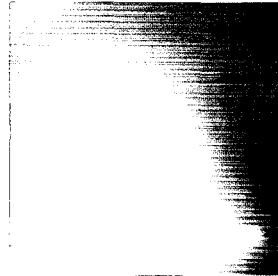


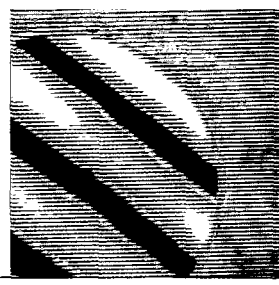


Vol 1 2002



APA OPTICS, Inc.

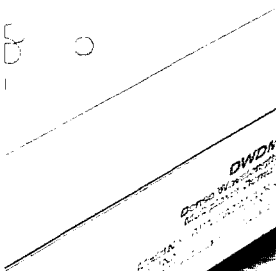
PROCESSED
JUL 18 2002
THOMSON
FINANCIAL



*ARS
P.F.
3-2-02*

annual report
2002

we make light work for you



APA Optics, Inc. develops, manufactures and markets dense wavelength division multiplexing/demultiplexing (DWDM) devices for optical communications and networking systems and gallium nitride (GaN) based ultraviolet radiation detection devices for commercial and industrial use. The Company also developed the innovative Sun^{UV}Watch[®] for the consumer market.

Headquartered in Blaine, Minnesota, a suburb of Minneapolis, APA Optics also operates an expanded manufacturing center in Aberdeen, South Dakota.

Selected Financial Data

	2002	2001	2000	1999	1998
Statements of Operations Data:					
Revenues	\$ 595,955	\$ 885,740	\$ 420,809	\$ 722,030	\$ 2,190,637
Net loss applicable to common shareholder	(4,738,199)	(3,261,446)	(3,796,296)	(2,513,798)	(967,767)
Net loss per share, basic and diluted	(0.40)	(0.29)	(0.43)	(0.30)	(0.12)
Weighted average number of 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
Long-term obligations, 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 in this Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

To Our Shareholders, Employees and Customers:

While fiscal 2002 was a challenging year for APA and virtually all companies associated with telecommunications, we continued to focus on product performance, reduction of manufacturing costs, expansion of our fiber optic product offering, and the marketing of our DWDMs. We also made significant advances in our Gallium Nitride (GaN) based technology and products.

Market uncertainties and the collapse of capital spending in telecommunications dramatically affected our customers and consequently APA's sales of DWDMs. Decreasing availability of capital to fund the building of communications networks combined with an overcapacity of bandwidth significantly reduced the demand for network components. The traction our DWDM family of products had gained in the fourth quarter of fiscal 2001 and first quarter of fiscal 2002 eroded as most of our customers suspended development of systems based in part on our components resulting in lower sales and an increased loss in fiscal 2002. Additionally, we face increasing marketing challenges due to declining average sales prices of DWDMs and other associated components due in part to the presence of several viable Asian companies who, despite the slump in the telecommunication markets, have made significant progress in the development and manufacturing of lower cost components.

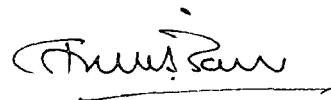
During the past fiscal year we continued to pursue Telcordia certification and our DWDMs now satisfy most of these requirements. Our current focus is to reduce production costs while expanding the functionality of our fiber optic components and to identify complementary and alternative products which will position us for growth and reduce the risk associated with a limited product offering. We launched several initiatives in fiscal 2002 to achieve these goals. These efforts will continue in fiscal 2003 to counter the competition posed by Asian and other manufacturers.

We continued the development of our Sun^{UV}Watch[®], which will be rolled out in the U.S. and select international markets this summer. We aim to capitalize on the ever-increasing public awareness of the dangers of UV radiation. We are also developing additional models of the watch to complement the existing sport model for introduction in fiscal 2003.

The TrUVMeter[™] and software will make its international debut in fiscal 2003 and we intend to seek licensees for our fundamental patents on gallium nitride based transistors. Our continued development of these transistors will support our licensing activities. We also initiated steps during fiscal 2002 to automate growth of GaN wafers to reduce the cost and improve the performance of associated products and devices.

To better serve our customers, we have continued to work toward ISO certification and are positioned to achieve finalization within 6-12 months. We have been careful to limit the growth of our organization and took steps last fall to reduce our operating expenses and conserve our financial resources. As a result we believe that we are in a strong financial position.

APA appreciates your continued support during the past year and going forward as we prepare for renewed activity in the telecommunications market, the broader optical component market and in the UV detection market.



Dr. Anil K. Jain

Chairman, President and Chief Executive Officer



Sun^{UV}Watch[®]

To Launch Into Consumer Markets...

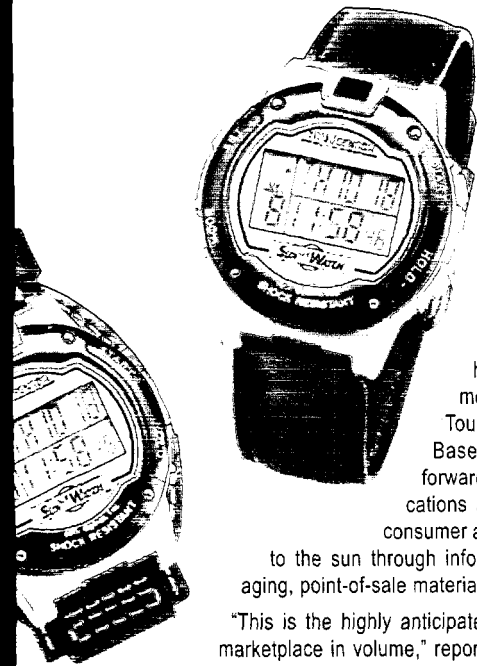
APA Optics' Sun^{UV}Watch[®] will launch this year with improved operation, multiple models, new promotion and a new sales/marketing team. Built around APA Optics' unique application of its GaN technology, the Sun^{UV}Watch is a unique and innovative consumer product that measures an individual's exposure to the sun's ultraviolet (UV) radiation.

Over the past fiscal year, a sustained engineering effort by APA Optics has resulted in significant improvements in the Sun^{UV}Watch's functionality, enabling the product to more accurately measure UV radiation and calculate safe exposure time to the sun following EPA guidelines.

The wide range of potential users and the variety of ways to market, package and use the product require that a family of styles be offered to excite retailers and help them achieve sales volume with a new product line. The original rugged plastic sport model Sun^{UV}Watch, test marketed the last 2 years, will be available as a wrist and clip-on model for sun bathers, golfers, and other outdoor enthusiasts. Joining the sport model will be metal-cased watches with a dressier design for both men and women. Two metal-cased, clip-on models will also be introduced. Later in the year, we plan to introduce a hybrid analog/digital version of the Sun^{UV}Watch.

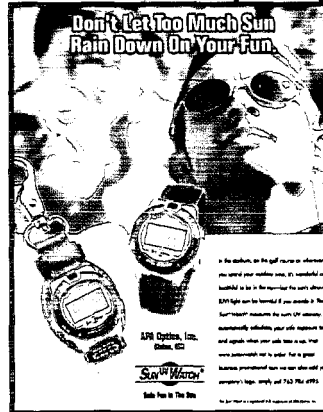
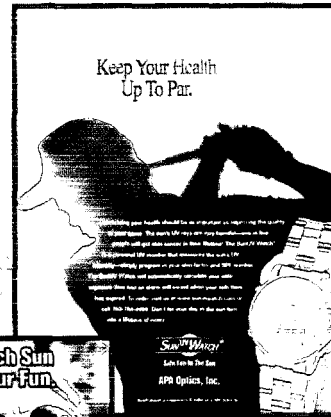
Leading the Sun^{UV}Watch sales/marketing effort is Mark Foley, who recently joined APA Optics and will lead Sun^{UV}Watch sales. Foley brings to APA Optics and the Sun^{UV}Watch effort experience in understanding consumer requirements, particularly in matching sales channels and promotional efforts to our target markets. Foley's background complements the technical capabilities of APA Optics' product development team. His experience includes launching a mass market consumer products company, setting up sales channels with major retailers such as WalMart and managing extremely successful promotions on QVC television.





APA's marketing and sales plan for the Sun^{UV}Watch line has moved into high gear. Mark is working with outside professionals on promotion, packaging, selecting retail channels and public relations. Consumer focus groups are planned to help hone the product features. Print promotion in FY2003 has kicked-off with full page advertisements in the PGA Tour and PGA Senior Tour 2002 Year books, and Major League Baseball 2002 Yearbook. As we move forward with a range of marketing communications activities, a focus will be to increase consumer awareness of the risks of overexposure to the sun through informative Sun^{UV}Watch promotion, packaging, point-of-sale materials and media coverage.

"This is the highly anticipated year for the Sun^{UV}Watch to hit the marketplace in volume," reports Peter Nussbaum, general manager for gallium nitride products. "The product is developed, the marketing strategy and sales team are coming together and the general public awareness of the need for this product is growing rapidly. APA Optics is excited about the Sun^{UV}Watch potential and believes it can deliver the right product at the right time."

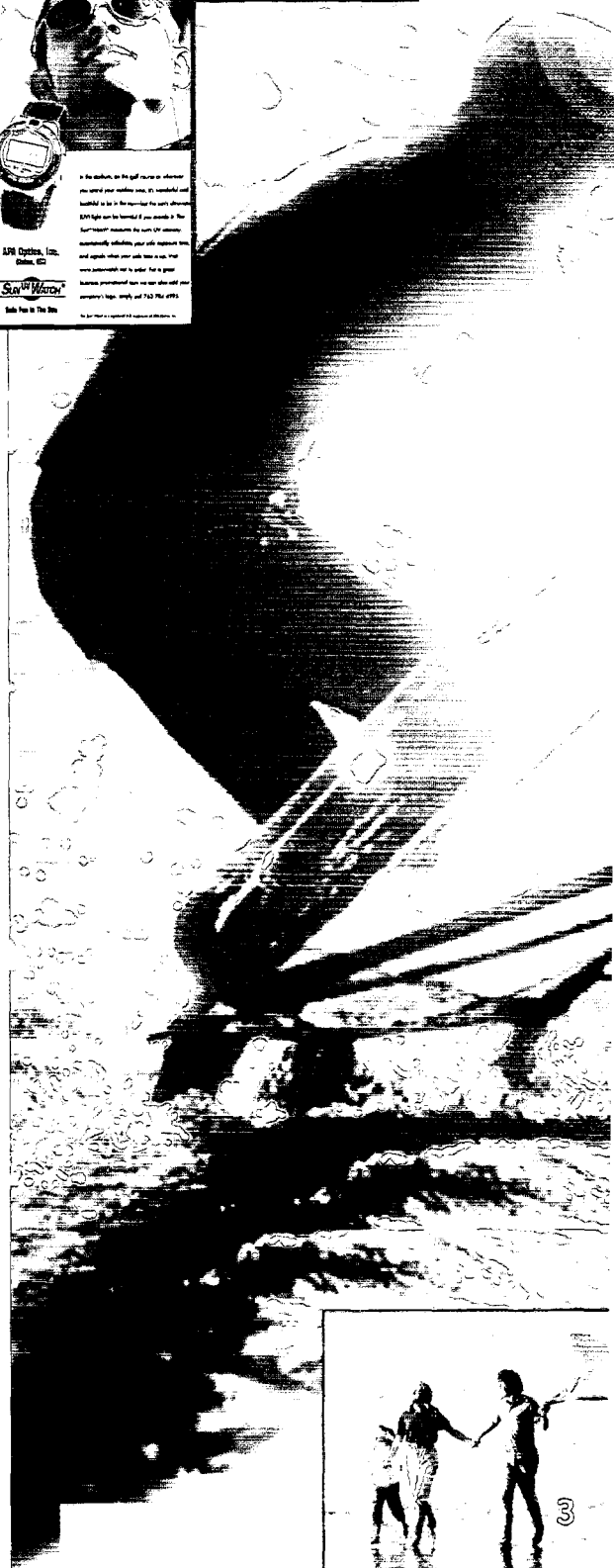


Ultraviolet Exposure: Growing Incidence of Disease and Awareness of Risk Create Opportunity

Like so many things in life, the key to time in the sun is moderation. In the right amount, the sun's rays make us feel good and cause our body to generate Vitamin D, a vital element in human chemistry. But excessive exposure is a health hazard that extends beyond the short-term discomfort of a sunburn. The following facts about excessive exposure to the sun's ultraviolet (UV) radiation do not make for pleasant reading, but provide background for understanding the Sun^{UV}Watch's market potential and are important information for our shareholders:

- In the United States, over 1 million new cases of nonmelanoma skin cancer are detected every year, 90% due to overexposure to the sun's UV.
- In 2001, there were over 50,000 melanoma cases and 8,000 deaths due to melanoma, the most dangerous form of skin cancer. This cancer is closely correlated to exposure to large amounts of sunlight. The incidence of this cancer in the U.S. has increased from 1 in 1500 in 1930 to 1 in 75 in 2000.
- Melanoma is one of the most common cancers found in Americans between ages 25 and 29.
- Children and adolescents may create the conditions for developing melanoma later in life. A strong correlation has been established between blistering sunburns between ages 15 and 20 for this cancer. Approximately 80% of total lifetime sun exposure happens before age 18.
- Sunscreens may indirectly contribute to the problem, some scientists believe. People use far too little, and stay in the sun far too long, when using them.
- Excessive UV exposure can also cause cataracts, other eye diseases, deterioration of the immune system and skin aging.

A cornerstone of APA's successful introduction of the Sun^{UV}Watch product line will be promoting consumer awareness of the health risks caused by excessive exposure to the sun's ultraviolet radiation. Everyone spending time in the sun – construction workers, gardeners, school safety patrol, fishermen/women, police officers, sail-boarders, farmers, hikers, skiers, parents, teachers, recreational coaches...the list is extensive - needs to be aware of the risks caused by ultraviolet radiation and take steps to monitor and manage exposure. Our objective is not to frighten people out of spending time in the sun but to make them feel safer in it by using our products to help them monitor it. These products provide a tool for people to make time in the sun, working or recreating, healthful and relaxing.



Significant progress in DWDM ♦ ♦ ♦

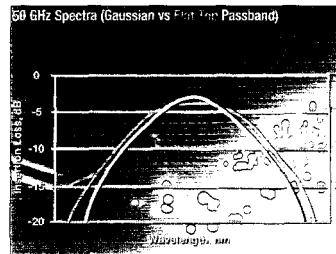
...over the past 12 months, APA has been improving value of its DWDM product.

At the beginning of the year, APA Optics reaffirmed the viability and strengths of its bulk diffraction technology through independent research and evaluations by current and prospective customers. As one major customer reported to us, "APA Optics' product crosstalk is excellent, temperature stability is good and central wavelengths match the ITU grid exactly."

Top tier of DWDM components.

APA Optics has continued to build on strengths of its bulk diffraction grating technology. These strengths include low insertion loss for high channel counts, narrow spacing such as 50 GHz, and passive athermal performance. Live demonstrations of the passive athermal performance of the 16 channel 50 GHz model at this spring's OFC trade show illustrate one way that these improvements are being communicated to the marketplace. "Passive athermal means that APA Optics' fiber optic products do not require power to drive heaters or other temperature control devices. It also means that the cost of monitoring and alarms for detecting malfunction of these temperature control devices is avoided", reports Terry VanderWert, general manager for APA Optics' fiber optic products. "This is typically not the case for high channel count components based on other technologies; some approaches require several watts of power to maintain their performance."

In May, APA Optics announced premium, low loss models (less than 3dB for the 8 and 16 channel models) which operate over 0° to 60° C without active thermal control. These new models now position APA Optics' components in the top tier of DWDM components available in the marketplace, a position of extreme importance when industry buyers seek to expand their network bandwidth.



Improvements in packaging, testing and manufacturing.

APA Optics has focused on reducing manufacturing costs and on packaging for meeting environmental requirements and for reducing product size. New assembly and packaging methods have been developed and tested to ensure the product's long-term stability. APA Optics' Aberdeen, SD test facility has been used extensively in developing and verifying the product's ability to meet temperature and humidity aging requirements of Telcordia standards.

"Qualification to Telcordia standards is a key requirement for deployment of DWDM components in a live network," reports VanderWert. "Many customers require this qualification. While we are continuing to test additional components, our initial data verifies that our new DWDM packaging meets the requirements for stability during thermal aging at 85° C (185° F) and humidity aging at 85° C / 85% relative humidity.

APA Optics, Inc.
2950 NE 84th Lane
Bellingham, Minnesota
USA 55248

DWDM
Dense Wavelength Division
Multiplexing

Despite present depressed industry conditions, these APA Optics products provide a solid basis for the fiber optics business. The reason is simple. APA Optics DWDM components support designer's objectives of reducing overall system cost and power consumption. When industry recovery begins, these objectives will be key purchasing criteria. We believe APA Optics is on the right track because our customers and prospects assure us that we are.

To put APA Optic's DWDM components in the strongest competitive position when market conditions improve, the company has pursued several aggressive strategies. The most important of these is to reduce production costs while expanding the functionality of APA Optics' DWDMs.

This past year, APA Optics' product development has resulted in improved DWDM designs with improved manufacturability, positioning the company for lower cost ramp-up of production. The company also invested in the addition of new physical vapor deposition system to apply thin film coatings to DWDM glass optical components. These coatings modify the reflection properties of the glass surfaces and enhance the performance of optical components within a system. The new ion-assisted deposition process produces coatings with better long-term reliability and more consistent performance from run-to-run.

In addition to the new optical coating system, APA Optics invested in additional pieces of equipment to increase product quality while increasing capacity. A programmable diamond slicing saw automatically and in high volume precision cuts optical glass for use in the company's DWDM components. Two double-sided lappers grind and polish the optical surfaces in quantities up to 50 at a time, depending on optical size. These systems replace earlier, one-at-a-time production methods. These new lapping systems complete more components in a half day than was possible in a month with the previous methods. All of these systems and processes are delivering a much higher quality product while greatly reducing component labor content.

Another important accomplishment this year was the identification of suppliers and service providers for reducing cost of additional APA Optics' DWDM components. Some domestic and some offshore, these sources will provide lower cost parts and/or assembly services to reduce our manufacturing costs. The company is also searching for potential suppliers of complementary components which can be integrated with the company's DWDM's, thereby broadening the company's product offering.

As earlier reported, these strategies are consistent with the company's long range planning to increase product quality and production capacity while lowering costs. Overall, much has been accomplished as APA Optics brings its DWDM products to market.

Global Marketing

"As a result of APA Optics' product refinements, testing and aggressive marketing activity, the company formed relationships with distributors in several geographic regions where APA Optics was not previously represented," reports VanderWert. "These companies are introducing us to their customers and helping us to define products that they need both now and in the future." For example, late last year we engaged a German distributor, Polytec GmbH.

Following the pattern set in North America for APA Optics' product publicity, Polytec GmbH recently published a three-page article devoted exclusively to APA Optics' DWDM products in Germany's premier fiber optic trade publication called "Photonik."

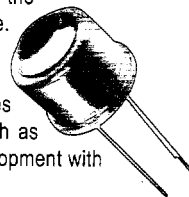
Overall, APA Optics is positioned well with refined, internally tested products. The headway made in the past year with products, customers and with partners should prove rewarding once the fiber optics industry turns around.



TrUVMeter™ To Launch...

into industrial markets.

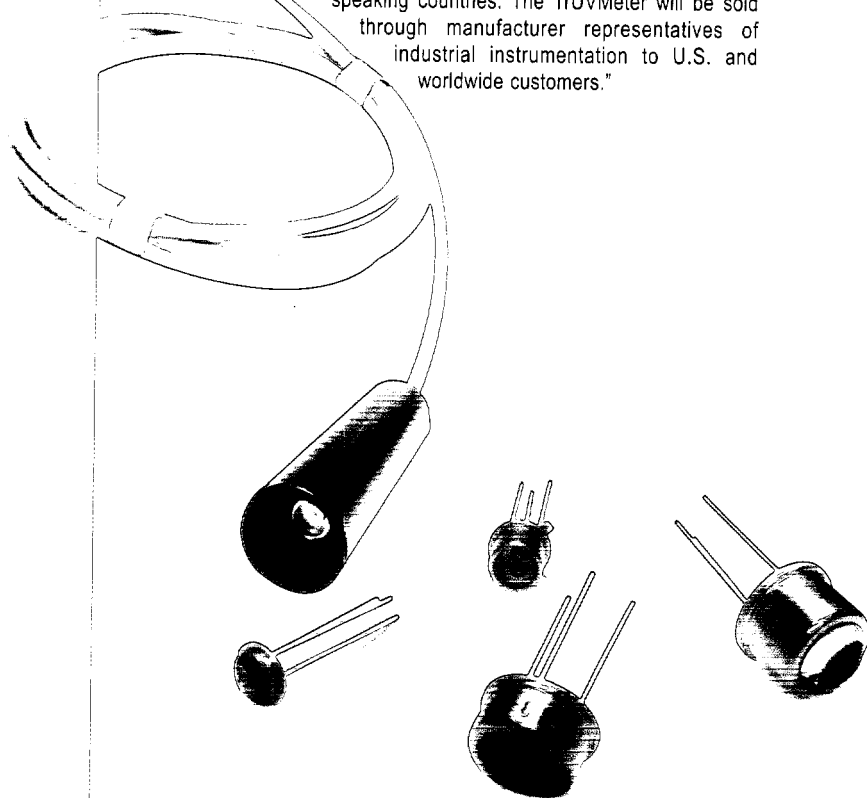
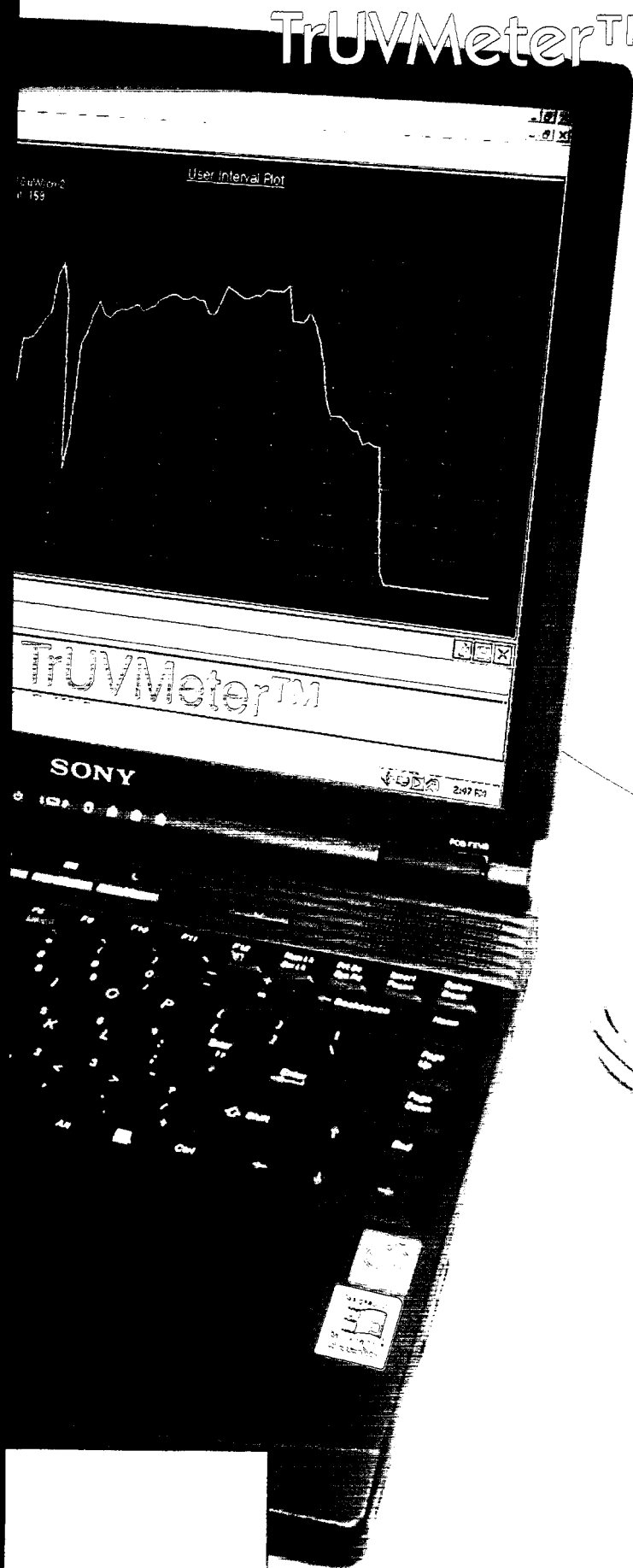
Like the Sun^{UV}Watch, the TrUVMeter is built around APA Optics' ultraviolet detector technology and is targeted for introduction later this year. Unlike the Sun^{UV}Watch, the TrUVMeter is intended for industrial use. Some possible examples where the TrUVMeter could be used include: the manufacturing of UV lamps, processes utilizing UV curable inks or paints such as printing, performing research and development with UV-emitting lasers or other sources.



The TrUVMeter is unique in that it allows the user to convert a desktop or laptop PC into a virtual instrument capable of analyzing, displaying and storing continuous and/or periodic UV measurements. Marketed as a kit, the components consist of a UV detector, an interface cable for a computer's serial port and a CD containing APA's proprietary software that allows the computer to capture and display UV measurements from the detector. APA Optics' TrUVMeters include measurement, data analysis and data storage and display, combining all functions into one unique product.

The TrUVMeter software is designed to be user-friendly in appearance and operation. The user can easily select measurement and display options from drop-down menus and virtual buttons on a computer screen. A series of data measurements can be stored in the computer's memory for later retrieval and display and the software can statistically analyze the data.

"The market for UV measurement is worldwide," reports Nussbaum. Our development plans include software that is compatible with major international versions of Windows in Japanese, German and French, as well as the English version targeted for the U.S. and other English speaking countries. The TrUVMeter will be sold through manufacturer representatives of industrial instrumentation to U.S. and worldwide customers."



Transistor Product Development...

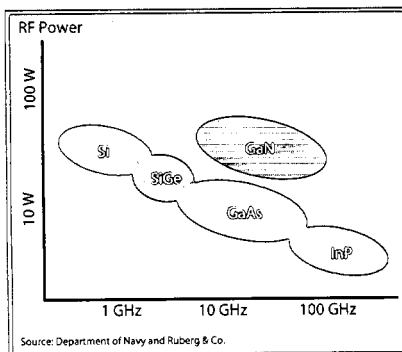
has major commercial potential.

Major strides have been made in the past year in APA Optics' gallium nitride (GaN) transistor development program. The areas of advancement include bringing key technical personnel on board, tests of demonstration designs and equipment upgrades. As a result of its pioneering research in this area in the 1990's, the company owns key patents in GaN technology, and is engaged in licensing discussions.

The capability of gallium nitride transistors to handle high voltages, frequencies and temperatures – higher than incumbent silicon or gallium arsenide transistors by factors ranging from 2 times to 10 times – has created a major opportunity in cellular telephone networks, other wireless communications applications, and potentially high temperature electronics, the biggest area of which is automotive. Gallium nitride transistors (the full technical name is a mouthful, but is abbreviated to "GaN/AlGaN HFET") have been called a disruptive technology because of the potential for them to dramatically displace the incumbent technologies. The market potential for these devices in cellular phones alone is substantial - power transistor sales into this application for 2004 are projected at \$1.3 billion and should increase to nearly \$2 billion by 2006, according to a recent study by Rutberg and Co. A substantial portion of this market could be captured by GaN/AlGaN HFET technology if it matures as projected.

APA Optics is continuing to expand its capability to design and fabricate the materials and structures needed to develop its gallium nitride transistors. In the last year, the company has strengthened its core team of material and device scientists and engineers and presented them with aggressive technology milestones to achieve in FY2003. Accomplishments by the team include achieving material characteristics that meet or exceed the industry's best results and building and testing high frequency transistors. The team is pursuing an equipment enhancement program as a key part of its transistor development. Highly specialized machines, called MOCVD reactors, are used to make the development grade material for the transistors and also to manufacture material for the UV detectors incorporated in both APA Optics' SunTMWatch and TrUVTMMeters. Sophisticated software controls have been developed for these machines that improve repeatability of the material characteristics and increase throughput.

APA Optics holds two fundamental patents in GaN/AlGaN HFETs that may be highly useful or necessary to any firm marketing these devices for commercial use in the United States. There are four to five U.S.-based firms and four to five in Europe and Japan that are investing seriously in developing GaN/AlGaN HFETs. APA has held preliminary discussions with some of these firms with respect to licensing and as the profile of the technology is raised and commercial introduction approaches, interest in APA's patents is expected to increase.



APA Optics - Incess Patented - GaN
Epi Structure

Al_xGa_{1-x}N/AlGaN - Al_xGa_{1-x}N - Al_xGa_{1-x}N

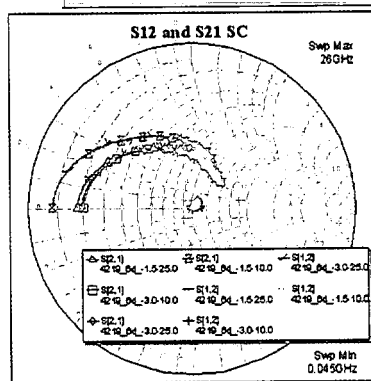
Al_xGa_{1-x}N/AlGaN - AlGaN - AlGaN

GaN - AlGaN - AlGaN

AlN - AlGaN - AlGaN

sapphire

*United States Patents # 5,192,987 and # 5,206,105



Management's Discussion and Analysis of Financial Condition and Results of Operations.

This MD&A is reprinted from APA's Form 10-K as filed with the Securities and Exchange Commission. References to "General Development of the Business," "Item 8 of this Report," "Item 1. Business," etc., refer to portions of the Form 10-K which is available on the SEC's web site at www.sec.gov or on APA's web site www.apaoptics.com under Investor Relations / Real Time Filings.

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 telecom 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/AlGaIn 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® and our TrUVMeter™ in fiscal 2003.

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.

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.

Quantative 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 in this annual report.

Reports of Independent Auditors

2002

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.

Grant Thornton LLP
Minneapolis, Minnesota
May 7, 2002

2001, 2000

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.

Ernst & Young LLP
Minneapolis, Minnesota
May 11, 2001

Balance sheets

March 31,

Assets	2002	2001
Current assets:		
Cash and cash equivalents	\$31,606,403	\$21,225,492
Short-term investments	-	15,759,000
Accounts receivable	20,613	370,859
Inventories, net	40,075	415,316
Prepaid expenses	103,588	30,064
Bond reserve funds	70,000	65,000
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	349,129	351,630
Bond placement costs, net of accumulated amortization of \$252,000 and \$204,000 at March 31, 2002 and 2001	68,013	116,012
Patents, net of accumulated amortization of \$347,998 and \$291,998 at March 31, 2002 and 2001	169,890	112,192
Other	220,695	220,695
	<u>807,727</u>	<u>800,529</u>
Total assets	<u>\$36,396,410</u>	<u>\$41,914,451</u>
Liabilities and shareholders' equity	2002	2001
Current liabilities:		
Current maturities of long-term debt	\$ 1,996,345	\$ 2,337,221
Accounts payable	127,926	495,410
Accrued expenses	302,204	301,911
Total current liabilities	2,426,475	3,134,542
Long-term debt	465,018	499,610
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	118,759	119,155
Additional paid-in capital	51,578,185	51,614,972
Accumulated deficit	(18,192,027)	(13,453,828)
Total shareholders' equity	<u>33,504,917</u>	<u>38,280,299</u>
Total liabilities and shareholders' equity	<u>\$ 36,396,410</u>	<u>\$ 41,914,451</u>

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

Statements of operations year ended March 31,

	2002	2001	2000
Revenues			
Net sales	\$ 595,955	\$ 885,740	\$ 260,701
Contract fees	-	-	160,108
	595,955	885,740	420,809
Costs and expenses:			
Cost of sales	3,545,519	2,663,192	1,415,229
Cost of contract fees	-	-	978,222
Research and development	1,114,051	1,175,564	918,811
Selling, general and administrative	1,733,846	1,866,766	862,170
	6,393,416	5,705,522	4,174,432
Loss from operations	(5,797,461)	(4,819,782)	(3,753,623)
Interest income	1,193,525	2,002,713	100,989
Interest expense	(132,263)	(135,323)	(142,662)
	1,061,262	1,867,390	(41,673)
Loss before income taxes	(4,736,199)	(2,952,392)	(3,795,296)
Income taxes	2,000	1,000	1,000
Net loss	(4,738,199)	(2,953,392)	(3,796,296)
Preferred stock dividend	-	(33,054)	-
Excess of preferred stock redemption over carrying value	-	(275,000)	-
Net loss applicable to common shareholders	\$(4,738,199)	\$ (3,261,446)	\$(3,796,296)
Net loss per share			
Basic and diluted	\$(0.40)	\$(0.29)	\$(0.43)
Weighted average shares outstanding			
Basic and diluted	11,896,976	11,180,615	8,744,125

Statement of shareholders' equity

	Preferred Stock		Common stock		Additional Paid-In Capital	Accumulated Deficit	Total Equity
	Shares	Amount	Shares	Amount			
Balance at March 31, 1999	-	\$ -	8,512,274	\$ 85,123	\$ 9,700,258	\$ (6,396,086)	\$ 3,389,295
Issuance of common stock	-	-	465,000	4,650	1,870,475	-	1,875,125
Warrants exercised	-	-	20,718	207	80,614	-	80,821
Issuance of preferred stock	500	5	-	-	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 at March 31, 2000	500	5	8,997,992	89,980	16,408,446	(10,192,382)	6,306,049
Issuance of common stock	-	-	2,845,868	28,459	39,528,845	-	39,557,304
Warrants exercised	-	-	64,646	646	252,584	-	253,230
Redemption of preferred stock	(500)	(5)	-	-	(4,724,995)	(308,054)	(5,033,054)
Warrants issued in lieu of debt service payments	-	-	-	-	51,172	-	51,172
Options exercised	-	-	6,950	70	32,080	-	32,150
Options issued as compensation	-	-	-	-	66,840	-	66,840
Net loss	-	-	-	-	-	(2,953,392)	(2,953,392)
Balance at March 31, 2001	-	-	11,915,456	119,155	51,614,972	(13,453,828)	38,280,299
Options exercised	-	-	5,125	51	25,245	-	25,296
Common stock repurchased	-	-	(43,200)	(432)	(92,206)	-	(92,638)
Options issued as compensation	-	-	-	-	45,414	-	45,414
Other	-	-	(1,500)	(15)	(15,240)	-	(15,255)
Net loss	-	-	-	-	-	(4,738,199)	(4,738,199)
Balance at March 31, 2002	-	\$ -	11,875,881	\$ 118,759	\$ 51,578,185	\$ (18,192,027)	\$ 33,504,917

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

Statements of cash flows years ended March 31,

	2002	2001	2000
Cash flows from operating activities:			
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	45,414	66,840	-
Changes in operating assets and liabilities:			
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)	542,237	54,115
Net cash used in operating activities	(3,753,553)	(2,230,867)	(3,497,892)
Cash flows from investment activities:			
Purchases of property and equipment	(1,050,274)	(1,128,453)	(195,342)
Purchases of short-term investments	-	(15,759,000)	-
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	-	-	4,725,000
Payments for redemption of preferred stock	-	(5,033,054)	-
Proceeds from sales of common stock	-	39,557,304	1,875,125
Repurchase of common stock	(92,638)	-	-
Proceeds from exercise of warrants and options	10,041	285,380	80,821
Payment of long-term debt	(375,468)	(161,255)	(133,350)
Bond reserve funds	(2,499)	(138,277)	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	\$31,606,403	\$ 21,225,492	\$ 5,941,906
Supplemental cash flow information:			
Cash paid during the year for:			
Interest	\$ 132,263	\$ 135,323	\$ 142,662
Income taxes	2,000	1,000	1,000
Noncash financing transactions:			
Warrants issued in lieu of debt service payments	-	51,172	32,104

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

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 manufactures 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.

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.

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 outstanding 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.

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:

	2002	2001
Raw materials	\$21,448	\$405,238
Work-in-process	18,627	10,078
	<u>\$40,075</u>	<u>\$415,316</u>

NOTE C -- Property, Plant and Equipment

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

	2002	2001
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
	<u>8,299,069</u>	<u>7,688,353</u>
Less accumulated depreciation and amortization	4,551,065	4,440,162
	<u>\$3,748,004</u>	<u>\$3,248,191</u>

NOTE D – Long Term Debt

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

	2002	2001
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
	2,461,363	2,836,831
Less current maturities	1,996,345	2,337,221
	<u>\$ 465,018</u>	<u>\$ 499,610</u>

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 \$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
	<u>\$2,461,363</u>

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	\$4,339,000	\$ 4,204,000
Depreciation	25,000	6,000
Other	157,000	132,000
Total deferred tax asset	4,521,000	4,342,000
Less valuation allowance	(4,521,000)	(4,342,000)
	<u>\$ -</u>	<u>\$ -</u>

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.

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.

NOTE H – Shareholder Rights Plan

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.

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	Weighted average exercise price
Outstanding at March 31, 1999	262,500	\$4.18
Granted	65,000	5.84
Canceled	<u>(35,000)</u>	4.67
Outstanding at March 31, 2000	292,500	4.49
Granted	160,000	10.06
Canceled	(48,375)	4.12
Exercised	<u>(6,950)</u>	4.64
Outstanding at March 31, 2001	397,175	6.81
Granted	90,000	10.33
Canceled	(112,500)	7.79
Exercised	<u>(5,125)</u>	4.94
Outstanding at March 31, 2002	<u><u>369,550</u></u>	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:

Options outstanding			Options exercisable		
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number outstanding	Weighted average exercise price
\$3.77 – \$5.53	194,550	2.87 years	\$4.30	87,049	\$4.19
5.73 – 7.22	50,000	3.40 years	6.50	20,000	6.14
8.50 – 12.54	85,000	4.57 years	10.86	-	-
13.18 – 17.15	35,000	3.38 years	15.23	1,625	13.18
23.00	<u>5,000</u>	4.01 years	23.00	-	-
	<u><u>369,550</u></u>	3.40 years	\$7.40	<u><u>108,674</u></u>	4.68

NOTE I – Stock Options and Warrants Continued

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	120,339	\$3.30 – \$5.00	1999 – 2004
Issued	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
Issued	177,985	7.00 – 17.84	2005 – 2006
Exercised	(64,646)	3.75 – 5.00	2000 – 2004
Balance at March 31, 2001	318,197	4.00 – 17.84	2002 – 2006
Expired	(31,875)	4.00	2002
Balance at March 31, 2002	<u>286,322</u>	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).

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.

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.

Common Stock Information

Fiscal 2002	High	Low
Quarter ended June 30, 2001	\$11.50	\$7.00
Quarter ended September 30, 2001	9.00	1.90
Quarter ended December 31, 2001	3.44	2.00
Quarter ended March 31, 2002	4.83	2.40
Fiscal 2001	High	Low
Quarter ended June 30, 2000	\$36.00	\$12.25
Quarter ended September 30, 2000	24.38	9.75
Quarter ended December 31, 2000	17.31	5.50
Quarter ended March 31, 2001	11.81	6.06

The Common Stock of APA Optics, Inc. is listed on the quotation system of The Nasdaq National Market under the symbol APAT. There were approximately 350 shareholders of record of the Company's Common Stock as of March 31, 2002. APA Optics, Inc. has not paid dividends on its common stock and does not anticipate doing so in the foreseeable future. The loan agreement relating to certain bonds issued by the South Dakota Economic Development Finance Authority restricts the Company's ability to pay dividends on its capital stock.

SHAREHOLDERS MEETING

Annual Meeting

The Annual Meeting of Shareholders will be held on August 22, 2002 at 3:30 PM at the Four Points Sheraton, 1330 Industrial Blvd., Minneapolis, Minnesota.

Availability of Form 10-K

Shareholders of record on July 8, 2001 may obtain, exclusive of exhibits, a copy of the annual report to the Securities and Exchange Commission (Form 10-K) for the year ended March 31, 2002 by writing to the Company.

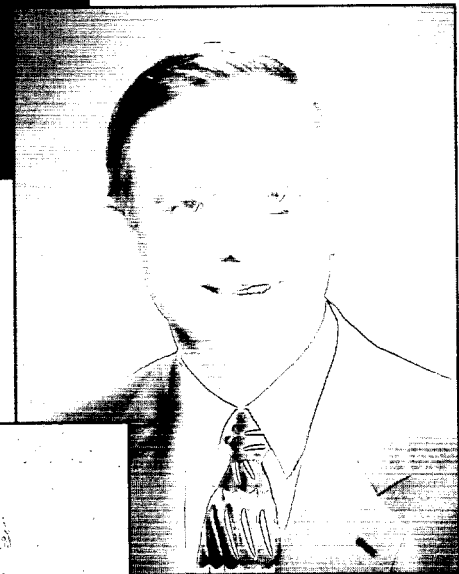
Stock Transfer Agent

Wells Fargo Bank Minnesota, N.A., 161 N. Concord Exchange, South St. Paul, MN 55075

Corporate Officers

Anil K. Jain, Chief Executive Officer and President; Kenneth A. Olsen, Vice President and Secretary; Robert M. Ringstad, Chief Financial Officer

Counsel: Moss & Barnett, A Professional Association Minneapolis, MN
Independent Auditors: Grant Thornton LLP Minneapolis, MN



BOARD OF DIRECTORS

Top left to bottom:

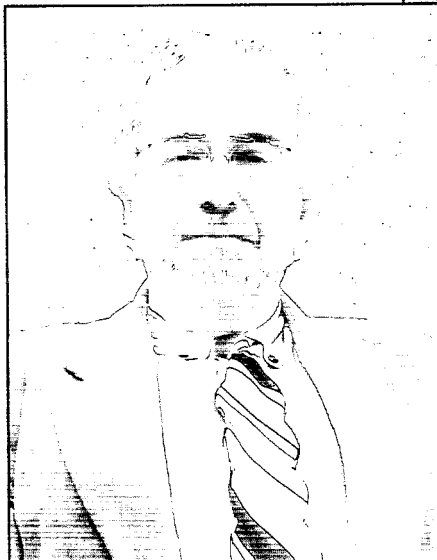
Anil K. Jain, Chief Executive Officer and President

Kenneth A. Olsen, Vice President and Secretary

Gregory Von Wald, Golden West Technologies, Inc., Rapid City, South Dakota;

Ronald G. Roth, Business Executive

Dr. Stephen L. Zuckerman, Aspen Medical Group, Minneapolis, Minnesota



© APA Optics, Inc. :: Home

Back Forward Stop Refresh Home AutoFill Print Mail


Address http://www.apaoptics.com/

Live Home Page Apple iTools Apple Support Apple Store Microsoft MacTopia MSN Office for Macintosh

APA OPTICS, Inc. we make light work for you


HOME PRODUCTS INVESTOR RELATIONS COMPANY INFO CONTACT

Fiber Optic Products




Advanced products for the fiber optic communications, optoelectronics and laser industries.

Sun^{UV} Watch[®] Personal UV Monitor

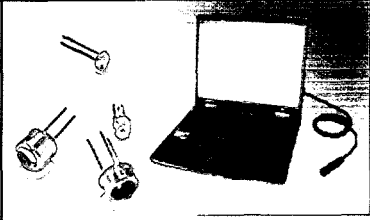


APA OPTICS, Inc.

Standard and Custom Optical Components



Established in 1979, the company has focused on leading edge research in sophisticated optoelectronic and optical system areas.



Industrial UV Measurements

APA NEWS

What is FutureFocus at APA? Click here to download a PDF.

Download a PDF of the APA Optics, Inc. Fiscal 2001 Annual Report.

ECOC 2002 See us at the ECOC Conference Sept 9-11, Stand 370.

©2002 APA Optics, Inc. - All rights reserved.

Internet zone