

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-QSB

X Quarterly report pursuant to Section 13 or 15(d)
of the
Securities
Exchange
Act of

1934

For the quarterly period ended December 31, 1996 or

Transition report pursuant to Section 13 or 15(d) of the
Securities Exchange Act 1934For 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 December 31, 1996
Common stock, par value \$.01
8,304,624

PART 1, FINANCIAL INFORMATION

ITEM 1, FINANCIAL STATEMENTS

APA OPTICS, INC.
CONDENSED BALANCE SHEETS

<TABLE>	
<CAPTION>	
ASSETS	
December 31	March 31
1996	1996
<S>	
<C>	
CURRENT ASSETS:	
(Unaudited)	(Audited) *
Cash and short-term investments	
\$4,312,813	\$2,256,309
Accounts receivable	
779,565	406,852
Inventories:	

Raw materials		
18,158		24,806
Work-in-process & finished goods		
141,427		105,993
Costs in excess of billings on research contracts		
0		210,658
Prepaid expenses		
35,247		30,305
Bond reserve funds		
43,750		66,667
TOTAL CURRENT ASSETS		
5,330,960		3,101,590

PROPERTY AND EQUIPMENT, NET		
1,394,095		1,157,570

OTHER ASSETS		
2,826,666		497,189

\$ 9,551,721		\$ 4,756,349
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LIABILITIES AND SHAREHOLDERS' EQUITY

CURRENT LIABILITIES:

Current portion of long-term debt		
\$ 152,517		\$ 100,000

Accounts payable		
75,579		112,857

Accrued expenses		
106,861		91,264

TOTAL CURRENT LIABILITIES		
334,957		304,121

LONG-TERM DEBT		
3,938,575		345,000

SHAREHOLDERS' EQUITY

Undesignated shares; 5,000,000 shares
authorized; none issued

- - - - -

Common stock, \$.01 par value; 15,000,000
shares authorized; 8,304,624 & 7,990,000
issued

83,046		79,900
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Paid-in capital		
8,208,943		6,930,826

Retained earnings (deficit)		
(3,013,800)		(2,903,498)

5,278,189		4,107,228
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\$ 9,551,721		\$ 4,756,349
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</TABLE>

* Derived from audited financial statements

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

<TABLE>

<CAPTION>

Three months ended		Nine months ended	
December 31		December 31	
1996	1995	1996	
1995			
<S>			
<C>			<C>
REVENUES			\$ 666,014
\$ 592,018	\$1,877,068	\$1,866,863	
COSTS AND EXPENSES:			
Cost of sales and services			
522,583	456,282	1,321,651	
1,449,017			
Selling, general & administrative			

135,582	112,774	442,071	
392,133			
Research & development			86,115
0	312,121	2,467	
744,280	569,056	2,075,843	
1,843,617			
Gain/Loss from Operations:			(78,266)
22,962	(198,775)	23,246	
INTEREST INCOME & EXPENSE:			
Interest Income			
84,927	19,703	200,470	
37,613			
Interest Expense			
(45,753)	(8,521)	(110,567)	
(27,907)			
39,174	11,182	89,903	
9,706			
INCOME (LOSS)			
BEFORE INCOME TAXES			
34,144	(108,872)	32,952	(39,092)
INCOME TAX EXPENSE			
(BENEFIT)			
930	250	1,430	
750			
NET INCOME (LOSS)			
\$ 33,894	\$ (110,302)	\$ 32,202	\$ (40,022)
EARNINGS (LOSS) PER			
COMMON & COMMON EQUIVALENT			
SHARE (EXHIBIT 11)			
\$.00	\$ (.01)	\$.00	(.00)

WEIGHTED AVERAGE SHARES			
OUTSTANDING			
8,029,569	8,155,944	7,651,545	8,304,624

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

<TABLE>
<CAPTION>

Nine Months Ended

December 31

1996	1995
------	------

<S>

<C> <C>

OPERATING ACTIVITIES

Net income (loss)

\$ (110,302)	\$ 32,202
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Adjustments to reconcile net income (loss) to net cash provided by operating activities:

Depreciation and amortization

333,863	303,708
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Changes in operating assets and liabilities:

Accounts receivable

(372,713)	(63,009)
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Inventories and prepaid expenses

(10,811)	1,622
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Costs in excess of billings on research contracts

210,658	---
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Accounts payable and accrued expenses

30,836	(15,271)
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Other assets

(20,429)	(194,534)
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Net cash provided by (used in) operating activities

61,102 64,718

INVESTING ACTIVITIES

Purchases of property and equipment
(284,388) (13,888)
Net cash (used in) investing activities
(284,388) (13,888)

FINANCING ACTIVITIES

Proceeds from the sale of common stock
1,281,263 1,810,991
Long-term debt proceeds
3,472,483 ---
Earnest money deposit on bond financing
(315,000) ---
Debt placement costs
(253,721) ---
Bond reserve funds
(1,776,327) ---
Repayment of long-term debt
(128,908) (95,000)
Net cash provided by financing activities
2,279,790 1,715,991

Increase in cash
2,056,504 1,766,821

Cash at Beginning of Period
2,256,309 401,034

Cash at End of Period
\$ 4,312,813 \$ 2,167,855

Supplemented schedule of non-cash transactions:

Land and corresponding deferred revenue
\$ 250,000 \$ ---

</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.

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

Results of Operations:

Revenues for the third quarter of fiscal 1997 ended December 31, 1996 were \$666,014, an increase of 12% from the third quarter of fiscal 1997 ended December 31, 1995. The third quarter revenues of fiscal 1997 are down 1% as compared to the second quarter of fiscal 1997. Revenues for the first three quarters of fiscal 1997 are up one percent as compared to the first three quarters of fiscal 1996.

For the third quarter of fiscal 1997, the Company is reporting a loss of \$40,022 as compared to a loss of \$6,763 in the second quarter of fiscal 1997. For the first three quarters of fiscal 1997, the Company is reporting a loss of \$110,302 as compared to a profit of 32,202 for the first three quarters of fiscal 1996. Although the Company has a loss for the first nine months of fiscal 1997 as compared to a profit for the first nine months of fiscal 1996, the Company's gross profit margin increased from 22% in fiscal 1996 to 30% in fiscal 1997. The main reason for the increased losses in spite of the increased gross profit margin in 1997, is the significant increase in internal research and development and administrative costs relative to the move toward product manufacturing. Research and development costs have increased from \$ 2,467 for the first nine months of fiscal 1996 to \$312,121 for the first nine months of fiscal 1997. The Company plans to continue these IR&D costs attributed to further development of the WDM receiver in the following quarters.

Liquidity and Capital Resources:

The Company's cash balance at December 31, 1996 is \$4,312,813 compared to \$2,256,309 at March 31, 1996. The

Company's account receivable balance has increased to \$779,565 at December 31, 1996 compared to \$406,852 at March 31, 1996, primarily due to the delay in payment on government contracts. These payments were received early in the fourth quarter of fiscal 1997. The cash increase can be attributed to the Company completing additional financing with Aberdeen, South Dakota. The Company continues construction of the Aberdeen facility and plans to complete construction by March 1997.

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PART II. OTHER INFORMATION

ITEMS 1 - 5. Not Applicable.

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

(a) Exhibit 11: Statement RE: Computation of per share earnings.

(b) Exhibit 27: Financial Data Schedules

There were no reports on Form 8-K filed during the three months ended December 31, 1996.

Signatures

In accordance with the requirements of the Securities Exchange Act of 1934, the issuer has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

APA OPTICS, INC.

February 7, 1997
s/s Anil K. Jain

Date

Anil K. Jain

President

Principal Executive Officer

Treasurer & Principal Financial

Officer

February 7, 1997
s/s Randal J. Becker

Date

Randal J. Becker

Principal Accounting Officer

<TABLE> <S> <C>

<ARTICLE> 5

<S>	<C>
<PERIOD-TYPE>	9-MOS
<FISCAL-YEAR-END>	MAR-31-1997
<PERIOD-END>	DEC-31-1996
<CASH>	4,312,813
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<RECEIVABLES>	779,565
<ALLOWANCES>	0
<INVENTORY>	159,585
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<PP&E>	1,394,095
<DEPRECIATION>	333,863
<TOTAL-ASSETS>	9,551,721
<CURRENT-LIABILITIES>	334,957
<BONDS>	0
<PREFERRED-MANDATORY>	0
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<COMMON>	83,046
<OTHER-SE>	5,195,143
<TOTAL-LIABILITY-AND-EQUITY>	9,551,721
<SALES>	1,877,068
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<CGS>	1,321,651
<TOTAL-COSTS>	1,321,651
<OTHER-EXPENSES>	754,192
<LOSS-PROVISION>	0
<INTEREST-EXPENSE>	110,567
<INCOME-PRETAX>	(108,872)
<INCOME-TAX>	1,430
<INCOME-CONTINUING>	(110,302)
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<CHANGES>	0
<NET-INCOME>	(110,302)
<EPS-PRIMARY>	(.01)
<EPS-DILUTED>	(.01)

</TABLE>

Exhibit 11

APA OPTICS, Inc.

Statement RE: Computation
of Per Share Earnings

months ended		Three Nine months ended
December 31		December 31
1996	1995	1996
1995		
Average common shares outstanding		8,304,624
7,986,007	8,155,944	7,651,545
Dilutive stock options and warrants (A)		
0	43,562	0
0		
Total		
8,304,624	8,029,569	8,155,944
7,651,545		
Net income (loss)		\$ (40,022)
\$ 33,894	\$ (110,302)	\$ 32,202
Per share amount		
\$ (.00)	\$.00	\$ (.01)
\$.00		

(A) Calculated using the "treasury stock" method.