SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

[X] Annual Report Pursuant to Section 13 or $15\,\text{(d)}$ of the Securities Exchange Act of $1934\,$

For the fiscal year ended March 31, 2002.

[] 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(q) of the Act:

COMMON STOCK, PAR VALUE \$.01 PER SHARE

(TITLE OF CLASS)

SERIES B PREFERRED SHARE PURCHASE RIGHTS

(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.

The aggregate market value of the voting stock held by non-affiliates of the registrant as of May 24, 2002, was approximately \$22,904,368.

The number of shares of common stock outstanding as of May 24, 2002 was 11,875,881.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of our proxy statement for the annual shareholders meeting to be held in August 2002 are incorporated by reference into Part III.

PART I

ITEM 1. BUSINESS.

GENERAL DEVELOPMENT OF THE BUSINESS.

Since the founding of APA Optics, Inc. in 1979, we have focused on leading edge research in gallium nitride (GaN), sophisticated optoelectronics, and optical systems, with the primary goal of developing advanced products for subsequent fabrication and marketing. Based on this research we have developed multiple products including dense wavelength division multiplexing (DWDM) optical components, a range of GaN based devices, and precision optical products. We believe that our DWDM and GaN product areas have significant potential markets and we have developed specific expertise and/or patent positions relevant to them. As a long time designer and manufacturer of

precision optical components, we also have substantial expertise in this area.

In addition to manufacturing and marketing products, we are actively seeking to license certain portions of our intellectual property portfolio related to GaN to other companies. While we have had discussions with multiple companies, we have not entered into any license arrangements as of the date of this report. We consider the market for products using our GaN technology to be just now emerging. Such products may include GaN based transistors for cell phone base stations.

Our DWDM components are designed to enable operators of fiber optic networks to cost effectively increase the capacity of their networks. Several factors, including deregulation of the telcom industry and readily available capital, fueled strong growth in the construction of these networks in recent years, which has resulted in overcapacity. This overcapacity, coupled with a recession and significantly tighter capital markets, has lead to a steep decline in capital expenditures for fiber optic networks and network components, including DWDMs.

In fiscal 2000, we eliminated 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.

DESCRIPTION OF BUSINESS.

Products

We currently offer the products described below.

-- Dense Wavelength Division Multiplexing (DWDM) Components. We

manufacture and market a family of DWDM components based on patented bulk diffraction grating technology. These components enable fiber optic networks to transmit data simultaneously on several wavelengths of light within each optical fiber of a cable as opposed to a single wavelength of light in networks not employing DWDM technology. This multiplexing of data streams using different wavelengths of light significantly increases the volume of data transmission through an optical network without requiring the installation of additional fiber optic cable. Our DWDM components offer leading-edge performance for key parameters, such as insertion loss and crosstalk, which determine the integrity of the signals combined on the fiber. These advantages are magnified as more and more individual signals are multiplexed onto a single fiber, a current trend in the industry. These components also operate without need for additional temperature control, a feature that supports the network operator's goal of minimizing power consumption.

Our design allows us to configure DWDM components to work with singlemode or multimode optical fiber. Singlemode fiber is typically associated with transmission over long distances (required for long haul networks) and metro area rings, while multimode fiber is typically associated with shorter networks found in campus and local area networks. Multimode demultiplexers are also an enabling component for multiwavelength fiber free communications systems.

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We hold three patents in this field, the earliest of which was issued in September 1995. In addition, we have two pending patents and numerous international filings covering key markets in Europe and Asia.

- - Precision Optical Products. We manufacture and sell precision optical

products to third parties; however, we expect a significant portion of our capacity in this area to be directed at supplying components for our DWDM components in the future. Custom optical products include:

- 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, alignment verification optics for dual magnetic recording heads, and multi-magnification optics systems for optical comparators.
- 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 APA-fabricated lens components. We also use our thin film coating facility to design, develop and fabricate

coatings for lens components supplied by customers.

- Optical Windows and Flats. We manufacture standard, off-the-shelf, ------high quality, optical windows and reference flats.
- -- Ultraviolet (UV) Detectors. We currently manufacture and sell a wide

range of UV detectors. The UV detectors are high response compound semiconductor devices based on gallium nitride (GaN) and aluminum gallium nitride (AlGaN). They are compact and rugged compared to competing technologies and have applications in spectrometry, UV curing processes, UV lamp monitors, solar radiation measurement, excimer-laser measurement and calibration, biomedical instrumentation, and flame detection and monitoring. We have been awarded seven patents in the area of compound semiconductor devices and have one pending

While we currently manufacture and sell a wide range of UV detectors as components, our focus in this area is on value-added products based on our UV detectors. We plan to actively market two such products in Fiscal 2003:

-- Sun(UV)Watch(R). The Sun(UV)Watch(R) is a personal ultraviolet

radiation (UV) monitor that also incorporates a time/day/date function. It detects and monitors UV radiation that is potentially hazardous to human health, telling the user the safe exposure time according to government recommendations and sounding an alarm when that time has expired. Through fiscal 2002 we trial marketed our Sun(UV)Watch(R). Based on the results of this trial marketing we made several improvements to the product and are preparing for a full rollout in fiscal 2003. All of our UV sensing value-added products are built around our production UV detectors. We plan to market a family of products designed to be worn on the wrist like a watch or clipped on a personal item such as a backpack or golf bag. We believe that there are significant international markets for this type of product in addition to the US market. We expect to commit significant resources to the rollout of these products and, based on consumer response, may commit significant resources to expand our product offering in this area.

-- TRUVMETER(TM) and Software. This product is targeted at industrial and

scientific users interested in measuring UV wavelengths with no sensitivity to visible or infrared (IR) light. The product consists of a detector on a cable that is connected to a computer, and software that allows the computer to operate like a meter and data-logging instrument. Example target markets are manufacturers of UV lamps and users of UV-cured inks and paints.

Our research and development efforts are currently focused on the products described below.

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-- Compound Semiconductor Electronic Devices: We have been a pioneer in

the research of transistors based on GaN/AlGaN heterojunctions and are maintaining a R&D capability in this technology while assessing commercialization opportunities. There are significant markets emerging for these devices with the rapid growth of cellular phone use and associated infrastructure, and in other high power/frequency/temperature applications. Two of our seven awarded patents in this technology are fundamental to the transistor structure. Significant resources would be required should we choose to develop a full product line in this area.

-- Components and Modules for Fiber Optics Networks: To build on the

strength of our DWDM components, the Company is exploring the market potential for new components and value-added modules for fiber optics telecommunications networks. We are also exploring other variants of the DWDM line incorporating passive and active functions. Much of this work is based on a technology called integrated optics, which creates optical components on planer waveguide devices with integrated circuit-like processes. The development of products based on integrated optics technology will require the commitment of significant resources.

Near the end of fiscal 2001, we formed an alliance with Harris Corporation to jointly develop and market a product utilizing our DWDMs which enables 10 Gigabit Ethernet to be transported over existing multimode fiber installations in short haul applications (distances up to 1,000 meters) such as business and academic campuses. A lack of standards upon which to base such a device had postponed the further development and introduction of this product. Industry groups have recently made progress toward establishment of applicable standards. The current design of our product would not support these standards. We continue to monitor the commercial viability of this product for niche applications but do not have

any definitive time frame for its introduction. The 10 Gigabit Ethernet product is based on our current DWDM technology and would not require significant resources for further development.

Marketing and Distribution

We market our DWDM and UV detector products through a variety of channels including advertising in relevant professional magazines, showcasing them in trade shows, direct mailing, personal visits, and by use of manufacturer's representatives and distributors domestically and in various countries (including Japan, Germany, Italy and France). We do not currently maintain a large internal sales force. We have one sales person dedicated to the SunUVWatch(R) and we also maintain product information on our website.

Sources of Raw Materials

Several purchased materials and components are used in the manufacturing of our products. Most of these are readily available from multiple suppliers. Some critical optical components are purchased from a single or a limited number of suppliers. We are working with other optical manufacturers to develop additional sources of these components as well as pursuing internal development of this capability for some of these components. The loss of access to some components would have a material adverse effect on our ability to deliver products on a timely basis and on our financial performance.

Patents and Intellectual Property

As of March 31, 2002, we had 12 patents issued in the United States and six patents applied for inside and outside the United States. We believe our success heavily depends upon technology we develop internally. The markets for our products are characterized by rapid change and continual innovation that could render our technology and patents obsolete before their statutory protection expires. Several of the companies we compete with have greater research and development resources than we do and could develop technologies and products that are similar or even superior to ours without infringing on our intellectual property.

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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. To date the cost of such compliance has not been 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.

During fiscal 2002, revenues from three customers represented 28%, 23% and 14% of our total revenues each. In fiscal 2001, we had three customers whose sales represented 19%, 16%, and 15% of total revenues each. While significant as a percentage of revenues, the revenues in total dollars were not as significant and the loss of any one of these customers would not have a material adverse effect on the Company. Revenues from U.S. government agencies constituted more than ten percent of our total operating revenues in fiscal year 2000. During fiscal year 2000, 35% of our sales were to the U.S. Army and 3% of our sales were to the U.S. Navy.

Backlog

We had no backlog of orders at March 31, 2002 compared to approximately \$545,000 at March 31, 2001 and none at March 31, 2000.

We had no backlog of uncompleted research contracts at March 31, 2002 or March 31, 2001, as compared to \$28,400 at March 31, 2000. The elimination of the backlog in uncompleted contracts is the direct result of our shift from contract R&D to product development and promotion.

Competition

The optoelectronics and compound semiconductor electronic device markets are evolving rapidly and, therefore, the competitive landscape changes continually. The opportunities presented by these markets have fostered a highly competitive environment. Over time, this competition will likely result in price reductions and lower profit margins for the companies serving this market. Many of the companies engaged in these businesses are well financed and have significantly greater research, development, production, and marketing resources than we do. Some of these companies have long operating histories, well-established distribution channels, broad product offerings and extensive customer bases. Our ability to compete with these companies will depend largely on the performance of our devices, our ability to innovate and develop solutions

for our customers, the extent and strength of our intellectual property, and our ability to convince customers to adopt our technology early in their design cycle.

Competitors for our DWDM products include Lightwave Microsystems, Inc., NetTest, LightChip, Inc., Wavesplitter Technologies, Inc., Alcaltel Optronics, Corning Incorporated and JDS Uniphase Corporation. Competitors for our GaN products include SVT (GaN UV detectors), and various UV detector makers using silicon or other semiconductor materials that do not perform comparably to GaN, but are lower-priced. We are not aware of any companies currently marketing a personal UV monitor in a watch configuration; however, we are aware of intellectual property for this general type of product. Newport, Melles Griot and Oriel offer scientific UV meters, some of which include GaN detectors as an option. A number of firms offer lower-performance, lower-cost UV meters for industrial applications. Competitors for GaN/AlGaN transistors, which are currently in the R&D phase at APA Optics, include Cree, Inc., Nitronex Corporation, RFMD Corporation, and some Japanese and European firms.

Research and Development

During the fiscal years ended March 31, 2002, 2001, and 2000, we spent approximately \$1,114,100, \$1,176,000, and \$919,000, respectively, on research and development, all of which was related to the DWDM, compound semiconductor electronic devices, UV detector and related products. In addition, in fiscal years 2002 and 2001, we had no research activities sponsored by customers compared to \$978,000 for fiscal year 2000. We operate in highly competitive and rapidly evolving markets and plan to commit significant resources for research and development for the foreseeable future. We will consider locating research and development facilities in locations other than our current facilities in Minnesota and South Dakota, including locations outside the United States, based on several factors, including accessibility to qualified personnel and facility costs.

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Employees

As of March 31, 2002, we had 51 full-time employees (including executive officers). Our future performance is dependent on our ability to attract, train, and retain highly qualified personnel. We have no employment agreements with our employees. The loss of one or more key employees could negatively impact the Company.

FACTORS THAT MAY AFFECT FUTURE RESULTS

Some of the statements contained in this report on Form 10-K that are not purely historical are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, without limitations, statements regarding the Company's expectations, hopes, beliefs, anticipations, commitments, intentions and strategies regarding the future. Forward-looking statements include, but are not limited to, statements contained in "Item 1. Business" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations." Actual results could differ from those projected in any forward-looking statements for the reasons, among others, detailed below. We believe that many of the risks detailed here are part of doing business in the industry in which we compete and will likely be present in all periods reported. The fact that certain risks are characteristic to the industry does not lessen the significance of the risk. The forward-looking statements are made as of the date of this Form 10-K and we assume no obligation to update the forward-looking statements or to update the reasons why actual results could differ from those projected in the forward-looking statements.

Unless we generate significant revenue growth, our increasing expenses and negative cash flow will significantly harm our financial position.

We have not been profitable since fiscal 1990. As of March 31, 2002, we had an accumulated deficit of \$18.2 million. We expect to incur operating losses for the foreseeable future, and these losses may be substantial. Further, we may continue to incur negative operating cash flow in the future. We have funded our operations primarily through the sale of equity securities and borrowings. We have significant fixed expenses and we expect to continue to incur significant and increasing manufacturing, sales and marketing, product development and administrative expenses. As a result, we will need to generate significantly higher revenues while containing costs and operating expenses if we are to achieve profitability.

Declining average selling prices for our DWDM products will require us to reduce production costs to effectively compete and market these products.

Since the time we first introduced our DWDM components to the marketplace we have seen the average selling price of this type of component decline. We expect this trend to continue. To achieve profitability in this environment we must continually decrease our costs of production. In order to reduce our

production costs, we will continue to pursue one or more of the following:

- Seek lower cost suppliers of raw materials, components, or assemblies within the United States, or internationally including Asia,
- Work to further automate our assembly process, or
- Develop value-added components.
 - We will also seek to form strategic alliances with companies that can supply these services.

Decreases in average selling prices also require that we increase unit sales to maintain or increase our revenue. Our efforts to increase revenues could include:

Expansion of our product offerings, both through internally developed and externally sourced products, and

Expansion of our international marketing efforts.

There can be no guarantee that we will achieve these objectives or goals. Our inability to decrease production costs or increase our unit sales could seriously harm our business, financial condition and results of operations.

We have limited experience in the development, manufacturing, marketing and distribution of products internationally.

If our efforts to reduce our costs to develop and manufacture our products and/or seek more international customers leads to the expansion of offshore subcontracting or the establishment of facilities outside of the United States, we will be subject to inherent risks, including, without limitation:

- Reduced protection of intellectual property rights in foreign countries in which we may choose to operate;
- Difficulties in attracting, training and retaining qualified staff;
- Political and economic instability, terrorism or war; The burden of complying with foreign laws and tax structures; and
- Risks associated with fluctuations in the value of currencies.

Demand for our products is subject to significant fluctuation. Market conditions in the telecommunications market in particular may harm our financial condition.

Demand for our products is dependent on several factors including capital expenditures in the communications industry. Capital expenditures can be cyclical in nature and there may be protracted periods of reduced demand for component parts. Similarly, periods of slow economic expansion or recession can result in periods of reduced demand for our products. The current economic slowdown has hit the telecommunications market particularly hard, resulting in a significant reduction in capital expenditures for products such as our DWDMs. It is impossible to predict how long the slowdown will last. Such periods of reduced demand harm our business, financial condition and results of operations.

We must increase our manufacturing capacity or we will not be able to deliver our products to our customers in a timely manner.

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

- Difficulties in achieving adequate yields from new manufacturing lines,
- Difficulty maintaining the precision manufacturing processes required by our products while increasing capacity,
- The inability to timely procure and install the necessary equipment, and
- The lack of availability of qualified manufacturing personnel.

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

Our dependence on outside manufacturers may result in product delivery delays.

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

Our products may have defects that are not detected before delivery to our customers.

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

We must introduce new products and product enhancements to increase revenue.

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

Our markets are characterized by rapid technological changes and evolving standards.

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

Our products may infringe on the intellectual property rights of others.

Our products are sophisticated and rely on complicated manufacturing processes. We have received several patents on certain aspects of our design and manufacturing processes and we have applied for several more. Third parties may still assert claims that our products or processes unlawfully utilize their intellectual property. Defense against these claims, even if they lack merit, may be time consuming, result in expensive litigation and divert management attention from operational matters. If such a claim was successful, we could be prevented from manufacturing or selling our current products, we could be forced to redesign our products, or we could be required to license the relevant intellectual property at a significant cost. Any of these actions could harm our business, financial condition or results of operations.

Acquisitions or investments could have an adverse affect on our business.

As part of our strategy to expand our product offerings, develop internal sources of components and materials, and acquire new technologies, we periodically review acquisition and investment prospects. There are inherent risks associated with making acquisitions and investments, including but not limited to:

- Challenges associated with integrating the operations, personnel, etc., of an acquired company,
- Potentially dilutive issuances of equity securities,
- Reduced cash balances and/or increased debt and debt service costs,
- Large one-time write-offs of intangible assets,
- Risks associated with geographic or business markets different than those we are familiar with, and Diversion of management attention from current responsibilities.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following is a list of our executive officers, their ages, positions and offices as of March 31, 2002.

NAME	AGE	8 POSITION
Dr. Anil K. Jain	56	Chief Executive Officer and President
Kenneth A. Olsen	58	Vice President and Secretary

DR. ANIL K. JAIN has been a Director, Chief Executive Officer and President since March 1979. He also served as Chief Financial Officer until August 2000. 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.

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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.

ROBERT M. RINGSTAD has been Chief Financial Officer since joining the Company in August 2000. Prior to joining the Company he was Vice President and Controller of Echostar Communications Corporation, Englewood, Colorado from October 1999 to January 2000. From October 1996 until March 1999 Mr. Ringstad was Chief Financial Officer and Chief Operating Officer for World Satellite Network, Inc., Minneapolis, Minnesota. Prior to joining World Satellite Network, Mr. Ringstad was employed with Family Partners, Ltd. of Minneapolis, MN.

TTEM 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 J of Notes to Financial Statements included under Item 8 of this Report. We own land directly west of the Blaine facility that may be used for future expansion.

We also own a 24,000 square foot production facility in Aberdeen, South Dakota, which is used for assembly of 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 D of Notes to Financial Statements included under Item 8 in this Report for further information regarding the financing of this facility.

We believe these two facilities will be adequate for our physical needs for the foreseeable future. However, in order to reduce costs in the face of continuing downward pressure on component prices, we are evaluating placement of research and development and/or manufacturing facilities in locations outside the United States. These facilities could be (a) owned or leased and operated by us or (b) owned and/or operated by others for us on a contract basis. These other facilities could be in addition to or replace our existing facilities.

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.

9 PART II

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

Our common stock is traded on The Nasdaq National 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:

FISCAL 2002	HIGH LOW	
Quarter ended June 30, 2001 Quarter ended September 30, 2001 Ouarter ended December 31, 2001.	 \$11.50 \$ 7.00 9.00 1.90 3.44 2.00	
Quarter ended March 31, 2002	4.83 2.40	
FISCAL 2001	HIGH LOW	
Quarter ended June 30, 2000 Quarter ended September 30, 2000 Quarter ended December 31, 2000. Quarter ended March 31, 2001	 \$36.00 \$12.25 24.38 9.75 17.31 5.50 11.81 6.06	

There were approximately 350 holders of record of our common stock as of March 31, 2002.

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.

ITEM 6. SELECTED FINANCIAL DATA.

<TABLE> <CAPTION>

CIT TION	2002	2001	2000	1999	1998
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Statements of Operations Data: Revenues	\$ 595,955	\$ 885,740	\$ 420,809	\$ 722,030	\$2,190,637
shareholder	(4,738,199)	(3,261,446)	(3,796,296)	(2,513,798)	(967,767)
diluted	(0.40)	(0.29)	(0.43)	(0.30)	(0.12)
shares, basic and diluted	11,896,976	11,180,165	8,744,125	8,512,274	8,376,661
Balance Sheet Data:					
Total assets	\$36,396,410	\$41,914,451	\$ 9,610,391	\$ 6,804,976	\$9,629,912
including current portion	2,461,363	2,836,831	3,049,258	3,214,712	3,609,652
Shareholders' equity					

 33,504,917 | 38,280,299 | 6,306,049 | 3,389,295 | 5,859,863 |The above selected financial data should be read in conjunction with the financial statements and related notes included under Item 8 of this Report 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.

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General

We are engaged in designing, manufacturing, and marketing of various optoelectronic products, ultraviolet (UV) detectors and related products and optical components. For several years, we also received significant revenues from research and development services projects sponsored by various government agencies. In fiscal 1998, we shifted our emphasis from research and development to product development, with the intent to eventually manufacture and market our own proprietary products. Accordingly, revenues from research and development contracts decreased significantly in fiscal 2000 and we received no revenues from this source in fiscal years 2001 and 2002.

For the last several years our goal has been to manufacture and market products/components based on our technology developments. We have focused on dense wavelength division multiplexer (DWDM) components for fiber optic communications and gallium nitride-based ultraviolet (UV) detectors (both components and integrated detector/electronic/display packages) because we believe that these two product areas have significant potential markets and because we have expertise and/or patent positions related to them.

Results of Operations

We recognized operating revenues of \$595,955, \$885,740, and \$420,809 for the fiscal years ended March 31, 2002, 2001, and 2000, respectively. The decrease of \$289,785 or 33% from fiscal 2001 to 2002 was primarily the result of lower sales of DWDM components. A reduction in capital spending in the telecommunications industry in addition to the United States recession significantly reduced demand for these components. In addition, in August 2001, one customer cancelled an order in excess of \$500,000 when we were unable to deliver the product according to their requirements. The \$464,931 or 111% increase in revenues from fiscal 2000 to 2001 was due primarily to increased sales of DWDM components. We had no backlog of orders at the end of fiscal 2002. Our backlog of DWDM component orders was approximately \$545,000 as of March 31, 2001. There were no contract fees in fiscal 2002 or 2001 compared to \$160,108 in fiscal 2000.

As discussed in the General Development of the Business above, capital expenditures in the telcom industry are down significantly. Because of this we expect revenues for at least the next few quarters to be consistent with the fourth quarter of fiscal 2002.

Cost of sales were \$3,545,519, \$2,663,192, and \$1,415,229 for fiscal 2002, 2001 and 2000, respectively. The increase of \$882,327 or 33% in the cost of sales from fiscal 2001 to 2002 was largely the result of inventory obsolescence costs, increased depreciation related to capital equipment purchases, and costs associated with implementing a quality assurance program. The increase in the

cost of sales of \$1,247,963 or 88% from fiscal 2000 to 2001 was related to the increase in sales utilizing additional materials and direct labor. Gross margin for product sales was negative in all three fiscal years as a result of low unit production and sales levels relative to the capital equipment and personnel committed to production. We expect further reductions in product pricing and we expect to continue to experience negative gross margins until there is a significant increase in sales and production levels. Cost of contract fees in fiscal 2000 was \$978,222 and was eliminated in fiscal 2002 and 2001 as no contract research was performed in those years.

Research and development expenses were \$1,114,051, \$1,175,564 and \$918,811 for fiscal years 2002, 2001 and 2000, respectively. The decrease of \$61,513 or 5\$ from fiscal 2001 to 2002 reflected a shift in personnel to manufacturing products from product development. This is in contrast to the increase of \$256,753 or 28\$ from fiscal 2000 to 2001, reflecting our continued investment in the development of our DWDM and GaN technologies. The extent of our efforts to develop variants of the DWDM line incorporating passive and active functions and to develop transistors based on GaN/AlGaN heterojunctions could result in increased research and development expenditures in the future.

Selling, general and administrative expenses were \$1,733,846, \$1,866,766 and \$862,170 for fiscal years 2002, 2001 and 2000, respectively. The decrease of \$132,920 or 7% from fiscal 2001 to 2002 reflects our efforts to reduce expenses in response to the slow economy, including a reduction in staff in the third quarter of fiscal 2002. The increase of \$1,004,596 or 117% from fiscal 2000 to 2001, was the result of compensation costs related to newly-hired key management personnel, non-cash compensation related to non-qualified stock options granted to employees, the cost of adopting a shareholder rights plan, and fees associated with listing our common stock on the Nasdaq National Market. Our selling, general and administrative expenses could increase significantly with the planned rollout of our SunUVWatch(R) and our TRUVMETER(TM) in fiscal 2003.

11

We realized \$1,193,525, \$2,002,713 and \$100,989 in interest income in fiscal years 2002, 2001 and 2000 respectively. The decrease in interest income of \$809,188 or 40% from fiscal 2001 to 2002 reflects the steep decline in short-term interest rates over the fiscal year and declining cash investments as we consumed a total of \$5.4 million in cash to fund operations, purchase equipment and retire debt. The increase in interest income of \$1,901,724 from fiscal 2000 to 2001 reflected increased average balances of cash and short-term investments during the fiscal year. We expect interest income to decline again in fiscal 2003 as short-term interest rates will likely remain low and cash is consumed in operations.

Our net losses applicable to common shareholders for fiscal 2002, 2001 and 2000 were \$4,738,199,\$3,261,446 and \$3,796,296 respectively.

Liquidity and Capital Resources

As of March 31, 2002, our principal source of liquidity was our cash, cash equivalents and short-term investments, which totaled \$31,606,403 compared to \$36,984,492 at March 31, 2001.

We used \$3,753,553 to fund operating activities during fiscal 2002 compared to \$2,230,867 in fiscal 2001, and \$3,497,892 in fiscal 2000. In all three years the largest use of cash in operating activities was the funding of the net losses. The net loss applicable to common shareholder for fiscal 2002 increased to \$4,738,199 from \$3,261,446 in fiscal 2001. The primary factors contributing to the increased loss were the decline in sales, the increase in the inventory obsolescence reserve and the decline in interest income. The decrease in the net loss from fiscal 2000 to 2001 was primarily related to the increase in revenues and interest income.

Investing activities provided \$14,595,028 in fiscal 2002. We generated \$15,759,000 from the sale of short-term investments and invested \$1,050,274 in property and equipment and \$113,698 in patents. The majority of the proceeds from sales of our short-term investments are classified as cash and cash equivalents on the balance sheet as of March 31, 2002. We used \$16,995,645 in investing activities in fiscal 2001, \$15,759,000 of which was invested in short-term investments. In fiscal 2000 we used \$235,394 in investing activities.

We used \$460,564 in financing activities in fiscal 2002. Primary uses of cash in financing activities included the repurchase of common stock for \$92,638 and the scheduled retirement of debt used \$375,468. We did not repurchase any shares of our stock during the fourth quarter of fiscal 2002. In fiscal 2001 financing activities provided net cash of \$34,510,098. Sales of our common stock provided \$39,557,304, retirement of preferred stock used \$5,033,054 and the scheduled retirement of debt and additions to bond reserve funds used an additional \$299,532. Financing activities provided cash of \$6,862,343 in fiscal 2000. Sales of preferred and common stock provided \$6,600,125, the scheduled retirement of debt used \$133,350, and a reduction in bond reserve funds provided \$314,747 of cash.

We constructed our manufacturing facility in Aberdeen, South Dakota using

certain economic incentive programs offered by the State of South Dakota and the City of Aberdeen. At March 31, 2002, the total principal outstanding under bonds issued by the State of South Dakota was \$1,630,000. Interest on the bonds ranges from 5% to 6.75%, and the bonds are due in various installments between 2003 and 2016. These bonds require compliance with certain financial covenants. We were out of compliance with some of these covenants during part of fiscal 2001 and all of fiscal 2002. We are not in default in repayment of the bonds. For further information regarding these bonds, see Note D of Notes to Financial Statements included under Item 8 of this Report.

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Our capital requirements are dependent upon several factors including market acceptance of our products, the timing and extent of new product introductions and delivery, and the costs of marketing and supporting our products on a worldwide basis. See "Item 1. Business."

Although we believe that our current cash and cash equivalents will be sufficient to fund our operations for more than the next 12 months, we cannot assure you that we will not seek additional funds through public or private equity or debt financing or from other sources within this time frame or that additional funding, if needed, will be available on terms acceptable to us, or at all. We may also consider the acquisition of, or evaluate investments in, products and businesses complementary to our business. Any acquisition or investment may require additional capital.

Application of Critical Accounting Policies

We have reviewed our use of estimates in applying our accounting policies and determined that significant changes in our various estimates would not have a material impact on the presentation of our financial condition, changes in financial condition or results of operations. Accordingly, we do not consider any of our estimates to be "critical estimates" as defined in the rules of the Securities and Exchange Commission. See Note A of Notes to Financial Statements under Item 8 of this Report for descriptions of the use of estimates in our accounting policies. Our management and the audit committee of our board of directors have discussed our use of estimates and have approved our disclosure relating to it in this report.

In April 2002, SFAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" became effective for our company. SFAS 144 clarifies the guidance used to measure impairment and clarifies the accounting for disposals of long-lived assets. We are reviewing the effect of this Statement on our financial statements and do not believe our adoption of the Statement will have a significant impact on our financial statements.

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

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. We invest in short-term securities of high credit issuers with maturities ranging from overnight up to 24 months. The average maturity of the portfolio does not exceed 12 months. The portfolio includes only marketable securities with active secondary or resale markets to ensure liquidity. We have no investments denominated in foreign country currencies and, therefore, our investments are not subject to foreign exchange risk. See "Cash and Equivalents" and "Short-term Investments" in Note A of Notes to Financial Statements included under Item 8 of this Report.

13
ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Quarterly Results of Operations. The following tables present our unaudited quarterly operating results for the eight quarters ended March 31, 2002:

<TABLE>

Ouarter Ended

	Quarter inded						
	June 30,	September 30,	December 31,	March 31,			
	2000	2000	2000	2001			
<s> Statement of Operations Data</s>	<c></c>	<c></c>	<c></c>	<c></c>			
Net revenue	(354,555)	(486,258)	(456,119)	(480,520)			
	(909,675)	(596,999)	(636,837)	(809,880)			

Quarter	Ended
Oual Lei	Ellaea

June 30,	September 30,	December 31,	March 31,
2001	2001	2001	2002

<s></s>	<c></c>	<c></c>		<c< th=""><th>></th><th><c></c></th><th></th></c<>	>	<c></c>	
Statement of Operations Data							
Net revenue	\$ 434,335	\$	87,574	\$	49,089	\$	24,957
Gross profit (loss)	(508,518)		(869 , 742)		(977 , 252)		(594,052)
Net loss	(645 , 062)		(1,364,499)		(1,422,002)	(1	,306,636)
Net loss per share	\$ (0.05)	\$	(0.11)	\$	(0.12)	\$	(0.11)
<fn></fn>							

* Reflects a loss of (0.02) per share related to the redemption of preferred stock. </TABLE>

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.

Information regarding changes in accountants is incorporated in this Report by reference to the Current Report on Form 8-K filed on March 11, 2002. There are no disagreements with our accountants on accounting or financial disclosure matters.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

Information regarding executive officers is included in Part I of this Report

Information regarding directors and the information required by Items 11, 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 2002).

ITEM 11. EXECUTIVE COMPENSATION.

Information required by Item 11, is incorporated in this Report by reference to the proxy statement for our annual meeting of shareholders (anticipated to be held in August 2002).

14
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

<TABLE>

CHITION					
	(a) (b)			(c)	
Plan category	Number of securities to be issued upon exercise of options, warrants or rights	Weighted-av exercise pr outstanding warrants ar	rice of options,	Number of securities remain available for future issual under equity compensation plans (excluding securities reflected in column (a))	
<pre><s> Equity compensation plans approved by</s></pre>	<c></c>	<c></c>		<c></c>	
security holders	369,550(1)	\$	7.40		1,104,713(1)
Equity compensation plans not approved by security holders	286,322(2)	 د	13.70		Not applicable(2)
	200,322(2)				
Total	655 , 872	\$	10.15		1,104,713
<pre><fn></fn></pre>					

- (1) These securities consist of options granted or available for grant under the 1997 Stock Compensation Plan and the Stock Option Plan for Nonemployee Directors.
- (2) These securities consist of warrants. These warrants were not issued pursuant to any formal plan and there is no authorized number of warrants available for issuance.

</TABLE>

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

Information required by Item 13, is incorporated in this Report by reference to the proxy statement for our annual meeting of shareholders (anticipated to be held in August 2002).

<TABLE>

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

- (a) (1) The following financial statements are filed herewith under Item 8. $<\!\!\mathrm{S}\!\!>$

Page

- (ii) Report of Independent Auditors as of March 31, 2001 and as and for the periods ended March 31, 2001 and 2000.
 - Balance Sheets as of March 31, 2002 and 2001 20-21

</TABLE>

- (2) Financial Statement Schedules: None
- (b) Reports filed on Form 8-K:

On March 11, 2002 we filed a Current Report on Form 8-K reporting the hiring of Grant Thornton LLP to audit our financial statements for the year ended March 31, 2002, replacing Ernst & Young LLP.

(c) Exhibits. See Exhibit Index on pages 37-38.

16 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 14, 2002

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>
 <C>
 <C>

/s/ Anil K. Jain President, Chief Executive Officer, and June 14, 2002

Anil K. Jain

/s/ Kenneth A. Olsen Secretary, Vice President, and Director June 14, 2002

Kenneth A. Olsen

/s/ Robert M. Ringstad Chief Financial Officer June 14, 2002

Robert M. Ringstad

/s/ Gregory Von Wald Director
-----Gregory Von Wald

June 14, 2002

or June 14, 2002

Ronald G. Roth

/s/ Stephen A. Zuckerman MD Director
-----Stephen Zuckerman
</TABLE>

June 14, 2002

1

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors and Shareholders APA Optics, Inc.

We have audited the accompanying balance sheet of APA Optics, Inc. (the Company) as of March 31, 2002, and the related statement of operations, shareholders' equity, and cash flows for the year then ended. 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 audit. The financial statements of the Company as of March 31, 2001 and for the two years in the period ended March 31, 2001, were audited by other auditors whose report dated May 11, 2001 expressed an unqualified opinion on those statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 our audit provides a reasonable basis for our opinion.

In our opinion, based on our audit, the financial statements referred to above present fairly, in all material respects, the financial position of APA Optics, Inc. as of March 31, 2002, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Minneapolis, Minnesota May 7, 2002

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Report of Independent Auditors

The Board of Directors and Shareholders APA Optics, Inc.

We have audited the accompanying balance sheet of APA Optics, Inc. as of March 31, 2001, and the related statements of operations, shareholders' equity, and cash flows for each of the two years in the period ended March 31, 2001. 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. as of March 31, 2001, and the results of its operations and its cash flows for each of the two years in the period ended March 31, 2001, in conformity with accounting principles generally accepted in the United States.

/s/ Ernst & Young LLP

<TABLE> <CAPTION>

APA OPTICS, INC.

BALANCE SHEETS

MARCH 31,

ASSETS	2002	2001
<s></s>	<c></c>	<c></c>
CURRENT ASSETS Cash and cash equivalents	\$ 31,606,403	\$ 21,225,492
Short-term investments	-	
Accounts receivable	20,613	370,859
Inventories, net	40,075	415,316
Prepaid expenses	103,588	
Bond reserve funds	70,000	
Total current assets	31,840,679	37,865,731
PROPERTY, PLANT AND EQUIPMENT, net	3,748,004	3,248,191
OTHER ASSETS		
Bond reserve funds Bond placement costs, net of accumulated amortization	349,129	351,630
of \$252,000 and \$204,000 at March 31, 2002 and 2001 Patents, net of accumulated amortization of \$347,998	68,013	•
nd \$291,998 at March 31, 2002 and 2001 Other	169,890 220,695	112,192 220,695
	807 , 727	800,529
$\mbox{\ensuremath{\mbox{\scriptsize $}}$ The accompanying notes are an integral part of these financial s		\$ 41,914,451 =======
The accompanying notes are an integral part of these financial s 20 <table> <caption></caption></table>		
The accompanying notes are an integral part of these financial s 20 <table></table>	tatements.	
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY</caption></table>	2002	2001
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND</caption></table>	tatements.	
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s></s></caption></table>	2002 	2001
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable</s></caption></table>	2002 <c> \$ 1,996,345 127,926 302,204</c>	2001 <c> \$ 2,337,221 495,410</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911</c>
The accompanying notes are an integral part of these financial s 20 <table> CAPTION> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities</s></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542</c>
The accompanying notes are an integral part of these financial s 20 <table> CAPTION> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY Undesignated shares, 4,999,500 authorized shares;</s></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY Undesignated shares, 4,999,500 authorized shares; no shares issued and outstanding Preferred stock, \$.01 par value; 500 authorized shares;</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY Undesignated shares, 4,999,500 authorized shares; no shares issued and outstanding Preferred stock, \$.01 par value; 500 authorized shares; no shares issued and outstanding</s></caption></table>	2002 	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542</c>
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The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY Undesignated shares, 4,999,500 authorized shares; no shares issued and outstanding Preferred stock, \$.01 par value; 500 authorized shares; no shares issued and outstanding Common stock, \$.01 par value; 50,000,000 authorized shares; 11,875,881 and 11,915,456 shares issued and outstanding at March 31, 2002 and 2001 Additional paid-in capital</s></caption></table>	2002 <c> \$ 1,996,345 127,926 302,204 </c>	2001 <c> \$ 2,337,221 495,410 301,911 3,134,542 499,610 - 119,155 51,614,972</c>
The accompanying notes are an integral part of these financial s 20 <table> <caption> LIABILITIES AND SHAREHOLDERS' EQUITY <s> CURRENT LIABILITIES Current maturities of long-term debt Accounts payable Accrued expenses Total current liabilities LONG-TERM DEBT COMMITMENTS AND CONTINGENCIES SHAREHOLDERS' EQUITY Undesignated shares, 4,999,500 authorized shares; no shares issued and outstanding Preferred stock, \$.01 par value; 500 authorized shares; no shares issued and outstanding Common stock, \$.01 par value; 50,000,000 authorized shares; 11,875,881 and 11,915,456 shares issued and outstanding at March 31, 2002 and 2001</s></caption></table>	2002 <c> \$ 1,996,345 127,926 302,204 </c>	2001 <c> \$ 2,337,221 495,410 301,911 </c>

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<TABLE> <CAPTION>

APA OPTICS, INC.

STATEMENTS OF OPERATIONS

YEARS ENDED MARCH 31,

		2002		2001		2000
<\$>	<c></c>		<c></c>		<c></c>	
Revenues Net sales Contract fees	\$	595 , 955 -	\$	885 , 740		
		595 , 955		885 , 740		420,809
Costs and expenses Cost of sales Cost of contract fees		_		2,663,192 -		978.222
Research and development Selling, general and administrative	1			1,175,564 1,866,766		862,170
	6	,393,416	į	5,705,522	4	
Loss from operations	(5	,797,461)	(4	4,819,782)	(3	3,753,623)
Interest income Interest expense	1	,193,525 (132,263)	2	2,002,713 (135,323)		100,989 (142,662)
	1	,061,262		1,867,390		(41,673)
Loss before income taxes	(4	,736,199)	(2	2,952,392)	(3	3,795,296)
Income taxes		2,000		1,000		1,000
Net loss	(4	,738,199)	(2	2,953,392)	(3	3,796,296)
Preferred stock dividend Excess of preferred stock redemption over carrying		-		(33,054)		-
value				(275,000)		-
Net loss applicable to common shareholders				3,261,446)		
Net loss per share Basic and diluted	\$ ===			(0.29)		
Weighted average shares outstanding Basic and diluted	11	,896,976	1:	1,180,615	8	3,744,125

 === | ====== | ===: | ======= | === | |The accompanying notes are an integral part of these financial statements.

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<TABLE> <CAPTION>

APA OPTICS, INC.

STATEMENTS OF SHAREHOLDERS' EQUITY

YEARS ENDED MARCH 31,

shareholders'	Preferr	ed stock	Common stock		Additional paid-in	Accumulated	Total
Sharehorders	Shares	Amount	Shares	Amount	capital	deficit	equity
<s> Balance at March 31, 1999</s>	<c> -</c>	<c> -</c>	<c> 8,512,274</c>	<c> \$ 85,123</c>	<c> \$ 9,700,258</c>	<c> \$ (6,396,086)</c>	<c></c>

.,,							
Issuance of common stock 1,875,125	-	-	465,000	4,650	1,870,475	-	
Warrants exercised 80,821	-	-	20,718	207	80,614	-	
Issuance of preferred stock 4,725,000	500	5	-	-	4,724,995	-	
Warrants issued in lieu of debt service payments 32,104	-	-	-	-	32,104	-	
Net loss (3,796,296)	-	-	-	-	-	(3,796,296)	
Balance at March 31, 2000 6,306,049	500	5	8,997,992	89,980	16,408,446	(10,192,382)	
Issuance of common stock 39,557,304	-	-	2,845,868	28,459	39,528,845	-	
Warrants exercised 253,230	-	-	64,646	646	252,584	-	
Redemption of preferred stock (5,033,054)	(500)	(5)	-	-	(4,724,995)	(308,054)	
Warrants issued in lieu of debt service payments 51,172	-	-	-	-	51,172	-	
Options exercised 32,150	-	-	6 , 950	70	32,080	-	
Options issued as compensation 66,840	-	-	-	-	66,840	-	
Net loss (2,953,392)	-	-	-	-	-	(2,953,392)	
Balance at March 31, 2001 38,280,299	-	-	11,915,456	119,155	51,614,972	(13,453,828)	
Options exercised 25,296	-	-	5,125	51	25,245	-	
Common stock repurchased (92,638)	-	-	(43,200)	(432)	(92,206)	-	
Options issued as compensation 45,414	-	-	-	-	45,414	-	
Other (15,255)	-	-	(1,500)	(15)	(15,240)	-	
Net loss (4,738,199)	-	-	-	-	-	(4,738,199)	
Balance at March 31, 2002 \$33,504,917						\$(18,192,027)	
========	_=====		_=======		_=======		

</TABLE>

The accompanying notes are an integral part of these financial statements.

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<TABLE> <CAPTION>

APA OPTICS, INC.

STATEMENTS OF CASH FLOWS

YEARS ENDED MARCH 31,

	2002	2001	
<\$>	<c></c>		<c></c>
Cash flows from operating activities:	(0)	.07	(0)
Net loss	\$(4,738,199)	\$ (2,953,392)	\$(3,796,296)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	654,460	424,022	424,085
Deferred compensation expense Changes in operating assets and liabilities:	45,414	66,840	-
Accounts receivable	350,246	(161,522)	(124,246)
Inventories	375,241	(138,791)	(54,658)
Prepaid expenses and other assets	(73,524)	(10,261)	(892)
Accounts payable and accrued expenses	(367,191)	(161,522) (138,791) (10,261) 542,237	54,115
Net cash used in operating activities		(2,230,867)	
Cash flows from investing activities: Purchases of property and equipment Purchases of short-term investments	(1,050,274)	(1,128,453) (15,759,000)	(195, 342)
Sale of short-term investments	15,759,000		_
Acquisition of patents	(113,698)	(108,192)	(40,052)
Net cash provided by (used in) investing activities	14,595,028	(16,995,645)	(235, 394)
Cash flows from financing activities: Proceeds from sales of preferred stock	_	(5,033,054) 39,557,304 - 285,380	4 725 000
Payments for redemption of preferred stock		(5 033 054)	4,723,000
Proceeds from sales of common stock		30 557 304	1 075 125
Repurchase of common stock	(92 638)	33,337,304	1,073,123
Proceeds from exercise of warrants and options	10 0/1	285,380 (161,255) (138,277)	80 821
Payment of long-term debt	(375 /68)	(161 255)	(133 350)
Bond reserve funds	(3/3,400)	(101,233)	311 717
Bond leserve funds	(2,499)	(130,277)	314,747
Net cash provided by (used in)			
financing activities	(460,564)	34,510,098	6,862,343
Increase in cash and cash equivalents	10,380,911	15,283,586	3,129,057
Cash and cash equivalents at beginning of year	21,225,492	5,941,906	2,812,849
Cash and cash equivalents at end of year		\$ 21,225,492	
Supplemental cash flow information: Cash paid during the year for:			
Interest	\$ 132,263	\$ 135,323	\$ 142,662
Income taxes	2,000		
Noncash financing transactions:			
Warrants issued in lieu of debt service payments	-	51,172	32,104

</TABLE>

The accompanying notes are an integral part of these financial statements.

24 APA OPTICS, INC.

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2002, 2001 AND 2000

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

APA Optics, Inc. (the Company) currently manufactures and markets dense wavelength division multiplexer (DWDM) optical components, offers a range of gallium nitride-based devices, and manufacturers custom optics products.

Revenue Recognition

Revenue is recognized when the product has been shipped and accepted by the customer and collection is probable.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. Investments classified as cash equivalents at March 31, 2002 consist entirely of short-term money market accounts. Investments classified as cash equivalents at March 31, 2001 consisted primarily of certificates of deposit. Cash equivalents are stated at cost, which approximates fair value.

Short-Term Investments

Short-term investments at March 31, 2001 consisted of certificates of deposit and were stated at cost plus accrued interest, which approximated market. At March 31, 2002, the Company had no short-term investments.

Accounts Receivable

The Company grants credit to customers in the normal course of business, but generally does not require collateral or any other security to support amounts due. Management performs on-going credit evaluation of customers. The Company maintains allowances for potential credit losses when needed and, when realized, have been within management's expectations. As of March 31, 2002 and 2001, accounts receivable includes \$9,122 and \$24,339 billed under the retainage provision of government contracts.

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Inventories

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

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided on the straight-line method over the following estimated useful lives of the assets:

	Years
Building	20
Equipment	3 - 10
Leasehold improvements	7 - 10

Bond Placement Costs

Bond placement costs relate to the issuance of bonds and are amortized over the life of the related bonds, or five to eight years.

Patents

Costs of obtaining and successfully defending patents are capitalized and amortized over three to five years.

Stock-Based Compensation

The Company utilizes the intrinsic value method for stock-based compensation. Under this method, compensation expense is recognized for the amount by which the market price of the common stock on the date of grant exceeds the exercise price of an option. The Company recognized compensation expense of \$45,414 and \$66,840 for the years ended March 31, 2002 and 2001. There was no compensation expense recognized in the year ended March 31, 2000.

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Fair Value of Financial Instruments

Due to their short-term nature, the carrying value of current financial

assets and liabilities approximates their fair values. The fair value of long-term obligations, if recalculated based on current interest rates, would not significantly differ from the recorded amounts.

Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding. Diluted net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding and common share equivalents related to stock options and warrants, when dilutive.

Common stock options and warrants to purchase 440,822,283,175 and 72,500 shares of common stock with a weighted average exercise price of \$13.02, \$15.31 and \$31.95 were out-standing during the years ended March 31, 2002, 2001 and 2000, but were excluded because they were antidilutive.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, related revenues and expenses and disclosure about contingent assets and liabilities at the date of the financial statements. Actual results may differ from those estimates used by management.

Newly Adopted Accounting Standards

In September 2001, the FASB issued SFAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 clarifies the guidance used to measure impairment and clarifies the accounting for disposals of long-lived assets. This Statement became effective for the Company in April 2002. The Company is currently reviewing the effect of this Statement on its financial statements and does not believe the Statement will have a significant impact on the Company.

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NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Impairment of Long-Lived Assets

The Company reviews long-lived assets and certain identifiable intangibles for impairment when-ever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying account of the assets exceed the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

Reclassifications

Certain 2001 and 2000 amounts have been reclassified to conform with the presentation in the 2002 financial statements.

NOTE B - INVENTORIES

Inventories consist of the following at March 31:

Property, plant and equipment consist of the following at March 31:

2002

2001

<TABLE> <CAPTION>

	2002	2001
<\$>	<c></c>	<c></c>
Land	\$ 60,000	\$ 60,000
Buildings	1,679,424	1,679,424
Manufacturing equipment	4,690,130	4,400,101
Tools	423,748	418,573
Office equipment	477,694	324,036
Leasehold improvements	968,073	806,219
	8,299,069	7,688,353
Less accumulated depreciation and amortization	4,551,065	4,440,162
	\$3,748,004	\$3,248,191
	========	========

</TABLE>

NOTE D - LONG-TERM DEBT

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

<TABLE> <CAPTION>

	2002	2001
<\$>	<c></c>	<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	\$1,630,000	\$1,695,000
Low interest economic development loans, 0% to 3%, due in various installments through 2016	264,583	526,317
Forgivable economic development loans, 3%, due in various installments through 2003	566 , 780	615,514
Less current maturities	2,461,363 1,996,345	
	\$ 465,018	\$ 499,610 ======

</TABLE>

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NOTE D - LONG-TERM DEBT - Continued

The forgivable loans are contingent upon employment levels at the facility meeting preset criteria. As partial consideration 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. The exercise price of the warrants was set at \$4.00 for year one of the debt and the yearly grant exercise price increases one dollar each year until the debt matures in fiscal 2003. No loans were forgiven and no new warrants were issued in fiscal year 2002. As of March 31, 2002, 36,511 warrants have been issued for loans forgiven totaling \$187,289.

At March 31, 2002 and 2001, the Company had on deposit with trustees $\left(\frac{1}{2} \right)$ \$419,129 and \$416,630 in reserve funds for current bond maturities, of which \$70,000 and \$65,000 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 compliance with certain covenants. The Company was out of compliance with certain of these covenants in fiscal 2002. All debt, except for the long-term portion of the low interest loans and the forgivable loans, to which the covenant violation does not apply, has been classified as current because of the Company's violation of one of the debt covenants contained in the agreement.

As part of the Company's plan to construct their 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.

Scheduled maturities of the Company's long-term debt are as follows:

Years ending March 31	,
2003	\$1,996,345
2004	235,713
2005	17,639
2006	17,639
2007	17,639
Thereafter	176,388
	\$2,461,363
	========

3.0

NOTE E - EMPLOYEE BENEFIT PLAN

The Company maintains a contributory 401(k) profit sharing benefit plan covering all employees. During fiscal year 2001, the Company started matching 50% of employee contributions up to 6% of a participant's compensation. The Company's contributions under this plan were \$53,000 and \$34,000 for the years ended March 31,2002 and 2001.

NOTE F - INCOME TAXES

As of March 31, 2002, the Company has net operating loss carryforwards for federal income tax purposes of approximately \$12,762,000 which expire in fiscal years 2002 to 2021.

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 at March 31 are as follows:

	2002	2001
Net operating losses Depreciation Other	\$ 4,339,000 25,000 157,000	\$ 4,204,000 6,000 132,000
Total deferred tax asset Less valuation allowance	4,521,000 (4,521,000)	4,342,000 (4,342,000)
	\$ -	\$ -

Income tax expense consists entirely of state taxes in 2002, 2001 and 2000.

NOTE G - 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.

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NOTE G - SHAREHOLDERS' EQUITY - Continued

In fiscal year 2002, the Board of Directors authorized the repurchase of up to the greater of \$2,000,000 or 500,000 shares of common stock. As of March 31, 2002, a total of 43,200 shares for \$92,638 at an average price of \$2.14 per share had been repurchased.

In fiscal year 2001, the Company redeemed all 500 shares of its preferred stock in exchange for a \$5,033,054 cash payment. Also, the Company sold 2,845,868 shares of its common stock in a registered offering, resulting in net proceeds of \$39,557,304. The proceeds were used to fund operations.

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 were 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 \$1,875,125. These proceeds were used to fund operations.

Pursuant to the Shareholder Rights Plan adopted by the Company in 2001, each share of common stock has attached to it a right, and each share of common stock issued in the future will have a right attached until the rights expire or are redeemed. Upon the occurrence of certain change in control events, each right entitles the holder to purchase one one-hundredth of a share of Series B Junior Preferred Participating Share, at an exercise price of \$80 per share, subject to adjustment. The rights expire on November 10, 2010 and may be redeemed by the Company at a price of \$.001 per right prior to the time they become exercisable.

NOTE I - STOCK OPTIONS AND WARRANTS

Stock Options

The Company has various incentive and non-qualified stock option plans which are used as an incentive for directors, officers, and other employees. Options are generally granted at fair market values determined on the date of grant and vesting normally occurs over a six-year period. The plans had 1,104,713 shares of common stock available for issue at March 31, 2002.

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NOTE I - STOCK OPTIONS AND WARRANTS - Continued

Option transactions under these plans during the three years ended March 31, 2002 are summarized as follows:

					Number of shares	avei	
Outstanding Granted Canceled	at	March	31,	1999	262,500 65,000 (35,000)	\$	4.18 5.84 4.67
Outstanding Granted Canceled Exercised	at	March	31,	2000	292,500 160,000 (48,375) (6,950)		4.49 10.06 4.12 4.64
Outstanding Granted Canceled Exercised	at	March	31,	2001	397,175 90,000 (112,500) (5,125)		6.81 10.33 7.79 4.94
Outstanding	at	March	31,	2002	369 , 550		7.40

The number of shares exercisable at March 31, 2002, 2001 and 2000 was 108,674, 191,898 and 106,563, respectively, at a weighted average exercise price of \$4.68, \$5.77 and \$4.67 per share, respectively.

The following table summarizes information concerning currently outstanding and exercisable stock options at March 31, 2002:

<TABLE> <CAPTION>

Options Outstanding Options exercisable _ ______ -----Weighted average
Range of Number remaining Weighted average Number Weighted average
exercise prices outstanding contractual life exercise price outstanding exercise price <S> <C> <C> 194,550 2.87 years \$
50,000 3.40 years
85,000 4.57 years
35,000 3.38 years 3.77 - \$5.53 3.40 years 4.57 years 3.38 years 5.73 - 7.22 8.50 - 12.54 6.14 10.86 1,625 13.18 - 17.15 15.23 13.18 23.00 5,000 4.01 years 23.00 369,550 3.40 years \$ 7.40 108,674 4.68

</TABLE>

The weighted average fair value of options granted in 2002, 2001 and 2000 was \$9.30, \$11.30 and \$5.30. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions used for grants in 2002, 2001 and 2000; zero dividend yield, risk-free interest rate of 4.5%, 6.0% and 5.5%; volatility of 132%, 93% and 44%, and a weighted-average expected term of the options of five years. The Company's 2002, 2001 and 2000 pro forma net loss and net loss per share would have been \$(5,011,715), \$(3,601,298) and \$(4,083,136) or \$(0.42), \$(0.32) and \$(0.47) loss per share had the fair value method been used for valuing options granted during 2002, 2001 and 2000. These effects may not be representative of the future effects of applying the fair value method.

Stock Warrants

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

	Warrants outstanding	Exercise price per share	Expiration date
Balance at March 31, 1999 Issued Exercised Expired	120,339 108,337 (20,718) (3,100)		2001 - 2005
Balance at March 31, 2000 Issued Exercised	204,858 177,985 (64,646)	3.75 - 49.47 7.00 - 17.84 3.75 - 5.00	2005 - 2006
Balance at March 31, 2001 Expired	318,197 (31,875)	4.00 - 17.84 4.00	2002 - 2006 2002
Balance at March 31, 2002	286,322	4.79 - 17.84	2002 - 2006

All warrants are exercisable upon date of grant.

In fiscal year 2000, warrants totaling 45,500 at a value of \$217,945 were issued to individuals assisting with the Company's capital raising efforts. Additionally, warrants totaling 57,500 at a value of \$2,106,025 were issued in connection with the issuance of preferred stock as a cost of financing. Both sets of warrants were valued based upon the Company's stock price at the time of the transaction. An additional 5,337 warrants were issued in fiscal year 2000 related to the forgiveness of debt (see note D).

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NOTE I - STOCK OPTIONS AND WARRANTS - Continued

In fiscal year 2001, warrants totaling 84,084 at a value of \$1,500,059 were issued in connection with the issuance of common stock as a cost of financing. These warrants were valued based upon the Company's stock price at the time of the transaction. An additional 7,310 warrants were issued in fiscal year 2001 related to the forgiveness of debt (see note D).

Additionally, in fiscal year 2001, 57,500 warrants were repriced at \$14.72 per share. In connection with the repricing, these individuals were issued 86,591 additional warrants also at \$14.72. The price of the warrants was based upon the value of the Company's stock price on the day of the transaction.

NOTE J - 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 increase of the rental rate based on increases in the consumer price index. Future minimum lease obligations under the lease as of March 31, 2002 are as follows:

Year ending March 31:

2003	\$107,000
2004	107,000
2005	72.000

Rental expense, all of which was paid to the partnership, was \$138,000,

\$135,000 and \$121,000 for the years ended March 31, 2002, 2001 and 2000.

NOTE K - CONCENTRATIONS

Major Customers

Three major customers accounted for 28%, 23% and 14% of the Company's sales for the year ended March 31, 2002. Three different customers accounted for 19%, 16% and 15% of the Company's sales for the year ended March 31, 2001. One customer accounted for 35% of the Company's sales for the year ended March 31, 2000. These customers also accounted for approximately 52% and 69% of the outstanding trade receivable balance at March 31, 2002 and 2001.

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NOTE K - CONCENTRATIONS - Continued

Suppliers

Although the Company buys specific components from a limited number of suppliers, management believes that other suppliers could provide a similar component on comparable terms. A change in suppliers, however, could cause a delay in manufacturing and a possible loss of sales, which would affect short-term operating results adversely. There were no suppliers that provided more than 10% of the Company's total purchases in the years ended March 31, 2002, 2001 or 2000.

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<TABLE> <CAPTION>

EXHIBIT INDEX

NUMBER	DESCRIPTION	PAGE NUMBER OR INCORPORATED BY REFERENCE TO
>	<\$>	<c></c>
3.1	Restated Articles of Incorporation, as amended to date	Exhibit 3.1 to Registrant's Report on Form 10-Q for the quarter ended September 30, 2000
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 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) filed as a part of Registration Statement on Form S-3 (Commission File No. 333-33968)
4.5(b)	Form of common stock warrant issued in connection with 2% Series A Convertible Preferred Stock	Exhibit 4.5(b) filed as a part of 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	Exhibit 4.6 to Registrant's Report or Form 10-K for fiscal year ended March 31, 2000 ("2000 10-K")

Share Rights Agreement dated October 23, 2000 by Exhibit 1 to the Registration and between the Registrant and Wells Fargo Bank Statement on Form 8-A filed Minnesota NA as Rights Agent

4.7

<FN>

November 8, 2000

NUMBER	DESCRIPTION	PAGE NUMBER OR INCORPORATED BY REFERENCE TO
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	Exhibit 10.1(b) to 2000 10-K
*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) *10.3	Form of option agreement issued under the plan 1997 Stock Compensation Plan	Exhibit 10.3b to 1994 10-KSB 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
10.7	Form of Agreement regarding Indemnification of Directors and Officers with Messrs. Jain, Olsen, Ringstad, Roth, Von Wald and Zuckerman	Exhibit 10.7 to Registrant's Report on From 10-K for the fiscal year ended March 31, 2002.
23.1	Consent of Grant Thornton LLP	
23.2	Consent of Ernst & Young LLP	

Indicates management contract or compensation plan or arrangements required to be filed as an exhibit to this form. </TABLE>

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We have issued our report dated May 7, 2002, accompanying the financial statements included in the Annual Report of APA Optics, Inc. on Form 10-K for the year ended March 31, 2002. We hereby consent to the incorporation by reference of said report in the Registration Statements of APA Optics, Inc. on Forms S-8 (File No. 333-74214, effective November 30, 2001; File No. 333-44500, effective August 25, 2000; File No. 333-44488, effective August 25, 2000; and File No. 333-44486, effective August 25, 2000).

Minneapolis, Minnesota June 12, 2002 0206-0315016

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statement (Form S-3 Nos. 333-33968, 333-44104, and 333-33966) and in the related Prospectus Supplement and Form S-8 Nos. 333-44500, 333-44488, 333-44486, and 333-74214 of APA Optics, Inc. of our report dated May 11, 2001, with respect to the financial statements of APA Optics, Inc. included in this Form 10-K for the year ended March 31, 2002.

/s/ Ernst & Young LLP

Minneapolis, Minnesota June 12, 2002