREHOLDERS' EQUITY:		
Undesignated shares; 4,999,500 shares authorized - none issued	-	-
Common stock, $.01 par value: Authorized - 50,000,000		
Issued and outstanding shares: 11,915,456 shares on March 31, 2001 and 11,919,081 shares on June 30, 2001	119,191	119,155
Paid-in-capital	51,639,369	51,614,972
Retained earnings (deficit)	(14,098,890)	(13,453,828)
TOTAL SHAREHOLDERS' EQUITY	37,659,670	38,280,299
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 40,571,665	$ 41,914,451

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APA OPTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS

	Three Months Ended June 30	
	2001	2000
<S>	<C>	<C>
REVENUES	$ 434,335	$ 51,517
COSTS AND EXPENSES:		
Cost of sales	942,853	406,072
Research and development	182,593	280,358
Selling, general and administrative	436,615	367,886
	1,562,061	1,054,316
LOSS FROM OPERATIONS	(1,127,726)	(1,002,799)
OTHER INCOME (EXPENSE):		
Interest income	519,589	136,402
Interest expense	(35,925)	(43,028)
	483,664	93,374
LOSS BEFORE INCOME TAXES	(644,062)	(909,425)
INCOME TAXES	(1,000)	(250)
NET LOSS	$ (645,062)	$ (909,675)
NET LOSS PER SHARE:		
Basic and diluted	$ (0.05)	$ (0.10)
WEIGHTED AVERAGE SHARES OUTSTANDING:		
Basic and diluted	11,917,291	9,193,663

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APA OPTICS, INC.
CONDENSED STATEMENTS OF CASH FLOWS

	Three Months Ended June 30	
	2001	2000
<S>	<C>	<C>
OPERATING ACTIVITIES:		
Net loss	$ (645,062)	$ (909,675)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	146,578	95,790
Deferred compensation expense	14,392	4,356
Changes in operating assets and liabilities:		
Accounts receivable	61,544	(7,765)
Inventories and prepaid expenses	22,568	(39,337)
Accounts payable and accrued expenses	(401,513)	(24,899)
Other	(4,438)	(42,753)
Net cash used in operating activities	(805,931)	(924,283)
INVESTING ACTIVITIES:		
Property and equipment additions, net	(446,203)	(52,707)
Net cash used in investing activities	(446,203)	(52,707)
FINANCING ACTIVITIES:		
Proceeds from the sale of common stock	24,433	15,110,216
Proceeds from the sale of short-term investments	15,759,000	-
Repayment of long-term debt	(335,036)	(113,305)
Bond reserve funds	47,500	62,524
Net cash (used in) provided by financing activities	15,495,897	15,059,435
INCREASE (DECREASE) IN CASH	14,243,763	14,082,445
CASH AND CASH EQUIVALENTS, beginning of period	21,225,492	5,941,906
CASH AND CASH EQUIVALENTS, end of period	$35,469,255	$20,024,351

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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, 2001.

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.

NOTE 2. EARNINGS PER SHARE

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

	Three Months Ended June 30	
	2001	2000
Numerator:		
Numerator for basic and diluted earnings per share-loss available to common shareholders	$ (645,062)	$ (909,675)

Denominator for basic and diluted earnings per share-weighted-average shares	11,917,291	9,193,663
Basic and diluted earnings per share	$ (0.05)	$ (0.10)

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

Statements in this Report about future sales prospects and other matters to occur in the future are forward looking statements and are subject to uncertainties due to many factors, many of which are beyond our control. These factors include, but are not limited to, the continued development of our products, acceptance of those products by potential customers, our ability to sell such products at a profitable price, and our ability to fund our operations. For further discussion regarding these factors, see "Factors That May Affect Future Results."

OVERVIEW

We are engaged in designing, manufacturing, and marketing various optoelectronic products, ultraviolet (UV) detectors and related products and optical components. For several years, we also received significant revenues from research and development services projects sponsored by various government agencies. In fiscal 1998, we shifted our emphasis from research and development to product development, with the intent to eventually manufacture and market our own proprietary products. We received no revenues from this source in fiscal 2001 and do not expect any revenues from this source in fiscal 2002.

For the last several years our goal has been to manufacture and market products/components based on our technology developments. We have focused on 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) because we believe that these two product areas have significant potential markets and because we have expertise and/or patent positions related to them.

Most companies in the communications equipment industry have been affected by the slowdown in telecommunications equipment spending. Weakness in the general economy, and the telecom sector in particular, continues to put downward pressure on component pricing, margins and profits. Industry analysts have repeatedly revised downward current year revenue and unit sales forecasts over the past six months. We are seeing the influence of these factors in the form of more aggressive pricing of components by our competitors and fewer requests for quotes from our customers. This aggressive pricing and the declining requests for quotes will likely have a negative impact on our financial performance for at least the next few fiscal quarters.

RESULTS OF OPERATIONS

REVENUES

Revenues for the three-month period ended June 30, 2001, were $434,335, reflecting a 743% increase over the comparable period in the preceding fiscal year. The majority of the increase occurred in sales of DWDM components that totaled $415,031 for the first quarter of fiscal 2002 compared to $14,200 for the first quarter of fiscal 2001.

COST OF SALES

Cost of sales increased for the three-month period ended June 30, 2001 to $942,853, reflecting a 132% increase over the comparable period in the preceding fiscal year. The increase in the cost of sales was related to the increased sales activity, expansion of quality programs and costs associated with testing products for compliance with certain industry standards. 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 our products. We expect to continue to experience negative gross margins until there is a significant increase in sales and production levels.

RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses decreased by $97,765 for the three-month period ended June 30, 2001. This represents a decrease of 35% over research and development expenses in the comparable period of the preceding fiscal year. The decrease is the result of our shift to production of DWDM components in the last half of fiscal 2001 and the associated transfer of expenses to cost of sales. The Company plans to expand its research and product development activities and will incur increased expenses related to these activities in the future.

SELLING, GENERAL AND ADMINISTRATIVE

Selling, general and administrative expenses increased $68,729 for the three-month period ended June 30, 2001, reflecting a 19% increase over the comparable period in three-month period ended June 30, 2000. The increase was primarily due to an increase in personnel and expenses as we prepare to market our products, support an expanded quality initiative and implement enterprise resource planning software.

LOSS FROM OPERATIONS

The loss from operations increased $124,927 or 12% for the three-month period ended June 30, 2001 over the comparable period in fiscal 2001. Increases in sales were offset by increases in the cost of sales related to expanded production staff and production facilities.

OTHER INCOME AND EXPENSE

Other income increased $390,290 for the three-month period ended June 30, 2001, over the comparable period in fiscal 2001. The increase was due to interest income on the increased cash and short-term investment balance maintained during the period. Interest rates have declined markedly over the past six months and we anticipate significant decreases in interest income as a result of these declines and as a result of the use of cash in operations and for capital expansion.

NET LOSS

The net loss for the three months ended June 30, 2001, was $645,062 (or $.05 per basic and diluted share), a decrease of $264,613 or 29% from the loss reported for the same period in fiscal 2001. 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 cash equivalents primarily consist of certificates of deposits, US Government instruments or commercial paper with maturities of less than three months. The balance of cash and cash equivalents at June 30, 2001 is $35,469,255 compared to $21,225,492 at March 31, 2001.

Cash used in operating activities was $805,931 for the three months ended June 30, 2001, compared to $924,283 for the comparable period in the preceding fiscal year. A decrease in the net loss for the first quarter of fiscal 2002 was partially offset by an increase in the use of cash to reduce accounts payable and accrued expenses.

We used net cash of $446,203 in investing activities in the three months ended June 30, 2001, all of which was used for the purchase of property and equipment additions. This was a $393,496 increase over the cash used for investing activities for the comparable period in the preceding fiscal year and is primarily due to the ongoing expansion of our production capacity.

Net cash provided from financing activities in the three months ended June 30, 2001 totaled $15,495,897. The increase was primarily the result of reclassification of $15,759,000 of short-term investments to cash and cash equivalents as the time to maturity of these investments shortened to less than

three months. We used $335,036 for the scheduled reduction of debt. For the three months ended June 30, 2000, we generated net cash of $15,059,435 from financing activities including net proceeds of $15,110,216 from the sale of common stock.

We anticipate a total of approximately $4 million in capital expenditures in fiscal 2002, primarily for equipment. The majority of the capital expenditures relate to the expansion and automation of our production and research and development facilities. The expenditures will be made in phases to meet demand for our products and to allow us to respond to new business opportunities.

We believe we have sufficient funds for operations for the remainder of fiscal 2002 and beyond.

FACTORS THAT MAY INFLUENCE FUTURE RESULTS

Several factors will influence our future results including:

UNLESS WE GENERATE SIGNIFICANT REVENUE GROWTH, OUR INCREASING EXPENSES AND NEGATIVE CASH FLOW WILL SIGNIFICANTLY HARM OUR FINANCIAL POSITION.

We have not been profitable since fiscal 1990. As of June 30, 2001, we had an accumulated deficit of $14.1 million. We will incur operating losses for the foreseeable future, and these losses may be substantial. Further, we may continue to experience negative operating cash flow in the future. We have funded our operations primarily through the sale of equity securities and borrowings. We have significant fixed expenses and we expect to continue to incur significant and increasing manufacturing, sales and marketing, product development and administrative expenses. As a result, we will need to generate higher revenues while containing costs and operating expenses if we are to achieve profitability.

WE MUST INCREASE OUR MANUFACTURING CAPACITY OR WE WILL NOT BE ABLE TO DELIVER OUR PRODUCTS TO OUR CUSTOMERS IN A TIMELY MANNER.

Manufacturing of our products is a complex and precise process. We have limited experience in rapidly increasing our manufacturing capacity or in manufacturing products at high volumes. We will be required to hire, train and manage additional manufacturing personnel and improve our production processes in order to increase our production capacity. There are numerous risks associated with rapidly increasing capacity, including:

(i) Difficulties in achieving adequate yields from new manufacturing lines,

(ii) Difficulty maintaining the precision manufacturing processes required by our products while increasing capacity,

(iii) The inability to timely procure and install the necessary equipment, and

(iv) Lack of availability of qualified manufacturing personnel.

Our manufacturing expansion and related capital expenditures are being made in anticipation of a level of customer orders that may not be realized. If anticipated levels of customer orders are not received, we will not be able to generate positive gross margins and profitability.

OUR DEPENDENCE ON OUTSIDE MANUFACTURERS MAY RESULT IN PRODUCT DELIVERY DELAYS.

We purchase components that are incorporated into our products from outside vendors. If these vendors fail to supply us with components on a timely basis, we could experience significant delays in shipping our products. Any significant interruption in the supply or support of any components could seriously harm our sales and our relationships with our customers.

OUR PRODUCTS MAY HAVE DEFECTS THAT ARE NOT DETECTED BEFORE DELIVERY TO OUR CUSTOMERS.

Some of our products are designed to be deployed in large and complex optical networks and must be compatible with other components of the system, both current and future. In addition, our products may not operate as expected over long periods of time. Our customers may discover errors or defects in our products only after they have been fully deployed. If we are unable to fix errors or other problems, we could lose customers, lose revenues, suffer damage to our brand and reputation, and lose our ability to attract new customers or achieve market acceptance. Any of these factors would negatively impact cash flow and would seriously harm our business, financial condition and results of operations.

WE WILL NEED TO INTRODUCE NEW PRODUCTS AND PRODUCT ENHANCEMENTS TO INCREASE REVENUE.

The successful operation of our business depends on our ability to anticipate market needs and to develop and introduce new products and product enhancements that respond to technological changes or evolving industry standards on a timely and cost-effective basis. Our products are complex, and new products may take longer to develop than originally anticipated. These products may contain defects or have unacceptable manufacturing yields when first introduced or as new versions are released. Our products could quickly become obsolete as new technologies are introduced. We must continue to develop leading-edge products and introduce them to the commercial market quickly in order to be successful. Our failure to produce technologically competitive products in a cost-effective manner and on a timely basis will seriously harm our business, financial condition and results of operations.

OUR MARKETS ARE NEW AND ARE CHARACTERIZED BY RAPID TECHNOLOGICAL CHANGES AND EVOLVING STANDARDS.

The markets we serve are characterized by rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. In developing our products, we have made, and will continue to make, assumptions with respect to which standards will be adopted within our industry. If the standards that are actually adopted are different from those that we have chosen to support, our products may not achieve significant market acceptance.

There are several existing standards in the communications industry including the Telcordia GR1209 and GR1221 standards. Several of our existing and potential customers require or will require compliance with these standards. To date we have produced DWDM components that achieve compliance with some but not all of the requirements of these standards. Our inability to achieve full compliance with these and other standards could harm our business, financial condition and results of operations.

DEMAND FOR OUR PRODUCTS IS SUBJECT TO SIGNIFICANT FLUCTUATION.

Demand for our products is dependent on several factors including capital expenditures in the communications industry. Capital expenditures can be cyclical in nature and result in protracted periods of reduced demand for component parts. Similarly, periods of slow economic expansion or recession can result in periods of reduced demand for our products. Such periods of reduced demand will harm our business, financial condition and results of operations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. We invest in short-term securities of high credit issuers with maturities ranging from overnight up to 24 months. The average maturity of the portfolio does not exceed 12 months. The portfolio includes only marketable securities with active secondary or resale markets to ensure liquidity. We have no investments denominated in foreign country currencies and, therefore, our investments are not subject to foreign exchange risk.

PART II
ITEMS 1 THROUGH 6 NOT APPLICABLE

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.
8/7/01	/s/ Anil K. Jain
Date	Anil K. Jain President and Chief Executive Officer
8/7/01	/s/ Robert M. Ringstad
Date	Robert M. Ringstad Chief Financial Officer