SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the fiscal year ended March 31, 2000.

[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 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 INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

2950 N.E. 84TH LANE
BLAINE, MINNESOTA 55449
(763) 784-4995
(ADDRESS, INCLUDING ZIP CODE AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICE)

Securities registered pursuant to Section 12(b) of the Act:
NONE

Securities registered pursuant to Section 12(g) of the Act:

COMMON STOCK, PAR VALUE $.01 PER SHARE
(TITLE OF CLASS)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months and (2) has been subject to the filing requirements for the past 90 days. [X] YES [ ] NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

The aggregate market value of the voting stock held by non-affiliates of the registrant as of May 24, 2000, was approximately $80,938,852.

The number of shares of common stock outstanding as of May 24, 2000 was 9,166,948.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of our proxy statement for the annual shareholders meeting to be held in August 2000 are incorporated by reference into Part III.

PART I

ITEM 1. BUSINESS.

(a) GENERAL DEVELOPMENT OF BUSINESS.

Since the founding of APA Optics, Inc. in 1979, we have focused on leading edge research in sophisticated optoelectronics and optical systems, with the primary goal of developing advanced products for subsequent marketing and fabrication. We currently manufacture dense wavelength division multiplexer (DWDM) optical components, offer a range of gallium nitride-based devices and services, and market custom optics products.

For the last several years our goal has been to manufacture and market products and components based on our technology developments. We have focused our efforts on 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 relevant to them. If we are successful in manufacturing and marketing these products, we expect to significantly increase our revenues and achieve profitability.

In fiscal 1999 we significantly reduced our R&D contracts (historically a significant source of revenue for us) to concentrate on development and production of our own proprietary products. This shift has significantly reduced our revenues and increased our losses, which will continue until we realize significant revenues from these products. Until such time, we will need additional funding to sustain our operations and to acquire additional equipment and additional personnel to meet our objectives.

(b) DESCRIPTION OF BUSINESS.

PRODUCTS

We currently offer the products described below.

- Optical Lens Systems. We design and build multi-element lens systems and components, including mounting structures, for precision quality optical needs in many applications, including laser-based systems, imaging systems, inspection systems, display systems, display optics, focusing optics for ultraviolet fire alarms, collimation and focusing optics for fiber optics systems.

- Optical Thin Film Coatings. We custom design, develop, and fabricate optical thin film coatings for optical components of lasers, laser systems, optical instruments, and optical devices. Our antireflective coatings are deposited onto Company-fabricated lens components. We also use our thin film coating facility to design, develop and fabricate coating for lens components supplied by customers.

Our research and development efforts are currently focused on the optoelectronic products described below. Optoelectronic devices are vital components of communication systems and optical instruments.

- Dense Wavelength Division Multiplexer (DWDM). We recently demonstrated the feasibility of a DWDM capable of transmitting several channels through a single optical fiber for communication applications. We developed the DWDM based on our development of optical modulator (single channel) technology during the early 1990s for fiber optic communication. These modulators have the capability of direct high speed (several billion bits per second) data loading and unloading on laser beams going through optical fibers, either for short distance or long distance. The DWDM, a small part of the modulator, utilizes high frequency holographic gratings. Our DWDM enables transmission of data on several different channels within a single fiber (a simple analogy is the expansion of a single lane highway to a multi-lane throughway) and, as a result, provides higher speed, increased and regulated data handling capabilities as compared to a single channel modulator. We are currently performing environmental packaging of the DWDM. We filed the first patent related to the DWDM Optical Modulator in June 1994, which was awarded on September 12, 1995. Since then, we have filed for six additional patents related to DWD Multiplexer/Demultiplexer devices. We were awarded two of these patents in March 1997 and February 1998. The other four applications are still pending.

- UV Detector. The UV Detector is a high response solid state detector based on single-crystal gallium nitride (GaN). The GaN detector is expected to have applications in spectrometry, solar radiation measurement, excimer-laser measurement and calibration, biomedical instrumentation, and flame detection and monitoring. The detector is visible blind, which allows detection of UV radiation in the presence of room lights without a filter. We believe the GaN detector has advantages over photomultiplier tubes because of its ruggedness and chemical inertness, which suit it for application in high-vibration and harsh environments as well as high-temperature operation. We have been awarded several patents in GaN related technologies.

OTHER PRODUCTS

We are in the process of introducing several other products by packaging our UV detectors with electronics and displays for many applications. Among these are a solar sensing watch to detect potential cancer causing UV radiation for consumer applications, UV radiation based flame sensors for industrial applications, and UV radiation meters for laboratory and industrial applications. All of these products have significant similarities and, therefore, do not require significant financial resources for development.

MARKETING AND DISTRIBUTION

We have delivered a limited number of alpha units of the DWDM to customers during fiscal 1999 and 2000. We have sold several UV detectors to more than 30 customers as well as a few detector/electronics packages. During this time, we have been aggressively marketing both products by advertising in relevant professional magazines, showcasing them in trade shows, direct mailing, personal visits, by use of distributors in various countries (including Japan, Germany, Italy and France). We also maintain product information on our Web page. We have a business manager who focuses on sales of DWDM, along with two applications engineers, and two persons who work on marketing and sales of GaN-based products.

SOURCES OF RAW MATERIALS

Optical glass and optical chips are two principal materials used in our operations. Optical glass is commercially available through several distributors. We currently use at least two vendors for optical chips and continuously look for additional vendors for these parts. Certain chemicals and other materials used by us are routinely available from several sources.

ENVIRONMENTAL COMPLIANCE

Because we handle a number of chemicals in our operations, we must comply with federal, state and local laws and regulations regarding the handling and disposal of such chemicals. The cost of such compliance is not material.

MAJOR CUSTOMERS

In prior years, we provided research and development services under contracts with various governmental agencies. Currently, we have no material contracts with any such agencies.

In our efforts to promote sales of new products, we have developed relationships with several potential new customers.

Revenues from the following unrelated customers constituted more than ten percent of our total operating revenues in fiscal years 2000, 1999 and 1998:

<TABLE>
<CAPTION>

		Year Ended March 31		
	Name	2000	1999	1998
<S>		<C>	<C>	<C>
	Government Agencies*	38%	67%	89%

</TABLE>

*REPRESENTS SERVICES TO SEVERAL OPERATING AGENCIES OF THE U.S. GOVERNMENT, AS FOLLOWS:

<TABLE>
<CAPTION>

		2000	1999	1998
<S>		<C>	<C>	<C>
	Air Force	--	15%	18%
	Army	35%	--	22
	Navy	3	12	34
	ARPA	--	40	15
	Total	38%	67%	89%

</TABLE>

BACKLOG

Our backlog of uncompleted contracts at March 31, 2000, was approximately $28,400, as compared to $189,000 at March 31, 1999, and $1,300,000 at March 31, 1998. Of the current year's backlog, all contracts will be completed within the next year. The reduced backlog is a direct result of our shift from contract R&D to product development and production.

COMPETITION

Competition in the optoelectronics and optics fabrication businesses is significant. Many of the companies engaged in these businesses are well-financed and have significantly greater research, development, production, and marketing resources than we do. However, we believe that we have a competitive advantage due to our patents and the uniqueness of our devices. In particular, we believe our DWDM is the most efficient (lowest insertion loss) and compact device currently available.

RESEARCH AND DEVELOPMENT

During the fiscal years ended March 31, 2000, 1999, and 1998, we spent approximately $327,000, $382,000, and $339,000, respectively, on research and development, all of which was related to the DWDM, UV detector and related products. In addition, in each of those years, we spent approximately $978,000, $837,000, and $1,431,000, respectively, on research activities sponsored by customers. As we shift our focus to development of our proprietary products, we expect that customer-sponsored R&D will continue to decline.

EMPLOYEES

As of March 31, 2000, we had 43 full-time employees (including executive officers).

ITEM 2. PROPERTIES.

We have corporate offices, manufacturing facilities, and laboratories located in an industrial building at 2950 N.E. 84th Lane, Blaine, Minnesota. We currently lease 23,500 square feet of space under a sublease from Jain-Olsen Properties, a partnership consisting of Anil K. Jain and Kenneth A. Olsen, officers and directors of the Company. See Note 8 of Notes to Financial Statements included herein. We own land directly west of the Blaine facility that may be used for future expansion.

We also have a 24,000 square foot production facility in Aberdeen, South Dakota, which is used for manufacturing our DWDM components and UV detectors. The land upon which this facility is located was granted to us as part of a financing package from the city of Aberdeen. See Note 4 of Notes to Financial Statements included herein for further information regarding the financing of this facility.

We believe that these two facilities will be adequate for our needs for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS.

We are not currently involved in any material legal proceedings.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY-HOLDERS.

No matter was submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this Report.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Our common stock is traded on The Nasdaq SmallCap Market under the symbol "APAT." The following table sets forth the quarterly high and low sales prices for our common stock for each quarter of the past two fiscal years as reported by Nasdaq.

<TABLE>
<CAPTION>

FISCAL 2000	HIGH	LOW
<S>	<C>	<C>
Quarter ended June 30, 1999	$8.50	$5.25
Quarter ended September 30, 1999	7.93	3.50
Quarter ended December 31, 1999	19.50	3.88
Quarter ended March 31, 2000	64.00	11.31
FISCAL 1999	HIGH	LOW
Quarter ended June 30, 1998	$6.75	$5.62

Quarter ended September 30, 1998....................................	6.00	4.25
Quarter ended December 31, 1998.....................................	5.00	4.00
Quarter ended March 31, 1999..	10.00	4.75

</TABLE>

There were approximately 338 holders of record of our common stock as of May 24, 2000.

We have never paid cash dividends on our common stock. The loan agreement relating to certain bonds issued by the South Dakota Economic Development Finance Authority restricts our ability to pay dividends.

During fiscal 2000, the Company issued an aggregate of 20,718 shares to three investors upon the exercise of outstanding warrants. Two of these warrants, for 5,500 shares, had been issued to the placement agent as consideration for services in a private placement of the Company's securities and the third, for 15,218 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 $80,822. 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.

On March 15, 2000, we sold 500 shares of 2% Series A Convertible Preferred Stock (which is convertible to common stock) and related warrants for purchase of an aggregate of 50,000 shares of common stock to three institutional investors for aggregate gross proceeds of $5 million. The placement was made through an agent who received a cash commission of $275,000 and warrants for purchase of 7,500 shares of our common stock. The sale was not registered under the Securities Act of 1933 in reliance upon Sections 4(2) and 4(6) of that Act. Pursuant to our agreement with the investors, we have filed a registration statement on Form S-3 (Commission File No. 333-33968) registering for resale the common stock issuable upon exercise of the warrants and conversion of the preferred stock.

The preferred stock carries a 2% cumulative dividend payable upon conversion in cash or common stock. The preferred stock (plus any unpaid accreted dividends) is convertible to common stock at the option of the holder and is automatically converted on March 15, 2003 or, if earlier, on the date that the common stock has sustained a market value of $50 per share for 20 consecutive trading days. The initial conversion price of $35 per share is subject to adjustment pursuant to the antidilution provisions of the Certificate of Designation of Voting Power, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of 2% Series A Convertible Preferred Stock (the "Certificate"). In addition, beginning September 14, 2000, and each monthly period thereafter while shares of the preferred stock are outstanding, the conversion price is reset in accordance with the formula set forth in the Certificate. As of June 23, 2000, the conversion price had been reset to $33.78 per share pursuant to the antidilution provisions. A holder of the preferred stock may not convert into shares of common stock if after the conversion the holder, together with its affiliates, would

beneficially own over 9.999% of the outstanding shares of our common stock. This restriction may be waived by a holder on not less than 61 days' notice to us. In addition, as long as our common stock is listed for trading on Nasdaq, we may not issue common stock on conversion of the preferred stock in an amount which exceeds 19.999% of the outstanding common stock immediately prior to the sale of the preferred stock without obtaining prior shareholder approval. The preferred stock is non-voting (except in specified circumstances) and is subject to redemption at our option on 30 days' notice (subject to certain restrictions if the effective conversion price at the time of notice of redemption is $30 or more). We are required to redeem the preferred stock upon certain default events. The preferred stock is redeemable under certain circumstances as stated in the Certificate.

The common stock warrants issued to the investors and to the placement agent are exercisable until March 15, 2005, at an initial exercise price of $35 per share with respect to the investors' warrants and at an initial exercise price of $49.47 per share with respect to the agent's warrants (in each case subject to anti-dilution adjustments).

On June 21, 2000, we issued a three-year warrant to Ladenburg-Thalmann & Co., Inc. for the purchase of 84,083 shares of Common Stock at $17.8395 per share. This warrant was issued in consideration of Ladenburg's services as placement agent of our common stock in the $100 million public offering described in Item 7 below. This warrant was issued without registration under the Securities Act of 1933 in reliance on Section 4(2) and Section 4(6) of the Act.

ITEM 6. SELECTED FINANCIAL DATA.

<TABLE>
<CAPTION>

	2000	1999	1998	1997	1996
<S>	<C>	<C>	<C>	<C>	<C>
Statements of Operations Data					
Revenues..	$ 420,809	$ 722,030	$2,190,637	$2,769,270	$2,485,833
Net loss..	(3,796,296)	(2,513,798)	(967,767)	(11,023)	(92,474)
Net loss per share, basic and diluted..............	(.43)	(.30)	(.12)	--	(.01)
Weighted average number of shares, basic and diluted	8,744,125	8,512,274	8,376,661	8,192,879	7,734,082
Balance Sheet Data					
Total assets......................................	$9,610,391	$6,804,976	$9,629,912	$9,419,398	$4,756,349
Long-term obligations, including current portion....	3,049,258	3,214,712	3,609,652	3,829,004	445,000
Shareholders' equity..............................	6,306,049	3,389,295	5,859,863	5,412,968	4,107,228

</TABLE>

The above selected financial data should be read in conjunction with the financial statements and related notes included in this Report beginning at page 15 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing in Item 7 of this Report.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

GENERAL

We are engaged in designing, manufacturing, and marketing optical components and various optoelectronic products. 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. Accordingly, revenues from research and development contracts have decreased significantly during the last three fiscal years.

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. If we are successful in manufacturing and marketing these products, we expect to significantly increase our revenues and achieve profitability.

In fiscal 1999 we significantly reduced our R&D contracts (historically a significant source of revenue for us) to concentrate on development and production of our own proprietary products. This shift will significantly reduce our revenues and increase our losses until we realize revenues from our products. During this time, we will need additional funding to sustain our operations and additional equipment, as well as additional personnel to meet our objectives.

RESULTS OF OPERATIONS

Fiscal 2000 Compared to Fiscal 1999. Operating revenues for fiscal 2000 were $420,809, a decrease of 42% from operating revenues of $722,030 in fiscal 1999. The decrease in revenues reflects our decision to focus on product development rather than contract research and development. Contract fees decreased from $484,329 in fiscal 1999 to $160,108 in fiscal 2000, and our backlog of uncompleted contracts at March 31, 2000 was $28,400 as compared to $189,000 at March 31, 1999. Revenues from sales of products increased by approximately 10% as compared to fiscal 1999. Sales of new products in fiscal 2000 were minimal; however, we believe we have made significant progress in developing our new products and the related manufacturing processes and that revenues from sales of such products will increase in fiscal 2001.

Cost of sales increased by approximately 53%, to $2,086,527, in fiscal 2000 from $1,366,105 in fiscal 1999. Cost of contract fees increased by 17% in fiscal 2000. Gross margin for product sales was negative in both fiscal 2000 and fiscal 1999, reflecting continued personnel and product development costs. Gross margin for contract fees was negative in both fiscal 2000 and fiscal 1999. The continued deterioration in gross margin is the result of decreased contract revenues. Research and development expenses decreased by approximately 15% in fiscal 2000, to $326,988 from $382,445 in fiscal 1999, and selling, general and administrative expenses increased by 8% to $782,694 from $727,989 in fiscal 1999. The increase in costs of sales and selling, general and administrative expenses reflects our focus on product development, including the hiring of additional personnel for production, marketing, and sales.

We reported a loss from operations in fiscal 2000 of $3,753,623, a substantial increase over the loss from operations of $2,591,750 in fiscal 1999. This loss results from the combination of significantly decreased revenues without a corresponding decrease in costs and expenses.

We realized $100,989 in interest income in fiscal 2000, down 56% from $228,195 in fiscal 1999, reflecting lower average cash balances during the year. Interest expense in fiscal 2000 totaled $142,662, down 4% from $149,243 in fiscal 1999, reflecting reduced balances on outstanding obligations.

Our net loss in fiscal 2000 was $3,796,296, compared to $2,513,798 in fiscal 1999. As noted above, this loss was primarily a result of significantly decreased revenues and significantly higher cost of sales and other operating expenses. Further losses can be expected until revenues from production increase, or operating costs decrease, sufficiently to produce positive cash flow.

Fiscal 1999 Compared to Fiscal 1998. Operating revenues for fiscal 1999 were $722,030, a decrease of 67% from operating revenues of $2,190,637 in fiscal 1998. The decrease in revenues reflects our decision to focus on product development rather than contract research and development. Contract fees decreased from $1,950,844 in fiscal 1998 to $484,329 in fiscal 1999, and our backlog of uncompleted contracts at March 31, 1999 was $189,000 as compared to $1,200,000 at March 31, 1998. Revenues from sales of products decreased by approximately 1% as compared to fiscal 1998. Sales of new products in fiscal 1999 were minimal.

Cost of sales increased by approximately 52%, to $1,366,105, in fiscal 1999 from $901,538 in fiscal 1998. Cost of contract fees decreased by 41% in fiscal 1999, reflecting the decreased revenues from contract research and development. Gross margin for product sales was negative in both fiscal 1999 and fiscal 1998, reflecting continued personnel and product development costs. Gross margin for contract fees was negative in fiscal 1999 and 27% in fiscal 1998. This deterioration is the result of decreased contract revenues. Research and development expenses increased by approximately 13% in fiscal 1999, to $382,445 from $338,615, and selling, general and administrative expenses increased by 18% to $727,988 in fiscal 1999 compared to $616,532 in fiscal 1998. The increase in costs of sales, research and development and selling, general and administrative expenses reflects our focus on product development, including the hiring of additional personnel for production, marketing, and sales.

We reported a loss from operations in fiscal 1999 of $2,591,750, a substantial increase over the loss from operations of $1,096,626 in fiscal 1998. This loss results from the combination of significantly decreased revenues without a corresponding decrease in costs and expenses.

We realized $228,195 in interest income in fiscal 1999, down 27% from $310,925 in fiscal 1998, reflecting lower average cash balances during the year. Interest expense in fiscal 1999 totaled $149,243, down 18% from $181,066 in fiscal 1998, reflecting reduced balances on outstanding obligations.

Our net loss in fiscal 1999 was $2,513,798 compared to $967,767 in fiscal 1998. As noted above, this loss was primarily a result of significantly decreased revenues and significantly higher cost of sales and other operating expenses.

LIQUIDITY AND CAPITAL RESOURCES

Our cash and cash equivalents at March 31, 2000, totaled $5,941,906 as compared to $2,812,849 at March 31, 1999. We used $3,537,944 of net cash for operating activities, of which the most significant cause was our net loss of $3,796,296. We used $195,342 net cash in investing activities in fiscal 2000, all for the purchase of property and equipment. This compares to use of net cash of $236,891 in fiscal 1999 and $925,494 in fiscal 1998. In all three years, such property and equipment was purchased primarily for the Aberdeen facility. During fiscal 2000, we received $6,862,343 net cash from financing activities, primarily from sales of our common and preferred stock. In 1999, we used $159,685 net cash in financing activities, which included payment of a $240,000 balance on a loan from the Minnesota Agricultural and Economic Development Board.

In connection with the construction of the manufacturing facility in Aberdeen, we took advantage of certain economic incentive programs offered by the State of South Dakota and the City of Aberdeen. At March 31, 2000, the total principal outstanding on the several loans obtained in connection with these financing packages was $3,049,258. Interest on the loans ranges from 0% to 6.75%, and the loans are due between 2003 and 2016. For further information regarding these loans, see Note 4 of Notes to Financial Statements included in this Report. These loans require us to maintain certain minimum levels of net worth and income to outstanding debt ratios. We were out of compliance with these covenants in fiscal 2000. Such noncompliance does not constitute an event of default but triggers further covenants under the loan agreement, with which we were in compliance at March 31, 2000.

We anticipate approximately $2 million in capital expenditures in fiscal 2001, primarily for equipment. The funds for these purchases will come primarily from proceeds from sales of our securities pursuant to a "shelf-registered" public offering, described below.

Our use of net cash in operating activities during fiscal 2000 emphasizes our need to increase sales in order to maintain operations. For the past several years, we have 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 we reduced our emphasis on contract research and development, resulting in significantly reduced revenues. This shift in emphasis was necessary to utilize our personnel and facilities in the product development effort. We believe that design of the new products and the manufacturing process is now essentially complete, and we have stepped up efforts to market these products. However, we cannot guarantee that we will succeed in increasing revenues. If we do not adequately increase revenues, we plan to decrease expenses by reducing inventory and personnel and discontinuing one or more products. In addition, we have investigated and will continue to investigate sources of additional capital. In March 2000, we sold 500 shares of 2% Series A Convertible Stock in a private transaction for gross proceeds of $5 million. In April 2000, we filed a "shelf registration statement" for sale of up to $100 million of common stock to institutional investors at market based prices from time to time through a placement agent, Ladenburg Thalmann & Co. Through June 23, 2000, we sold 574,036 shares of common stock in this offering for gross proceeds of $8,450,941. However, we cannot guarantee that we will be able to obtain additional financing through this offering or otherwise, if needed.

YEAR 2000 READINESS

The cost associated with our year 2000 readiness program was not material. Since January 1, 2000, we have not experienced any significant year 2000-related problems and we do not expect any to occur. Thus, we expect that any future costs will not be material and will have no adverse effect on our earnings or financial position.

FORWARD LOOKING STATEMENTS

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.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Our 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.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See Item 14(a)(1) for financial statements filed with this Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following is a list of our executive officers, their ages, positions and offices as of March 31, 2000.

NAME	AGE	POSITION
Dr. Anil K. Jain	54	Chief Executive Officer, President, Chief Financial Officer and Treasurer
Kenneth A. Olsen	56	Vice President and Secretary
Randal J. Becker	47	Principal Accounting Officer

DR. ANIL K. JAIN has been a Director and Chief Executive Officer, President, Chief Financial Officer and Treasurer since March 1979. From 1973 until October 15, 1983, when Dr. Jain commenced full time employment with the Company, he was employed at the Systems and Research Center at Honeywell Inc. as a Senior Research Fellow, coordinating optics-related development.

KENNETH A. OLSEN has been a Director since 1980, Secretary since 1983, and Vice President since 1992. Prior to joining the Company, he had been with 3M Corp., St. Paul, Minnesota.

RANDAL BECKER has been Principal Accounting Officer since joining the Company in 1987. Prior to joining the Company he was with Apache Corporation, Minneapolis, Minnesota.

Information regarding directors and the information required by Items 11, 12, and 13, below, is incorporated in this Report by reference to the proxy statement for our annual meeting of shareholders (anticipated to be held in August 2000).

ITEM 11. EXECUTIVE COMPENSATION.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.

(a)(1) The following financial statements are filed herewith:

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</TABLE>

(2) Financial Statement Schedules: None

(b) Reports filed on Form 8-K:

No reports on Form 8-K were filed during the fourth quarter of the fiscal year ended March 31, 2000.

(c) Exhibits

See Exhibit Index on page 28.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: June 29, 2000

By /s/ Anil K. Jain
Anil K. Jain
PRESIDENT

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<TABLE>
<CAPTION>

SIGNATURE	TITLE	DATE
/s/ Anil K. Jain Anil K. Jain	President, Chief Executive Officer, Treasurer, Chief Financial Officer, and Director	June 29, 2000
/s/ Kenneth A. Olsen Kenneth A. Olsen	Secretary, Vice President, and Director	June 29, 2000
/s/ Randal J. Becker Randal J. Becker	Principal Accounting Officer	June 29, 2000
/s/ Gregory Von Wald Gregory Von Wald	Director	June 29, 2000
/s/ William R. Franta William R. Franta	Director	June 29, 2000
/s/ Michael A. Gort Michael A. Gort	Director	June 29, 2000

</TABLE>

Report of Independent Auditors

The Board of Directors and Shareholders
APA Optics, Inc.

We have audited the accompanying balance sheets of APA Optics, Inc. as of March 31, 2000 and 1999, and the related statements of operations, shareholders' equity and cash flows for each of the three years in the period ended March 31, 2000. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of APA Optics, Inc. at March 31, 2000 and 1999, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2000, in conformity with accounting principles generally accepted in the United States.

Ernst & Young LLP

Minneapolis, MN
May 5, 2000

APA Optics, Inc.

Balance Sheets

	MARCH 31	
	2000	1999
ASSETS		
Current assets:		
Cash and cash equivalents	$5,941,906	$2,812,849
Accounts receivable, net of $0 allowance for doubtful accounts	209,337	85,091
Inventories:		
Raw materials	146,841	54,208
Work-in-process	129,684	167,659
Prepaid expenses	19,803	18,911
Bond reserve funds	65,000	60,000
Total current assets	6,512,571	3,198,718
Property, plant and equipment, net	2,459,760	2,592,503
Other assets:		
Bond reserve funds	213,353	533,100
Bond placement costs	164,012	212,012
Other	260,695	268,643
	638,060	1,013,755
Total assets	$9,610,391	$6,804,976

<TABLE>
<CAPTION>

	MARCH 31	
	2000	1999
<S>	<C>	<C>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 82,412	$ 53,416
Accrued expenses	172,672	147,553
Current maturities of long-term debt	140,871	133,200
Total current liabilities	395,955	334,169
Long-term debt	2,908,387	3,081,512
Shareholders' equity		
Undesignated shares; 4,999,500 shares authorized, none issued		
Convertible preferred stock, $.01 par value		
Authorized shares - 500		

Issued and outstanding shares - 500	5	--
Common stock, $.01 par value:		
Authorized shares - 15,000,000		
Issued and outstanding shares - 8,997,992 in 2000, 8,512,274 in 1999	89,980	85,123
Additional paid-in capital	16,408,446	9,700,258
Accumulated deficit	(10,192,382)	(6,396,086)
Total shareholders' equity	6,306,049	3,389,295
Total liabilities and shareholders' equity	$ 9,610,391	$ 6,804,976

</TABLE>

SEE ACCOMPANYING NOTES.

APA Optics, Inc.

Statements of Operations

<TABLE>
<CAPTION>

	YEAR ENDED MARCH 31 2000	1999	1998
<S>	<C>	<C>	<C>
Revenues:			
Net sales	$ 260,701	$ 237,701	$ 239,793
Contract fees	160,108	484,329	1,950,844
	420,809	722,030	2,190,637
Costs and expenses:			
Cost of sales	2,086,527	1,366,105	901,538
Cost of contract fees	978,222	837,242	1,430,578
Research and development	326,989	382,445	338,615
Selling, general and administrative	782,694	727,988	616,532
	4,174,432	3,313,780	3,287,263
Loss from operations	(3,753,623)	(2,591,750)	(1,096,626)
Interest income	100,989	228,195	310,925
Interest expense	(142,662)	(149,243)	(181,066)
Loss before income taxes	(3,795,296)	(2,512,798)	(966,767)
Income tax expense	1,000	1,000	1,000
Net loss	$(3,796,296)	$(2,513,798)	$ (967,767)
Net loss per common share:			
Basic and diluted	$ (.43)	$ (.30)	$ (.12)
Weighted average shares outstanding:			
Basic and diluted	8,744,125	8,512,274	8,376,661

</TABLE>

SEE ACCOMPANYING NOTES.

APA Optics, Inc.

Statement of Shareholders' Equity

<TABLE>
<CAPTION>

COMMON STOCK

	PREFERRED STOCK SHARES	AMOUNT	SHARES	AMOUNT
<S>	<C>	<C>	<C>	<C>
Balance March 31, 1997	-	$ -	8,306,624	$ 83,066
Stock options exercised, net...	-	-	3,500	35
Warrants exercised	-	-	202,150	2,022
Warrants issued in lieu of debt service payments	-	-	-	-
Net loss	-	-	-	-
Balance March 31, 1998	-	-	8,512,274	85,123
Warrants issued in lieu of debt service payments	-	-	-	-
Net loss	-	-	-	-
Balance March 31, 1999	-	-	8,512,274	85,123
Issuance of common stock	-	-	465,000	4,650
Warrants exercised	-	-	20,718	207
Issuance of preferred stock ...	500	5	-	-
Warrants issued in lieu of debt service payments	-	-	-	-
Net loss	-	-	-	-
Balance March 31, 2000	500	$ 5	8,997,992	$ 89,980

</TABLE>

[WIDE TABLE CONTINUED FROM ABOVE]

<TABLE>
<CAPTION>

	ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL SHAREHOLDERS' EQUITY
<S>	<C>	<C>	<C>
Balance March 31, 1997	$ 8,244,423	$ (2,914,521)	$ 5,412,968
Stock options exercised, net...	7,871	-	7,906
Warrants exercised	1,343,861	-	1,345,883
Warrants issued in lieu of debt service payments	60,873	-	60,873
Net loss	-	(967,767)	(967,767)
Balance March 31, 1998	9,657,028	(3,882,288)	5,859,863
Warrants issued in lieu of debt service payments	43,230	-	43,230
Net loss	-	(2,513,798)	(2,513,798)
Balance March 31, 1999	9,700,258	(6,396,086)	3,389,295
Issuance of common stock	1,870,475	-	1,875,125
Warrants exercised	80,614	-	80,821
Issuance of preferred stock ...	4,724,995	-	4,725,000
Warrants issued in lieu of debt service payments	32,104	-	32,104
Net loss	-	(3,796,296)	(3,796,296)
Balance March 31, 2000	$ 16,408,446	$(10,192,382)	$ 6,306,049

</TABLE>

SEE ACCOMPANYING NOTES.

APA Optics, Inc.

Statements of Cash Flows

<TABLE>
<CAPTION>

	YEAR ENDED MARCH 31 2000	1999	1998
<S>	<C>	<C>	<C>
OPERATING ACTIVITIES			

Net loss	$(3,796,296)	$(2,513,798)	$ (967,767)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	376,085	443,275	426,362
Changes in operating assets and liabilities:			
Accounts receivable	(124,246)	151,193	119,697
Inventories	(54,658)	(64,746)	(8,758)
Prepaid expenses and other assets	7,056	(31,286)	(31,548)
Accounts payable and accrued expenses	54,115	40,572	(17,029)
Net cash used in operating activities	(3,537,944)	(1,974,790)	(479,043)
INVESTING ACTIVITIES			
Purchases of property and equipment	(195,342)	(236,891)	(925,494)
Net cash used in investing activities	(195,342)	(236,891)	(925,494)
FINANCING ACTIVITIES			
Proceeds from sales of preferred stock	4,725,000	-	-
Proceeds from sales of common stock	1,875,125	-	-
Proceeds from exercise of warrants and options	80,821	-	1,353,789
Repayment of long-term debt	(133,350)	(351,710)	(158,479)
Bond reserve funds	314,747	192,025	1,518,237
Net cash provided by (used in) financing activities	6,862,343	(159,685)	2,713,547
Increase (decrease) in cash and cash equivalents	3,129,057	(2,371,366)	1,309,010
Cash and cash equivalents at beginning of year	2,812,849	5,184,215	3,875,205
Cash and cash equivalents at end of year	$ 5,941,906	$ 2,812,849	$ 5,184,215
SUPPLEMENTAL DISCLOSURES OF NONCASH INVESTING AND FINANCING ACTIVITIES			
Warrants issued in lieu of debt service payments	$ 32,104	$ 43,230	$ 60,873

</TABLE>

SEE ACCOMPANYING NOTES.

APA OPTICS, INC.

NOTES TO FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF BUSINESS. APA Optics, Inc. (the "Company") is engaged in the business of developing, designing and fabricating optical components and optical systems for laser and other industrial applications.

REVENUE RECOGNITION. Sales are recorded upon shipment of product. Revenue on contract fees is recorded on the percentage of completion method of accounting for long-term government contracts. A portion of the total contract price is recognized on the basis of contract costs incurred to date as compared to the expected total cost of the contract. Contract costs include direct materials, labor and manufacturing overhead. Estimated losses on uncompleted contracts are recorded in their entirety in the period in which they are determined.

During 1999, the Company received a $75,000 grant from the State of South Dakota when the Company hired its tenth employee at its Aberdeen, South Dakota production facility. The grant was designed to offset the costs of training new employees.

CASH EQUIVALENTS. The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Investments classified as cash equivalents consist primarily of certificates of deposit. The fair value of investments approximates cost.

INVENTORIES. Inventories are stated at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method for raw materials, actual cost for direct labor and average cost for factory overhead in work-in-process.

PROPERTY, PLANT AND EQUIPMENT. Property and equipment are stated at cost. Depreciation is provided on the straight-line method over the following estimated useful lives of the assets:

YEARS

Building	20
Manufacturing equipment	7 - 10
Tools	3 - 7
Office equipment	5 - 10
Leasehold improvements	15

BOND PLACEMENT COSTS. Bond placement costs are amortized over 5 - 8 years.

USE OF ESTIMATES. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

INCOME TAXES. The Company accounts for income taxes using the liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax basis.

EARNINGS PER SHARE. Basic and diluted earnings per share are calculated in accordance with Financial Accounting Standards Board (FASB) Statement No. 128, EARNINGS PER SHARE. All earnings per share amounts for all periods have been presented and, where appropriate, restated to conform to the requirements of Statement 128.

IMPAIRMENT OF LONG-LIVED ASSETS. The Company records losses on long-lived assets in operations when events and circumstances indicate that the estimate of undiscounted future cash flows expected to be generated by those assets are less than the assets' carrying amount. If impairment is determined to exist, it is recorded as the excess of carrying value over estimated fair value.

2. ACCOUNTS RECEIVABLE

Accounts receivable includes $60,495 billed under retainage provisions of government contracts in 2000 ($21,032 in 1999).

3. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following:

	MARCH 31	
	2000	1999
Land	$ 60,000	$ 60,000
Building	1,679,424	1,679,424
Manufacturing equipment	4,083,453	3,899,744
Tools	88,092	88,092
Office equipment	193,952	188,884
Leasehold improvements	536,447	536,447
	6,641,368	6,452,591
Less accumulated depreciation	4,181,608	3,860,088
	$2,459,760	$2,592,503

4. LONG-TERM DEBT

In June 1996, the Company began construction of its new production facility in Aberdeen, South Dakota to fabricate wavelength division multiplexed modulators. As part of its financing of the facility, the Company has received economic assistance from the State of South Dakota Governor's Office of Economic Development and the Aberdeen Development Corporation (the parties) as follows:

<TABLE>

<S>	<C>
Proceeds:	
Bond financing for building construction and equipment	$1,895,000
Low interest loans	875,000
Forgivable loans	750,000
Equity investment - purchase of 288,992 shares of common stock	1,200,000
	$4,720,000

</TABLE>

The following is a summary of the outstanding debt at March 31 related to the Aberdeen facility:

<TABLE>
<CAPTION>

	2000	1999
<S>	<C>	<C>
South Dakota Governor's Office of Economic Development and the Aberdeen Development Corporation Bond, 5% to 6.75%, due in various installments through 2016	$1,780,000	$1,840,000
Low interest loans, 0% to 3%, due in various .... installments through 2016	556,396	586,107
Forgivable loans, 3%, due in various installments through 2003	712,862	788,605
	----------	----------
	$3,049,258	$3,214,712
	==========	==========

</TABLE>

The forgivable loans are contingent upon employment levels at the facility meeting preset criteria. In exchange for any loans forgiven, the Company will grant warrants to purchase common stock of the Company based on the number of job credits earned by the Company in the preceding 12 months divided by the exercise price. As of March 31, 2000, 23,864 warrants have been issued for loans forgiven totaling $104,103. The carrying value of the low interest loans and forgivable loans, based on similar instruments, approximates market at March 31, 2000 and 1999.

At March 31, 2000 and 1999, the Company had on deposit with trustees $278,353 and $593,100 in reserve funds for current bond maturities of which $65,000 and $60,000 are held in escrow. These funds are included in bond reserve funds in the accompanying balance sheets. The loan agreement requires the Company to maintain certain minimum levels of net worth and to maintain certain income to outstanding debt ratios. The Company was out of compliance with these covenants in fiscal 2000. Such noncompliance does not constitute an event of default, but triggers further covenants under the loan agreement with which the Company is in compliance at March 31, 2000. The carrying value of the bonds, based on similar instruments, approximates market value at March 31, 2000 and 1999.

As partial payment of expenses related to the Aberdeen financing, the Company issued warrants to purchase 31,875 shares of the Company's common stock at an exercise price of $4.00 per share. The warrants expire in March 2002. The value assigned to the warrants of $31,875 has been capitalized as bond placement costs and is amortized over the life of the loan agreement.

As part of the Company's plan to construct this production facility, the city of Aberdeen, South Dakota gave the Company land with an approximate fair market value of $250,000. The gift was contingent upon the Company staying in the new building through June 23, 2002.

All of the above debt is secured by land, buildings, and certain equipment of the Company.

Interest paid during fiscal year 2000, 1999 and 1998 was $142,662, $149,243, and $181,066, respectively.

Maturities of long-term debt are as follows (assuming no debt is forgiven): 2001 - - $140,871; 2002 - $377,908; 2003 - $528,701; 2004 - $315,709; 2005 - $102,639; thereafter - $1,583,430.

5. INCOME TAXES

As of March 31, 2000, the Company has net operating loss carryovers for federal income tax purposes of approximately $10,000,000, expiring in fiscal years 2001 to 2019, and $43,000 in research and development credits, expiring in fiscal 2001, which may be used to offset federal income taxes.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts used for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred taxes are as follows:

5. INCOME TAXES (CONTINUED)

	MARCH 31 2000	1999
Net operating losses	$ 3,395,000	$ 2,113,000
Depreciation	9,000	6,000
Research and development credits	43,000	43,000
Other	100,000	71,000
Total deferred tax asset	3,547,000	2,233,000
Less valuation allowance	(3,547,000)	(2,233,000)
Net deferred taxes	$ -	$ -

Income tax expense consists entirely of state taxes in 2000, 1999 and 1998.

6. SHAREHOLDERS' EQUITY

The Board of Directors may by resolution establish from the undesignated shares different classes or series of shares and may fix the relative rights and preferences of shares in any class or series.

In fiscal year 2000, the Company sold in a private placement 500 shares of its preferred stock, resulting in net proceeds of $4,725,000. The proceeds will be used to fund operations. Also in September 1999, the Company sold 465,000 shares of its common stock in a private placement resulting in net proceeds of $1,870,475. These funds were used to fund operations.

The preferred stock carries a 2% cumulative dividend payable upon conversion in cash or common stock. The preferred stock (plus any unpaid accreted dividends) is convertible to common stock at the option of the holder and is automatically converted on March 15, 2003 or, if earlier, on the date that the common stock has sustained a market value of $50 per share for 20 consecutive trading days. The initial conversion price of $35 per share is subject to adjustment pursuant to the antidilution provisions of the Certificate of Designation of Voting Power, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of 2% Series A Convertible Preferred Stock (the "Certificate"). In addition, beginning September 14, 2000, and each monthly period thereafter while shares of the preferred stock are outstanding, the conversion price is reset in accordance with the formula set forth in the Certificate. A holder of the preferred stock may not convert into shares of common stock if after the conversion the holder, together with its affiliates, would beneficially own over 9.999% of the outstanding shares of the common stock. This restriction may be waived by a holder on not less than 61 days' notice to the Company. In addition, as long as the Company's common stock is listed for trading on Nasdaq, the Company may not issue common stock on conversion of the preferred stock in an amount which exceeds 19.999% of the outstanding common stock immediately prior to the sale of the preferred stock without obtaining prior shareholder approval. The preferred stock is non-voting (except in specified circumstances) and is subject to redemption at the Company's option on 30 days' notice (subject to certain restrictions if the effective conversion price at the time of notice of redemption is $30 or more). The Company is required to redeem the preferred stock upon certain default events. The preferred stock is redeemable under certain circumstances as stated in the Certificate.

7. STOCK OPTIONS AND WARRANTS

Option activity is summarized as follows:

<TABLE>
<CAPTION>

	SHARES AVAILABLE FOR GRANT	OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE PER SHARE
<S>	<C>	<C>	<C>
Balance March 31, 1997	661,338	81,000	$. 20
Additional shares reserved	500,000	-	-
Granted	(25,000)	25,000	6.19
Exercised	-	(6,000)	4.22
Canceled	70,000	(70,000)	5.19

	-------	-------	
Balance March 31, 1998	1,206,338	30,000	6.10
Granted	(252,500)	252,500	4.09
Canceled	20,000	(20,000)	6.24
	-------	-------	
Balance March 31, 1999	973,838	262,500	4.18
Granted	(65,000)	65,000	5.84
Canceled	35,000	(35,000)	4.67
	-------	-------	
Balance March 31, 2000	943,838	292,500	$ 4.49
	=======	=======	

</TABLE>

The Company has various incentive and non-qualified stock option plans which are used as an incentive for directors, officers and other employees, consultants and technical advisers. Options are granted at values determined based on fair market value on the date of grant and vesting normally occurs over a four-year period.

The number of shares exercisable at March 31, 2000, 1999 and 1998 was 262,500, 15,000 and 5,000, respectively, at a weighted average exercise price of $4.10, $5.70 and $5.65 per share, respectively.

The weighted average fair value of options granted in 2000, 1999 and 1998 was $5.30, $2.05 and $2.83 per share, respectively. The exercise price of options outstanding at March 31, 2000 ranged from $3.77 to $13.18 per share.

Pro forma information regarding net loss and net loss per share is required by FASB Statement No. 123 and has been determined as if the Company had accounted for its employee stock options under the fair value method of Statement 123. The fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted-average assumptions for 2000, 1999 and 1998, respectively: risk-free interest rates of 6.50%, 4.55%, and 5.61%, 0% dividend rate, volatility factor of the expected market price of the Company's common stock of .44, .48, and .44 and a weighted-average expected life of the options of 5 years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value statement, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The Company's pro forma information is as follows:

<TABLE>
<CAPTION>

	2000	1999	1998
	----	----	----
<S>	<C>	<C>	<C>
Pro forma net loss	$(4,083,136)	$(2,626,002)	$(991,568)
Pro forma net loss per common share - basic and diluted	$(.47)	$(.31)	$(.12)
	=====	=====	=====

</TABLE>

These pro forma amounts may not be indicative of future years' amounts.

The following is a table of the warrants to purchase shares of the Company's common stock:

<TABLE>
<CAPTION>

	WARRANTS OUTSTANDING	EXERCISE PRICE PER SHARE	EXPIRATION DATE
	-------	--------------	-----------
<S>	<C>	<C>	<C>
Balance at March 31, 1997..................	401,875	$3.30 - $6.75	1997 - 2002
Granted.................................	15,218	4.00	2003
Exercised...............................	(202,150)	3.30 - 6.75	1997 - 1999
Expired.................................	(103,250)	6.75	1997

Balance at March 31, 1998	111,693	3.30 - 4.00	1999 - 2003
Granted	8,646	5.00	2004
Balance at March 31, 1999	120,339	3.30 - 5.00	1999 - 2004
Granted	108,337	4.88 - 49.47	2001 - 2005
Exercised	20,718	3.30 - 4.00	1999 - 2003
Expired	3,100	3.30	1999
Balance at March 31, 2000	204,858	$3.75 - $49.47	2000 - 2005

</TABLE>

8. COMMITMENTS

The Company leases office and manufacturing facilities from a partnership whose two partners are major shareholders and officers of the Company. The lease agreement, classified as an operating lease, expires November 30, 2004 and provides for periodic increases of the rental rate based on increases in the consumer price index. Future minimum lease obligations under the lease as of March 31, 2000 are as follows:

Year ending March 31:	
2001	$107,280
2002	107,280
2003	107,280
2004	107,280
2005	71,520

Rental expense, all of which was paid to the partnership, was $121,000 in fiscal 2000, $116,000 in fiscal 1999 and $118,000 in fiscal 1998.

9. MAJOR CUSTOMERS

In fiscal 2000, the U.S. Army accounted for 35% of net sales and contract fees. No other customer accounted for more than 10% of net sales and contract fees. In fiscal years 1999 and 1998 operating agencies of the U.S. Government accounted for 67% and 89%, respectively, of the Company's net sales and contract fees as follows:

	1999	1998
Air Force	15%	18%
Army	-	22
Navy	12	34
ARPA	40	15
Total	67%	89%

EXHIBIT INDEX

<TABLE>
<CAPTION>

NUMBER	DESCRIPTION	PAGE NUMBER OR INCORPORATED BY REFERENCE TO
<S>	<C>	<C>
3.1	Restated Articles of Incorporation, as amended to date, and Statement regarding establishment of class of shares	Exhibit 3.1 to Registrant's Report on Form 10-KSB for the fiscal year ended March 31, 1995
3.2	Bylaws, as amended and restated to date	Exhibit 3.2 to Registrant's Report on Form 10-KSB for the fiscal year ended March 31, 1999
4.1(a)	State of South Dakota Board of Economic Development $300,000 Promissory Note, REDI Loan: 95-13-A	Exhibit 4.1(a) to the Report on 10-QSB for the quarter ended June 30, 1996 (the "June 1996 10-QSB")
4.1(b)	State of South Dakota Board of Economic Development Security Agreement REDI Loan No: 95-13-A dated May 28, 1996	Exhibit 4.1(b) to the June 1996 10-QSB

4.2(a)	$700,000 Loan Agreement dated June 24, 1996 by and between Aberdeen Development Corporation and APA Optics, Inc.	Exhibit 4.2(a) to the June 1996 10-QSB
4.2(b)	$300,000 Loan Agreement dated June 24, 1996 between Aberdeen Development Corporation and APA Optics, Inc.	Exhibit 4.2(b) to the June 1996 10-QSB
4.2(c)	$250,000 Loan Agreement dated June 24, 1996 by and between Aberdeen Development Corporation and APA Optics, Inc.	Exhibit 4.2(c) to the June 1996 10-QSB
4.2(d)	$300,000 Loan Agreement dated June 24, 1996 by and between Aberdeen Development Corporation and APA Optics, Inc.	Exhibit 4.2(d) to the June 1996 10-QSB
4.3(a)	Loan Agreement between South Dakota Economic Development Finance Authority and APA Optics, Inc.	Exhibit 4.3(a) to the June 1996 10-QSB
4.3(b)	Mortgage and Security Agreement - One Hundred Day Redemption from APA Optics, Inc. to South Dakota Economic Development Finance Authority dated as of June 24, 1996	Exhibit 4.3(b) to the June 1996 10-QSB
4.4(a)	Subscription and Investment Representation Agreement of NE Venture, Inc.	Exhibit 4.4(a) to the June 1996 10-QSB
4.4(b)	Form of Common Stock Purchase Warrant for NE Venture, Inc.	Exhibit 4.4(b) to the June 1996 10-QSB
4.5(a)	Certificate of Designation for 2% Series A Convertible Preferred Stock	Exhibit 4.5(a) to Registration Statement on Form S-3 (Commission File No. 333-33968)

NUMBER	DESCRIPTION	PAGE NUMBER OR INCORPORATED BY REFERENCE TO
4.5(b)	Form of common stock warrant issued in connection with 2% Series A Convertible Preferred Stock	Exhibit 4.5(b) to Registration Statement on Form S-3 (Commission File No. 333-33968)
4.6	Common Stock Purchase Warrant issued to Ladenburg Thalmann & Co. Inc. to purchase 84,083 shares	Page 30
10.1(a)	Sublease Agreement between the Registrant and Jain-Olsen Properties and Sublease Agreement and Option Agreement between the Registrant and Jain-Olsen Properties	Exhibit 10.1 to the Registration Statement on Form S-18 filed with the Chicago Regional Office of the Securities and Exchange Commission on June 26, 1986
10.1(b)	Amendment and Extension of Sublease Agreement dated August 31, 1999	Page 42
*10.2(a)	Stock Option Plan for Nonemployee Directors	Exhibit 10.3a to Registrant's Report on Form 10-KSB for the fiscal year ended March 31, 1994 (the "1994 10-KSB")
*10.2(b)	Form of option agreement issued under the plan	Exhibit 10.3b to 1994 10-KSB
*10.3	1997 Stock Compensation Plan	Exhibit 10.3 to Registrant's Report on Form 10-KSB for the fiscal year ended March 31, 1997
*10.4	Insurance agreement by and between the Registrant and Anil K. Jain	Exhibit 10.5 to Registrant's Report on Form 10-K for the fiscal year ended March 31, 1990
*10.5	Form of Agreement regarding Repurchase of Stock upon Change in Control Event with Anil K. Jain and Kenneth A. Olsen	Exhibit 10.1 to Registrant's Report on Form 10-QSB for the quarter ended September 30, 1997 ("September 1997 10-QSB")
*10.6	Form of Agreement regarding Employment/Compensation upon Change in Control with Messrs. Jain and Olsen	Exhibit 10.2 to the September 1997 10-QSB
23.1	Consent of Ernst & Young LLP	Page 44
27	Financial data schedule	Page 45

</TABLE>

*Indicates management contract or compensation plan or arrangement required to be filed as an exhibit to this form.

Exhibit 4.6

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED OR EXERCISED UNLESS AND UNTIL SAID SECURITY IS REGISTERED UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY IS OBTAINED TO THE EFFECT THAT SUCH REGISTRATION IS NOT REQUIRED. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT ARE SUBJECT TO THE RESTRICTIONS ON TRANSFER SET FORTH IN SECTIONS 4 AND 10 OF THIS WARRANT.

Ladenburg Thalmann Warrant No. 1 | Number of Shares: 84,083 (subject to adjustment)

Date of Issuance: June 21, 2000

APA OPTICS, INC.

Common Stock Purchase Warrant

(Void after June 20, 2003)

APA Optics, Inc., a Minnesota corporation (the "Company"), for value received, hereby certifies that Ladenburg Thalmann & Co. Inc., or its registered assigns (the "Registered Holder"), is entitled, subject to the terms and conditions set forth below, to purchase from the Company, at any time or from time to time on or after the date of issuance and on or before 5:00 p.m. (Eastern time) on June 20, 2003, 84,083 shares of Common Stock, $.01 par value per share, of the Company, at a purchase price of $17.8395 per share. The shares purchasable upon exercise of this Warrant, and the purchase price per share, each as adjusted from time to time pursuant to the provisions of this Warrant, are hereinafter referred to as the "Warrant Shares" and the "Purchase Price," respectively.

1. Exercise.

(a) This Warrant may be exercised by the Registered Holder, in whole or in part, by surrendering this Warrant, with the purchase form appended hereto as Exhibit I duly executed by the Registered Holder or by the Registered Holder's duly authorized attorney, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by payment in full, in lawful money of the United States, of the Purchase Price payable in respect of the number of Warrant Shares purchased upon such exercise.

(b) The Registered Holder may, at its option, elect to pay some or all of the Purchase Price payable upon an exercise of this Warrant by cancelling a portion of this Warrant. If the Registered Holder wishes to exercise this Warrant by this method, the number of Warrant Shares purchasable (which shall in no event exceed the total number of Warrant Shares purchasable under this Warrant as set forth above, subject to adjustment under Section 2 of this Warrant) shall be determined as follows:

X = Y [(A-B) / A]

X = the number of Warrant Shares to be issued to the Holder.

Y = the number of Warrant Shares with respect to which this Warrant is being exercised.

A = the Fair Market Value of one share of Common Stock.

B = the Purchase Price of one share of Common Stock.

The Fair Market Value per share of Common Stock shall be determined as follows:

(i) If the Common Stock is listed on a national securities exchange, the Nasdaq National Market or another nationally recognized trading system (including, without limitation, the OTC Bulletin Board and, if the average daily trading volume for the preceding 10 days has been at least 100,000 shares, the Pink Sheets) as of the Exercise Date, the Fair Market Value per share of Common Stock shall be deemed to be the average of the high and low reported sale prices per share of Common Stock thereon on the trading day immediately preceding the Exercise Date (provided that if no such price is reported on such day, the Fair Market Value per share of Common Stock shall be determined pursuant to clause (ii)).

(ii) If the Common Stock is not listed on a national securities exchange, the Nasdaq National Market or another nationally recognized trading system as of the Exercise Date, the Fair Market Value per share of Common Stock shall be deemed to be the amount most recently determined by the Board of Directors to represent the fair market value per share of the Common Stock (including without limitation a determination for purposes of granting Common Stock options or issuing Common Stock under an employee benefit plan of the Company); and, upon request of the Registered Holder, the Board of Directors (or a representative thereof) shall promptly notify the Registered Holder of the Fair Market Value per share of Common Stock. Notwithstanding the foregoing, if the Board of Directors has not made such a determination within the three-month period prior to the Exercise Date, then (A) the Board of Directors shall make a determination of the Fair Market Value per share of the Common Stock within 15 days of a request by the Registered Holder that it do so, and (B) the exercise of this Warrant pursuant to this subsection 1(b) shall be delayed until such determination is made.

(c) Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided in subsection 1(a) above accompanied by payment in full of the Purchase Price (the "Exercise Date"). At such time, the person or persons in whose name or names any certificates for Warrant Shares shall be issuable upon such exercise as provided in subsection 1(d) below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates.

(d) As soon as practicable after the exercise of this Warrant in full or in part, and in any event within 5 business days thereafter, the Company, at its expense, will cause to be issued in the name of, and delivered to, the Registered Holder, or as such Holder (upon payment by such Holder of any applicable transfer taxes) may direct:

(i) a certificate or certificates for the number of full Warrant Shares to which the Registered Holder shall be entitled upon such exercise plus, in lieu of any fractional share to which the Registered Holder would otherwise be entitled, cash in an amount determined pursuant to Section 3 hereof; and

(ii) in case such exercise is in part only, a new warrant or warrants (dated the date hereof) of like tenor, calling in the aggregate on the face or faces thereof for the number of remaining Warrant Shares (without giving effect to any adjustment therein).

2. Adjustments.

(a) Adjustment for Stock Splits and Combinations. If the Company shall at any time or from time to time after the date on which this Warrant was first issued (the "Original Issue Date") effect a subdivision of the outstanding Common Stock, the Purchase Price then in effect immediately before that subdivision shall be proportionately decreased. If the Company shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Purchase Price then in effect immediately before the combination shall be proportionately increased. Any adjustment under this paragraph shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Adjustment for Certain Dividends and Distributions. In the event the Company at any time, or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, then and in each such event the Purchase Price then in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Purchase Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution;

provided, however, if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Purchase Price shall be recomputed accordingly as of the close of business on such record date and thereafter the

Purchase Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends or distributions.

(c) Adjustment in Number of Warrant Shares. When any adjustment is required to be made in the Purchase Price pursuant to subsections 2(a) or 2(b), the number of Warrant Shares purchasable upon the exercise of this Warrant shall be changed to the number determined by dividing (i) an amount equal to the number of shares issuable upon the exercise of this Warrant immediately prior to such adjustment, multiplied by the Purchase Price in effect immediately prior to such adjustment, by (ii) the Purchase Price in effect immediately after such adjustment.

(d) Adjustment for Mergers or Reorganizations, etc. If there shall occur any reorganization, recapitalization, consolidation or merger involving the Company in which the Common Stock is converted into or exchanged for securities, cash or other property (other than a transaction covered by subsections 2(a) or 2(b)), then, following any such reorganization, recapitalization, consolidation or merger, the Registered Holder shall receive upon exercise hereof the kind and amount of securities, cash or other property which the Registered Holder would have been entitled to receive if, immediately prior to such reorganization, recapitalization, consolidation or merger, the Registered Holder had held the number of shares of Common Stock subject to this Warrant ("Substituted Property"). In the event that the Company is not the acquiring or surviving entity in such transaction, then the acquiror or survivor, at its option, may repurchase this Warrant, effective not later than the effective date of the acquisition, merger, or other transaction, by issuing to the Holder the Substituted Property which would have been issuable if the Holder had chosen to exercise this Warrant in full using the exercise method described in Section 1(b), above, at the time of the repurchase.

(e) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Purchase Price pursuant to this Section 2, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to the Registered Holder a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property for which this Warrant shall be exercisable and the Purchase Price) and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of the Registered Holder, furnish or cause to be furnished to the Registered Holder a certificate setting forth (i) the Purchase Price then in effect and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the exercise of this Warrant.

3. Fractional Shares. The Company shall not be required upon the exercise of this Warrant to issue any fractional shares, but shall make an adjustment therefor in cash on the basis of the Fair Market Value per share of Common Stock, as determined pursuant to subsection 1(b) above.

4. Requirements for Transfer.

(a) This Warrant and the Warrant Shares shall not be sold or transferred unless either (i) they first shall have been registered under the Securities Act of 1933, as

amended (the "Act"), or (ii) the Company first shall have been furnished with an opinion of legal counsel, reasonably satisfactory to the Company, to the effect that such sale or transfer is exempt from the registration requirements of the Act.

(b) Notwithstanding the foregoing, no registration or opinion of counsel shall be required for (i) a transfer by a Registered Holder which is a corporation to a wholly owned subsidiary of such corporation, a transfer by a Registered Holder which is a partnership to a partner of such partnership or a retired partner of such partnership or to the estate of any such partner or retired partner, a transfer by a Registered Holder which is a limited liability company to a member of such limited liability company or a retired member or to the estate of any such member or retired member, or a transfer by a Registered Holder which is a member of the National Association of Securities Dealers (the "NASD") to an officer of the Registered Holder as permitted by NASD rules, provided that the transferee in each case agrees in writing to be subject to the terms of this Section 4, or (ii) a transfer made in accordance with Rule 144 under the Act.

(c) Each certificate representing Warrant Shares shall bear a legend substantially in the following form:

> "The securities represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be offered, sold or otherwise transferred, pledged or hypothecated unless and until such securities are registered under such Act or an opinion of counsel satisfactory to the Company is obtained to the effect that such registration is not required."

The foregoing legend shall be removed from the certificates representing any Warrant Shares, at the request of the holder thereof, at such time as they become eligible for resale pursuant to Rule 144(k) under the Act.

5. No Impairment. The Company will not, by amendment of its charter or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder of this Warrant against impairment.

6. Notices of Record Date, etc. In the event:

(a) the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time deliverable upon the exercise of this Warrant) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of stock of any class or any other securities, or to receive any other right; or

(b) of any capital reorganization of the Company, any reclassification of the Common Stock of the Company, any consolidation or merger of the Company with or into another corporation (other than a consolidation or merger in which the Company is the surviving

entity and its Common Stock is not converted into or exchanged for any other securities or property), or any transfer of all or substantially all of the assets of the Company; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other stock or securities at the time deliverable upon the exercise of this Warrant) shall be entitled to exchange their shares of Common Stock (or such other stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up. Such notice shall be mailed at least ten days prior to the record date or effective date for the event specified in such notice. Failure by the Company to give timely notice, as specified above, shall not invalidate any action taken by the Board of Directors or the stockholders in connection with the matter to which the record date relates.

7. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery upon the exercise of this Warrant, such number of Warrant Shares and other securities, cash and/or property, as from time to time shall be issuable upon the exercise of this Warrant.

8. Exchange of Warrants. Upon the surrender of this Warrant by the Registered Holder, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 4 hereof, issue and deliver to or upon the order of such Holder, at the Company's expense, a new Warrant or Warrants of like tenor, in the name of the Registered Holder or as the Registered Holder (upon payment by the Registered Holder of any applicable transfer taxes) may direct, calling in the aggregate on the face or faces thereof for the number of shares of Common Stock (or other securities, cash and/or property) then issuable upon exercise of this Warrant.

9. Replacement of Warrants. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and (in the case of loss, theft or destruction) upon delivery of an indemnity agreement (with surety if reasonably required) in an amount reasonably satisfactory to the Company, or (in the case of mutilation) upon surrender and

cancellation of this Warrant, the Company will issue, in lieu thereof, a new Warrant of like tenor.

10. Transfers, etc.

(a) The Company will maintain a register containing the name and address of the Registered Holder of this Warrant. The Registered Holder may change its or his address as shown on the warrant register by written notice to the Company requesting such change.

(b) Subject to the provisions of Section 4 hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant with a properly executed assignment (in the form of Exhibit II hereto) at the principal office of the Company.

(c) Until any transfer of this Warrant is made in the warrant register, the Company may treat the Registered Holder as the absolute owner hereof for all purposes; provided, however, that if and when this Warrant is properly assigned in blank, the Company may (but shall not be obligated to) treat the bearer hereof as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.

11. Representations of the Registered Holder. The Registered Holder of this Warrant represents and warrants to the Company as follows:

(a) Investment. The Registered Holder is acquiring this Warrant and the Warrant Shares issuable upon the exercise of this Warrant, for its own account for investment and not with a view to, or for sale in connection with, any distribution thereof, nor with any present intention of distributing or selling the same, except as otherwise may be permitted under applicable securities laws.

(b) Authority. The Registered Holder has full power and authority to enter into and to perform this Warrant in accordance with its terms. The Registered Holder has not been organized, reorganized or recapitalized specifically for the purpose of investing in the Company.

(c) Accredited Investor. The Registered Holder is an Accredited Investor within the definition set forth in Rule 501(a) promulgated under the Securities Act.

12. Mailing of Notices, etc. All notices and other communications from the Company to the Registered Holder shall be mailed by first-class certified or registered mail, postage prepaid, to the address last furnished to the Company in writing by the Registered Holder. All notices and other communications from the Registered Holder or in connection herewith to the Company shall be mailed by first-class certified or registered mail, postage prepaid, to the Company at its principal office set forth below. If the Company should at any time change the location of its principal office to a place other than as set forth below, it shall give prompt written notice to the Registered Holder and thereafter all references in this Warrant to the location of its principal office at the particular time shall be as so specified in such notice.

13. No Rights as Stockholder. Until the exercise of this Warrant, the Registered Holder shall not have or exercise any rights by virtue hereof as a stockholder of the Company. Notwithstanding the foregoing, in the event (i) the Company effects a split of the Common Stock by means of a stock dividend and the Purchase Price of and the number of Warrant Shares are adjusted as of the date of the distribution of the dividend (rather than as of the record date for

such dividend), and (ii) the Registered Holder exercises this Warrant between the record date and the distribution date for such stock dividend, the Registered Holder shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

14. Change or Waiver. Any term of this Warrant may be changed or waived only by an instrument in writing signed by the party against which enforcement of the change or waiver is sought.

15. Section Headings. The section headings in this Warrant are for the convenience of the parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the parties.

16. Governing Law. This Warrant will be governed by and construed in accordance with the internal laws of the State of Minnesota (without reference

to the conflicts of law provisions thereof).

EXECUTED as of the Date of Issuance indicated above.

APA OPTICS, INC.

By:________________________________
Title:_______________________________

ATTEST:

____

EXHIBIT I

PURCHASE FORM

To:_________________ Dated:____________

The undersigned, pursuant to the provisions set forth in the attached Warrant (No. ___), hereby irrevocably elects to purchase (CHECK APPLICABLE BOX):

[ ] _____ shares of the Common Stock covered by such Warrant; or

[ ] the maximum number of shares of Common Stock covered by such Warrant pursuant to the cashless exercise procedure set forth in Section 1(b).

The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant, which is $________. Such payment takes the form of (CHECK APPLICABLE BOX OR BOXES):

[ ] $______ in lawful money of the United States; and/or

[ ] the cancellation of such portion of the attached Warrant as is exercisable for a total of _____ Warrant Shares (using a Fair Market Value of $_____ per share for purposes of this calculation); and/or

[ ] the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in Section 1(b), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in Section 1(b).

Signature: ______________________

Address: ______________________

____

EXHIBIT II

ASSIGNMENT FORM

FOR VALUE RECEIVED, ____ hereby sells, assigns and transfers all of the rights of the undersigned under the attached Warrant (No. ____) with respect to the number of shares of Common Stock covered thereby set forth below, unto:

Name of Assignee	Address	No. of Shares

Dated:_____________________ Signature:________________________________

Signature Guaranteed:

By: _________________________________
The signature should be guaranteed by
an eligible guarantor institution (banks,
stockbrokers, savings and loan associations
and credit unions with membership in
an approved signature guarantee medallion
program) pursuant to Rule 17Ad-15
under the Securities Exchange Act of 1934.

Exhibit 10.1(b)

AMENDMENT AND EXTENSION OF SUBLEASE

THIS AMENDMENT AND EXTENSION OF SUBLEASE ("Amendment") is made as of the 31st day of August, 1999, and is by and between Jain-Olsen Properties, a Minnesota corporation ("Lessor"), and APA Optics, Inc., a Minnesota corporation ("Lessee").

RECITALS

A. Lessor and Lessee entered into that certain Sublease Agreement dated December 1, 1984 ("Sublease") for certain premises ("Premises") located at 2950 N.E. 84th Lane, Blaine, Minnesota, and legally described in the Sublease. The Sublease was amended by that certain Sublease Amendment and Option Agreement dated March 11, 1985.

B. The original term of the Sublease was ten (10) years and included the option for the Lessee to renew the term for two terms of five (5) years each.

C. The original term expired November 30, 1994. Lessee renewed the term for an additional five years. The Sublease as extended now expires November 30, 1999.

D. Lessor and Lessee desire and intend to amend the Sublease and also to extend the Sublease for an additional term of five (5) commencing December 1, 1999, upon the terms and conditions provided in this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor and Lessee agree as follows:

1. EXTENSION OF SUBLEASE. The term of the Sublease is hereby extended by an additional term of five (5) years which shall commence December 1, 1999 and shall expire November 30, 2004, unless sooner terminated as provided in the Sublease.

2. ANNUAL RENT. Commencing January 1, 2000, annual rent shall be $107,280. Paragraph 3 of the Addendum to Lease is amended such that on January 1, 2002 and on January 1 of every other year thereafter, there will be an adjustment of one hundred percent (100%) of the increase in the Consumer Price Index for the preceding two years.

3. REAL PROPERTY TAXES. Commencing January 1, 2000, Lessee's pro rata share of the real estate taxes due and payable on the premises shall be one hundred percent (100%).

4. ADDITIONAL RENEWAL TERMS. The Sublease is hereby amended to provide that in addition to the five (5) year renewal term that is to commence December 1, 1999, Lessee shall have the option to renew the Sublease for two (2) additional five (5) year renewal terms each, said option to renew to be exercised as provided in paragraph 4 of the Addendum to Sublease. The option to renew may be exercised to commence the first of such renewal terms as of December 1, 2004, and may also be exercised to commence the second of said renewal terms as of December 1, 2009. The terms and conditions of each of said renewal terms shall be the terms and conditions of the Sublease, as currently amended and extended, including the option to purchase the Optioned Premises (as defined therein) at any time during the last ninety (90) days of each of the renewal terms and on the terms and conditions provided in the Addendum to Sublease.

5. LEASE AGREEMENT. Lessor and Lessee acknowledge and agree that the Sublease is subject to an underlying Lease Agreement dated as of December 1, 1984 ("Lease") between City of Blaine, as lessor, and Jain-Olsen Properties, as lessee. The term of the Lease expires September 1, 2009, unless sooner terminated as provided therein. Lessor, as the lessee under the Lease, has the option to purchase the subject property on the terms and conditions set forth in the Lease. If Lessor exercises said option to purchase and the subject property is conveyed to Lessor, the terms and conditions of this Sublease shall survive and continue in full force and effect as a lease of the Premises.

6. AFFIRMATION OF SUBLEASE. As modified herein, Lessor and Lessee reaffirm all of the terms and conditions of the Sublease including all addendum and amendments thereto.

IN WITNESS WHEREOF, Lessor and Lessee have executed this Amendment to be effective as of the date first written above.

LESSOR:	LESSEE:
JAIN-OLSEN PROPERTIES	APA OPTICS, INC.
By --------------------------------	By --------------------------------
Kenneth A. Olsen	Dr. Anil K. Jain
Its General Partner	Its President

Exhibit 23.1

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statements (Form S-3 No. 333-33966 and Form S-3 No. 333-33968) of APA Optics, Inc. and in the related Prospectus of our report dated May 5, 2000, with respect to the financial statements of APA Optics, Inc. included in this Form 10-K for the year ended March 31, 2000.

Ernst & Young LLP

Minneapolis, MN
June 28, 2000

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE COMPANY'S FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED MARCH 31, 2000, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
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