

SCHEDULE 14A
(RULE 14a-101)
INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934 (AMENDMENT NO.)

Filed by the registrant [X]

Filed by a party other than the registrant []

Check the appropriate box:

- [X] Preliminary proxy statement
 [] Definitive proxy statement
 [] Definitive additional materials
 [] Soliciting material pursuant to Rule 14a-11(c) or Rule 14a-12
 [] Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

APA OPTICS, INC.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- [X] No fee required
 [] Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

- (1) Title of each class of securities to which transaction applies:
(2) Aggregate number of securities to which transactions applies:
(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11. (Set forth the amount on which the filing fee is calculated and state how it was determined.)
(4) Proposed maximum aggregate value of transaction:
(5) Total fee paid:

- [] Fee paid previously with preliminary materials.
 [] Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- (1) Amount previously paid:
(2) Form, Schedule or Registration Statement No.:
(3) Filing party:
(4) Date filed:

APA OPTICS, INC.
2950 N.E. 84th Lane
Blaine, Minnesota 55449

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

TO OUR SHAREHOLDERS:

The 2000 Annual Meeting of the shareholders of APA Optics, Inc., a Minnesota corporation (the "Company"), will be held at the Four Points Sheraton, 1330 Industrial Boulevard, Minneapolis, Minnesota 55431, on August 16, 2000, at 3:30 p.m., Central Daylight Time, to consider and vote upon the following matters:

1. Election of five directors.
2. Amendment to our Articles of Incorporation to increase our

authorized common stock from 15,000,000 to 50,000,000 shares.

3. Such other business as may properly come before the meeting or any adjournment or adjournments thereof.

We have fixed the close of business on June 23, 2000, as the record date for the determination of shareholders entitled to notice of and to vote at the Annual Meeting. Our transfer books will not be closed.

Whether or not you expect to be present personally at the Annual Meeting, please complete, date, sign, and return the accompanying Proxy in the enclosed, self-addressed envelope at your earliest convenience. This will insure your participation in the decisions to be made by the shareholders. We sincerely hope that all shareholders who can attend the Annual Meeting will do so.

BY ORDER OF THE BOARD OF DIRECTORS

Kenneth A. Olsen
Secretary

July 12, 2000

APA OPTICS, INC.
2950 N.E. 84TH LANE
BLAINE, MINNESOTA 55449

PROXY STATEMENT
FOR ANNUAL MEETING OF SHAREHOLDERS
AUGUST 16, 2000

SOLICITATION AND REVOCATION OF PROXIES

The accompanying Proxy is solicited by the Board of Directors of APA Optics, Inc. (the "Company") in connection with the 2000 Annual Meeting of the Shareholders of the Company, to be held on August 16, 2000, at 3:30 p.m. Minneapolis time, at the Four Points Sheraton, 1330 Industrial Boulevard, Minneapolis, Minnesota 55431 and any adjournments thereof. This Proxy Statement is first being mailed to shareholders on or about July 12, 2000.

HOW TO VOTE

- o By signing and returning the enclosed proxy card, you will be giving your proxy to our board of directors and authorizing them to vote your shares.

HOW YOUR PROXY WILL BE VOTED

- o Unless revoked, all properly executed Proxies will be voted as specified. Proxies that are signed but that lack any specification will, subject to the following, be voted FOR all nominees for director as listed herein and FOR each other proposal described in this Proxy Statement. If any other matters properly come before the Annual Meeting, or if any of the persons named to serve as directors should decline or be unable to serve, the persons named in the Proxy will vote in accordance with their discretion.

HOW TO REVOKE YOUR PROXY

- o You have the power to revoke your proxy at any time before the convening of the Annual Meeting. Revocations of proxy will be honored if received by us, at the Company, addressed to the attention of Anil K. Jain, on or before August 15, 2000. In addition, on the day of the meeting, prior to the convening thereof, revocations may be delivered to the tellers who will be seated at the door of the meeting room.

ABSTENTIONS

- o If you abstain from voting as to any matter, your shares shall be deemed present at the meeting for purposes of determining a quorum and for purposes of calculating the vote with respect to such matter, but shall not be deemed to have been voted in favor of such matter. Abstentions, therefore, as to any proposal will have the same effect as votes against such proposal.

BROKER NON-VOTES

- o If a broker turns in a "non-vote" Proxy, indicating a lack of voting instruction by the beneficial holder of the shares and a lack of discretionary authority on the part of the broker to vote on a particular matter, then the shares covered by such non-vote Proxy will be considered present at the meeting for purposes of determining a quorum but will not be considered to be represented at the meeting for purposes of calculating the vote required for approval of such matter.

COST OF SOLICITATION

- o We will pay all expenses in connection with the solicitation of proxies. Proxies are being solicited primarily by mail, but officers, directors, and other employees of the Company may also solicit proxies by telephone, telegraph, or personal calls. No extra compensation will be paid by us for such solicitation. We may reimburse brokers, banks, and other nominees holding shares for others for the cost of forwarding proxy materials to, and obtaining proxies from, their principals.

VOTING RIGHTS

Only shareholders of record at the close of business on June 23, 2000, are entitled to notice of and to vote at the meeting or any adjournment thereof. As of that date, we had issued and outstanding 9,622,028 shares of common stock and 500 shares of 2% Series A Convertible Preferred Stock. Only our common stock is entitled to vote on the proposals described in this Proxy Statement. Each shareholder of record is entitled to one vote for each share registered in the shareholder's name as of the record date. The Articles of Incorporation of the Company do not grant the shareholders the right to vote cumulatively for the election of directors. No shareholder will have appraisal rights or similar dissenter's rights as a result of any matters expected to be voted on at the meeting.

The presence in person or by proxy of holders of a majority of the shares of Common Stock entitled to vote at the Annual Meeting will constitute a quorum for the transaction of business.

OWNERSHIP OF COMMON STOCK

The following table shows as of June 23, 2000, the stock ownership of (i) all persons known by us to be beneficial owners of more than five percent of our outstanding shares of Common Stock, (ii) each director, (iii) the Named Executive Officer (as defined below under the caption "Executive Compensation"), (iv) each nominee for election as a director, and (v) all current directors and executive officers as a group:

<TABLE>
<CAPTION>

NAME AND ADDRESS OF BENEFICIAL OWNER -----	NUMBER OF SHARES BENEFICIALLY OWNED -----	PERCENT OF OUTSTANDING SHARES -----
<S> Anil K. Jain 2950 N.E. 84th Lane Blaine, Minnesota 55449	<C> 1,670,602(1)	<C> 17.4%
Kenneth A. Olsen 2950 N.E. 84th Lane Blaine, Minnesota 55449	842,832(2)	8.8
Herman Lee Route 1, Box 55 Borup, Minnesota 56519	800,000	8.3
Gregory J. Von Wald	20,000(3)	*

William R. Franta	10,000(4)	*
Michael A. Gort	5,000(5)	*
All directors and executive officers as a group (6 persons)	2,548,434(3) (4) (5)	26.4

</TABLE>

- -----

* Less than 1%.

- (1) Includes 5,250 shares held by Dr. Jain as custodian for minor relatives. Dr. Jain disclaims beneficial ownership of such shares.
- (2) Includes 19,332 shares held in trusts for Anil K. Jain's children, of which Mr. Olsen serves as trustee. Mr. Olsen disclaims beneficial ownership of such shares.
- (3) Includes 20,000 shares that may be acquired upon exercise of options that are or will become exercisable within sixty days of the record date.
- (4) Includes 10,000 shares that may be acquired upon exercise of options that are or will become exercisable within sixty days of the record date.
- (5) Includes 5,000 shares that may be acquired upon the exercise of currently exercisable options.

ITEM NO. 1

ELECTION OF DIRECTORS

Our Board of Directors has nominated the individuals listed below for election as directors, each to serve until the next annual meeting of the shareholders and until his successor is elected and qualified or until his earlier resignation or removal. All of the nominees are currently

3

directors. Michael A. Gort was added by vote of the Board to fill a vacancy created by the resignation of Senator Larry Pressler. The five serving directors have all been nominated for reelection.

Unless instructed not to vote for the election of directors or not to vote for any specific nominee, we will vote your proxy to elect the listed nominees. If any of the nominees are not candidates for election at the meeting, which is not currently anticipated, we will vote for such other persons we may determine, in our discretion.

The following information is provided with respect to the nominees for directors:

NAME	AGE	DIRECTOR SINCE
----	---	-----
Anil K. Jain	54	1979
Kenneth A. Olsen	56	1980
Gregory J. Von Wald	50	1997
William R. Franta	58	1998
Michael A. Gort	51	2000

Anil K. Jain has been president and treasurer of the Company since 1979, Chairman of the Board since 1987, and chief executive officer since 1988. Dr. Jain is a past director and former chairman of Minnesota Project Innovation, Inc., a nonprofit corporation.

Kenneth A. Olsen has been secretary of the Company since 1983 and vice president since 1992. Mr. Olsen manages the Company's optics fabrication operations. Prior to joining the Company in 1979, Mr. Olsen had been employed at 3M since 1966.

Gregory J. Von Wald joined Golden West Tele-Tech, Inc. as the General Manager in December 1999. Prior thereto he had served as Vice President for Technical Services for NorCom Advanced Technologies, Inc., a firm providing telecommunications equipment and related services. He had been with NorCom, or its predecessor, Tel Serv Telecommunications, Inc., as an owner or officer, since 1992. Mr. Von Wald is serving on the Board as a representative of the Aberdeen Development Council, one of the funding sources for the Company's Aberdeen, South Dakota, manufacturing facility.

Dr. William R. Franta has been Vice President of Product Strategy and

Development for REAL Solutions, a systems integrator in the data communications, storage systems, and server platform markets since July 1999. Since August 1998 he had served as Vice President of Marketing for Centron-DPL, a VAR/Integrator for networking infrastructure, and prior thereto had worked as an independent consultant. From 1987 through 1996, he served as a senior vice president and in other positions with Network Systems Corporation (which was acquired by Storage Technology Corporation in 1995), primarily in charge of advanced development, product development, and product marketing. He currently serves as a director of Waters Instruments, Inc.

Michael A. Gort has been Chairman and Chief Executive Officer of Bravo Zulu! Interactive, an interactive multimedia development company, since May 1, 2000. Prior thereto, he was a consultant to high tech companies. From March 1990 through June 1997, he was employed by Morgan Stanley Dean Witter, most recently (March 1995 - June 1997) as a Managing Director in the Information Technology Division.

4

BOARD MEETINGS. The Board of Directors held six meetings during fiscal 2000. All directors attended at least 75% of the meetings of the Board of Directors and of each committee on which they served.

AUDIT COMMITTEE. The members of the audit committee in fiscal 2000 were Messrs. Von Wald (chairman), Franta, and Jain. The audit committee is responsible for meeting with the Company's independent public accountants to discuss the annual audit and related accounting and financial matters. The audit committee held one meeting in fiscal 2000. In accordance with newly enacted rules of the Securities and Exchange Commission ("SEC"), in fiscal 2001, the audit committee will consist of the three nonemployee directors.

COMPENSATION COMMITTEE. In fiscal 2000, the compensation committee consisted of Messrs. Franta, Von Wald and Olsen. The compensation committee met once during fiscal 2000 to consider the compensation of the executive officers.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION IN COMPENSATION DECISIONS. During fiscal 2000, Kenneth A. Olsen served as a member of the compensation committee. Mr. Olsen is an executive officer of the Company.

COMPENSATION OF DIRECTORS. We pay each director who is not also an employee of the Company a quarterly director's fee of \$500 and reasonable expenses for attending Board meetings. We paid a total of \$4,000 in directors' fees for services rendered during fiscal 2000.

Under the terms of our Stock Option Plan for Nonemployee Directors, each director who is not otherwise an employee of the Company receives annually, on the first business day following the annual shareholders' meeting or, if earlier, on September 1, an option to purchase 5,000 shares of common stock. The exercise price for the option equals the fair market value of the stock on the date of grant. Each option becomes exercisable on the earlier of the date of the next annual shareholders' meeting or one year from the date of grant and is exercisable for a period of four years thereafter. During fiscal 2000, options to purchase 15,000 shares at \$6.55 per share were awarded to non-employee directors pursuant to the Plan. An option for 5,000 shares expired when the recipient resigned from the Board.

5

EXECUTIVE COMPENSATION

SUMMARY COMPENSATION TABLE. The following table sets forth certain information regarding compensation paid during each of our last three fiscal years to our chief executive officer, who is the only executive officer whose total annual compensation in fiscal 2000 (based on salary and bonus) exceeded \$100,000 (the "Named Executive Officer").

NAME AND PRINCIPAL POSITIONS	FISCAL YEAR	ANNUAL COMPENSATION	
		SALARY	BONUS(1)
Anil K. Jain	2000	\$136,463	-
President and Chief	1999	135,000	\$ 14,175
Executive Officer	1998	131,190	9,204

(1) Bonus paid for services in prior fiscal year. Payment of bonus for fiscal 1999 was deferred until the Company achieves positive cash flow.

STOCK OPTIONS. No options were granted to or exercised by the Named Executive Officer in fiscal 2000, and no options were outstanding at the close of fiscal 2000.

CHANGE OF CONTROL ARRANGEMENT. We have an agreement with Anil K. Jain providing for certain benefits in the event of a change in control of the Company. If, following a change in control (as defined in the agreement), Dr. Jain's employment is terminated within 36 months other than for "cause" (as defined) or as a result of his retirement, disability, or death, or if Dr. Jain terminates his employment for "good reason" (as defined), he is to receive a lump sum payment equal to two and one-half times his annualized includable compensation for the base period (as defined in Section 280G(d) of the Internal Revenue Code of 1986, as amended). "Good reason" includes certain changes in Dr. Jain's duties, responsibilities, status, salary, benefits, and other similar terms of his employment made without his consent. A "change in control" for purposes of the agreement includes a consolidation or merger of the Company in which the Company is not the continuing or surviving corporation, any sale, lease, exchange, or transfer of all or substantially all of the assets of the Company, approval by the shareholders of any plan or proposal for liquidation or dissolution of the Company, the acquisition by any person (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, as amended) of beneficial ownership of 30% or more of the Company's outstanding common stock, or a change in the board of directors of the Company during any period of two consecutive years such that individuals who at the beginning of such period constituted the entire Board of Directors cease for any reason to constitute a majority (with certain exceptions).

In addition, we have an agreement with Dr. Jain providing that upon the occurrence of a change in control, in conjunction with a change in Dr. Jain's current position, other than by voluntary resignation, Dr. Jain will have the option to request the Company to purchase from him a number of shares of his common stock equal to up to 4% of the shares of common stock outstanding immediately prior to the change in control at a price per share equal to highest per share price paid in connection with the change in control event or the highest price paid in the

6

public market within the twelve months preceding Dr. Jain's exercise of the option. This option is effective for a period of twelve months after the change in control.

REPORT OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS

During fiscal 2000, the compensation committee of the Board was comprised of Messrs. Franta, Olsen, and Von Wald. The compensation committee develops our general compensation policies and establishes compensation plans and specific compensation levels for executive officers.

COMPENSATION POLICY

In determining the Company's executive compensation policy and levels, the compensation committee seeks to attract and retain qualified executive officers, motivate executive officers to improve the Company's performance, and reward executive officers for individual contributions to the achievement of the Company's business objectives. The committee attempts to achieve these goals by combining annual base salaries with bonuses based on corporate performance and on the achievement of specified performance objectives. The compensation committee believes that cash compensation in the form of salary and bonus provides executives with short-term rewards for success in operations. The compensation committee also believes that long-term compensation through the award of stock options encourages growth in management stock ownership which leads to expansion of management's stake in the long-term performance and success of the Company.

BASE SALARY. In determining the base salary of each of the executive officers, the Company relies on information regarding salaries paid to executive officers with comparable responsibilities employed by companies with comparable businesses and also takes into account the Company's cash needs. In fiscal 2000, the base salary of the executive officers was increased by 2%.

BONUSES. Annual incentives for the President and Chief Executive Officer and the other executive officers are intended to reward the attainment of annually established goals in various areas over which the individual officer has significant influence or control, including product development, product manufacturing, sales levels, and others. As of the mailing of this Proxy Statement, the compensation committee had not yet determined whether bonuses would be paid for fiscal 2000. This determination is usually made in August.

STOCK OPTIONS. To date, because the two principal executive officers own a significant percentage of the Company's outstanding common stock, they have not been awarded options. Options have been awarded to other management employees, usually at the time they are hired.

COMPENSATION OF PRESIDENT AND CHIEF EXECUTIVE OFFICER

The compensation committee believes that the compensation of the President and Chief Executive Officer should reflect the Company's performance. In fiscal 2000, the annual base salary of the Company's President and Chief Executive Officer was increased by 2%. The amount of any bonus paid to the Chief Executive Officer for fiscal 2000 will be determined following analysis of whether specific performance goals were achieved. For the Chief Executive Officer, these goals were based on sales levels, production of new products, and other related matters. As of the date of mailing of this Proxy Statement, the compensation committee had not determined whether any bonus had been earned by the Chief Executive Officer.

SECTION 162 LIMITATION

The compensation committee has considered whether any revisions to the Company's executive compensation policy may be necessary due to provisions of the Omnibus Budget Reconciliation Act of 1993. This legislation amended Section 162 of the Code by limiting to \$1,000,000 the deductibility of compensation paid to certain executives. It is the current policy of the compensation committee to maximize, to the extent reasonably possible, the Company's ability to obtain a corporate tax deduction for compensation paid to executive officers of the Company to the extent consistent with the best interest of the Company and its shareholders.

William R. Franta Kenneth A. Olsen Gregory J. Von Wald

STOCK PERFORMANCE GRAPH

The following performance graph compares the cumulative total returns for the Company's Common Stock, The Nasdaq Stock Market (U.S.) Index and The Nasdaq Non-Financial Index for the period from March 31, 1995 through March 31, 2000. The comparison assumes \$100 was invested in the Company's Common Stock and in each index at the beginning of the period and reinvestment of dividends.

[GRAPH]

<TABLE>
<CAPTION>

	CUMULATIVE TOTAL RETURN					
	3/95	3/96	3/97	3/98	3/99	3/00
<S>	<C>	<C>	<C>	<C>	<C>	<C>
APA Optics, Inc.	100.00	172.28	174.26	188.12	221.79	930.71
Nasdaq Stock Market (U.S.)	100.00	135.80	150.95	228.88	309.19	574.04
Nasdaq Non-Financial	100.00	134.92	145.51	218.33	305.45	599.01

</TABLE>

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

SUBLEASE FOR COMPANY FACILITY. Effective December 1, 1984, we entered into a sublease for our office and manufacturing space with Jain-Olsen Properties, a partnership consisting of Anil K. Jain and Kenneth A. Olsen, who are officers, directors, and principal shareholders of the Company. We have twice exercised an option to extend the sublease for an additional five years. In fiscal 2000, we entered into an Amendment and Extension of the Sublease through November 30, 2004. Certain terms of the sublease are set forth in Note 8 of Notes to Financial Statements included in our 2000 Annual Report, which is being distributed with this Proxy Statement. We made lease payments of \$121,000 and \$116,000 to Jain-Olsen Properties during fiscal 2000 and 1999, respectively, and we are obligated to make payments in fiscal 2001 of \$134,000. The sublease will expire in November 2004. We believe the lease terms are at least as favorable to us as terms we could have negotiated with an unrelated third party.

KEY MAN INSURANCE. We maintain key man insurance in the amount of

\$2,000,000 on the life of Anil K. Jain and in the amount of \$500,000 on the life of Kenneth A. Olsen, both of whom are directors and officers. Up to \$500,000 of the proceeds of each policy is intended to be used to purchase shares of our common stock owned by the insured at the request of the personal representative of the insured's estate. The per share price for the repurchase will be the fair market value of the common stock as of the date of the event triggering the repurchase.

SPLIT DOLLAR INSURANCE. In November 1989, we adopted a split dollar life insurance plan (the "1989 Plan") for the benefit of Anil K. Jain. Under the terms of the 1989 Plan, we pay the premiums on a \$5 million insurance policy (the "Policy") on the lives of Dr. Jain and his spouse. The Policy is a whole life, joint and survivor policy, on which all premiums are paid by us and income is imputed to Dr. Jain in an amount equal to the term rate for his insurance as established by the insurer. No premium payments have been made since January 1996.

The Policy is owned by the Jain Children's Irrevocable Trust dated November 28, 1989 (the "Trust"). The 1989 Plan is designed so that we will recover all premium payments and advances made by us on account of the Policy held by the Trust. Our interest in the premium payments and advances is secured by a collateral assignment of the Policy. Upon the death of the last to die of Dr. Jain and his spouse, we will be reimbursed from the insurance proceeds paid to the Trust in an amount equal to the total premiums and advances made by us. In the event the trustee of the Trust surrenders the Policy for its cash surrender value at some date in the future, we will be reimbursed for the premiums paid on the Policy.

10

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Based solely upon a review of Forms 3, 4 and 5 and amendments thereto furnished to the Company and any written representations that no Forms 5 were required, the Company believes that all reports required to be filed by its officers, directors, and greater than 10% beneficial shareholders under Section 16(a) of the Exchange Act were timely filed.

ITEM NO. 2 INCREASE IN AUTHORIZED CAPITAL STOCK

The Board has approved, subject to shareholder approval, an amendment of our Restated Articles of Incorporation to increase the number of authorized shares of common stock, \$.01 par value, from 15,000,000 to 50,000,000. As of June 23, 2000, 9,622,028 shares of common stock were issued and outstanding and 1,714,972 shares were reserved for issuance under our option plans, our outstanding 2% Series A Convertible Preferred Stock, and outstanding warrants. In addition, we had authorized 5,000,000 undesignated shares, \$.01 par value, of which 500 shares had been designated as 2% Series A Convertible Preferred Stock. All 500 of these shares are issued and outstanding.

We believe that the proposed increase is desirable so that, as the need may arise, we will have more flexibility to issue shares of common stock without the expense and delay of a special shareholders' meeting, in connection with possible future stock dividends or stock splits, equity investments or acquisitions, management incentive and employee benefit plans and for other general corporate purposes.

The increase in authorized common stock will not have any immediate effect on the rights of existing shareholders. However, our Board of Directors will have the authority to issue authorized common stock for such purposes and for such consideration as it may determine to be appropriate without requiring future shareholder approval of such issuances, except as may be required by applicable law or exchange regulations. Issuance of additional authorized shares will decrease the existing shareholders' percentage equity ownership and, depending upon the price at which they are issued, may dilute the existing shareholders. Issuance of additional shares could also adversely affect the market price of the common stock. The holders of common stock have no preemptive rights to acquire additional shares which may be issued.

The increase in the authorized number of shares of common stock and the subsequent issuance of such shares could have the effect of delaying or preventing a change in control of the Company without further action by the shareholders. Our Board of Directors could issue shares of authorized and unissued common stock (within the limits imposed by applicable law) in one or more transactions which would make a change in control more difficult, and therefore less likely. Any such issuance of additional stock could have the effect of diluting the earnings per share and book value per share of outstanding shares of common stock, and such additional shares could be used to dilute the stock ownership or voting rights of a person seeking to obtain control of the Company.

We currently plan to issue additional shares of common stock pursuant to a public offering to institutional buyers. We have filed a registration statement on Form S-3 (Commission File No. 333-33966) for sale of up to \$100 million of common stock in this offering. As of June 23, 2000, 574,036 shares have been sold for aggregate gross proceeds of \$8,450,941. The offering is not underwritten and we do not know whether any additional shares will be sold or the price of any additional sales. We anticipate that this offering will terminate in late 2000.

VOTE NECESSARY TO APPROVE PROPOSAL. The affirmative vote of the holders of a majority of the outstanding shares of Common Stock present and entitled to vote at the meeting is necessary for approval of Item No. 2. Therefore, abstentions and broker non-votes effectively count as votes against the proposal.

THE BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE PROPOSED AMENDMENT TO THE COMPANY'S ARTICLES OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK TO 50,000,000.

MISCELLANEOUS

We are not aware that any matter other than those described in the Notice of Meeting will be presented for action at the Meeting. If, however, other matters do properly come before the Meeting, it is the intention of Messrs. Jain and Olsen (the persons named as proxies) to vote the proxied shares in accordance with their best judgment on such matters.

RELATIONSHIP WITH INDEPENDENT AUDITORS

Ernst & Young LLP, independent auditors, audited the financial statements of the Company for the fiscal year ended March 31, 2000. The Company anticipates that Ernst & Young LLP will be retained as the Company's independent auditors for fiscal 2001. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting and will have the opportunity to make a statement, if they desire to do so, and would be available to respond to appropriate questions.

SHAREHOLDER PROPOSALS FOR 2001 ANNUAL MEETING

The Company's 2001 Annual Meeting of Shareholders is expected to be held on or about August 22, 2001, and proxy materials in connection with that meeting are expected to be mailed on or about July 15, 2001. In order to be included in the Company's proxy materials for the 2000 Annual Meeting, shareholder proposals prepared in accordance with the proxy rules must be received by the Company on or before March 14, 2001.

In addition, pursuant to the Company's Bylaws, a shareholder must give notice to the Company prior to May 18, 2001 of any nominations for director or any proposal which such shareholder intends to raise at the 2001 Annual Meeting. If the Company receives notice of such nomination or proposal on or after May 18, 2001, such nomination or proposal will not be considered at the annual meeting.

Additionally, if the Company receives notice of a shareholder proposal after May 28, 2001 it will be considered untimely pursuant to SEC Rule 14a-4 and 14a-5(e) and the persons named in the proxies solicited by the Board of Directors for the 2001 Annual Meeting may exercise discretionary voting power with respect to the proposal.

ADDITIONAL INFORMATION

A copy of the Company's Report to Shareholders for the fiscal year ended March 31, 2000, accompanies this Notice of Annual Meeting and Proxy Statement.

THE COMPANY WILL FURNISH WITHOUT CHARGE A COPY OF ITS ANNUAL REPORT ON FORM 10-K (EXCLUSIVE OF EXHIBITS) FOR THE FISCAL YEAR ENDED MARCH 31, 2000, TO EACH PERSON WHO IS A SHAREHOLDER OF THE COMPANY AS OF JUNE 23, 2000, UPON RECEIPT OF A WRITTEN REQUEST FOR SUCH REPORT. SUCH REQUESTS SHOULD BE SENT TO:

APA OPTICS, INC.
Attention: Secretary
2950 N.E. 84th Lane
Blaine, Minnesota 55449

Kenneth A. Olsen
Secretary

July 12, 2000

APA OPTICS, INC.
PROXY
ANNUAL MEETING OF SHAREHOLDERS - AUGUST 16, 2000

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Anil K. Jain and Kenneth A. Olsen, or either of them, proxies or proxy, with full power of substitution, to vote all shares of Common Stock of APA Optics, Inc. (the "Company") which the undersigned is entitled to vote at the 2000 Annual Meeting of Shareholders to be held at the Four Points Sheraton, 1330 Industrial Boulevard, Minneapolis, Minnesota 55431, August 16, 2000, at 3:30 p.m., Central Daylight Time, and at any adjournment thereof, as directed below with respect to the proposals set forth below, all as more fully described in the Proxy Statement, and upon any other matter that may properly come before the meeting or any adjournment thereof.

1. ELECTION OF DIRECTORS:

FOR all nominees listed WITHHOLD AUTHORITY to vote for
below (except as marked to all nominees listed below |_|
the contrary below) |_|

Anil K. Jain, Kenneth A. Olsen, Gregory J. Von Wald, William R. Franta and Michael A. Gort

(INSTRUCTION: TO WITHHOLD AUTHORITY FOR ANY INDIVIDUAL NOMINEE, WRITE THAT NOMINEE'S NAME IN THE SPACE PROVIDED BELOW.)

2. INCREASE IN AUTHORIZED COMMON STOCK TO 50,000,000 SHARES:

|_| FOR |_| AGAINST |_| ABSTAIN

3. Upon such other matters as may properly come before the meeting.

The power to vote granted by this Proxy may be exercised by Anil K. Jain and Kenneth A. Olsen, jointly or singly, or their substitute(s), who are present and acting at said Annual Meeting or any adjournment of said Annual Meeting. The undersigned hereby revokes any and all prior proxies given by the undersigned to vote at this Annual Meeting.

THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE SHAREHOLDER'S INSTRUCTIONS. IF THE SHAREHOLDER EXECUTES THIS PROXY BUT DOES NOT PROVIDE INSTRUCTIONS, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE PROPOSED DIRECTORS AND FOR THE INCREASE IN THE COMPANY'S AUTHORIZED COMMON STOCK.

It is urgent that each shareholder complete, date, sign, and mail this Proxy as soon as possible. Your vote is important!

Dated and Signed _____, 2000

Signature of Shareholder(s)

Signature of Shareholder(s)

Please sign as your name(s) appears above. When signing as attorney, executor, administrator, trustee, guardian, authorized officer of a corporation, or partner of a partnership, please provide the name of the entity on whose behalf you are signing and your title.

PLEASE DO NOT FORGET TO DATE THIS PROXY.