

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:

[] PRELIMINARY PROXY STATEMENT

[X] DEFINITIVE PROXY STATEMENT

[] DEFINITIVE ADDITIONAL MATERIALS

[] SOLICITING MATERIAL PURSUANT TO RULE 14a-11(c) OR RULE 14a-12

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) (1)
AND 0-11.

(1) TITLE OF EACH CLASS OF SECURITIES TO WHICH TRANSACTION APPLIES:

(2) AGGREGATE NUMBER OF SECURITIES TO WHICH TRANSACTION 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 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:

Please take notice that the 1999 Annual Meeting of the Shareholders of APA Optics, Inc., a Minnesota corporation (the "Company"), will be held at the Sheraton Minneapolis Metrodome, 1300 Industrial Boulevard, Minneapolis, Minnesota 55431, on August 18, 1999, at 3:30 p.m., Central Daylight Time, to consider and vote upon the following matters:

1. Election of five directors of the Company.
2. Such other business as may properly come before the meeting or any adjournment or adjournments thereof.

The Board of Directors of the Company has fixed the close of business on June 30, 1999, as the record date for the determination of shareholders entitled to notice of and to vote at the Annual Meeting. The transfer books of the Company will not be closed.

Shareholders who do not expect to be present personally at the Annual Meeting are urged to complete, date, sign, and return the accompanying Proxy in the enclosed, self-addressed envelope. The Board of Directors of the Company sincerely hopes, however, that all shareholders who can attend the Annual Meeting will do so.

It is important that your shares be represented and voted at the Annual Meeting. You should, therefore, return your Proxy at your earliest convenience.

BY ORDER OF THE BOARD OF DIRECTORS

Kenneth A. Olsen
Secretary

July 19, 1999

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

PROXY STATEMENT

ANNUAL MEETING OF SHAREHOLDERS TO BE HELD AUGUST 18, 1999

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 1999 Annual Meeting of the Shareholders of the Company, to be held on August 18, 1999, at 3:30 p.m. Minneapolis time, at the Sheraton Minneapolis Metrodome, 1300 Industrial Boulevard, Minneapolis, Minnesota 55431 and any adjournments thereof. This Proxy Statement is first being mailed to shareholders on or about July 19, 1999.

A person giving the enclosed Proxy has the power to revoke it at any time before the convening of the Annual Meeting. Revocations of proxy will be honored if received at the offices of the Company, addressed to the attention of Anil K. Jain, on or before August 17, 1999. 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 hall.

Unless revoked in the manner set forth above, 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. 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 the same in accordance with their discretion. If a shareholder abstains from voting as to any matter, then the shares held by such shareholder 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. 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 shall be deemed present at the meeting for purposes of determining a quorum but shall not be deemed to be represented at the meeting for purposes of calculating the vote required for approval of such matter.

Expenses in connection with the solicitation of proxies will be paid by the Company. 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 the Company for such solicitation. The Company 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 30, 1999, are entitled to notice of and to vote at the meeting or any adjournment thereof. As of that date, there were issued and outstanding 8,512,274 shares of Common Stock of the Company, the only class of securities of the Company entitled to vote at the meeting. 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 sets forth certain information as of June 30, 1999, obtained from the Company's stock records or the named shareholder, with respect to the stock ownership of all persons known by the Company to be beneficial owners of more than five percent of its outstanding shares of Common Stock, each director, the Named Executive Officer, and all directors and executive officers of the Company as a group:

NAME AND ADDRESS OF BENEFICIAL OWNER -----	NUMBER OF SHARES BENEFICIALLY OWNED -----	PERCENT OF OUTSTANDING SHARES -----
Anil K. Jain 2950 N.E. 84th Lane Blaine, Minnesota 55449	1,664,002 (1)	19.5%
Kenneth A. Olsen 2950 N.E. 84th Lane Blaine, Minnesota 55449	839,332 (2)	9.7
Herman Lee Route 1, Box 55 Borup, Minnesota 56519	790,500	9.3
Gregory J. Von Wald	10,000 (3)	*
William R. Franta	-	-
Larry Pressler	-	-
All directors and executive officers as a group (6 persons)	2,513,334 (1) (2) (3)	29.5

* 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 10,000 shares Mr. Von Wald may acquire upon exercise of options that become exercisable within sixty days of the record date.

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ITEM NO. 1

ELECTION OF DIRECTORS

Management 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. At the 1998 annual meeting, Anil K. Jain, Kenneth A. Olsen, Lincoln Hudson, and Gregory J. Von Wald were elected as directors. In December 1998, Mr. Hudson retired as a director, and William R. Franta was appointed to replace him. In April 1999, Larry Pressler was appointed a director. 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, the proxies will vote to elect the listed nominees. If any of the nominees are not candidates for election at the meeting, which is not currently anticipated, the proxies may vote for such other persons as they, in their discretion, may determine.

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

NAME	AGE	DIRECTOR SINCE
----	---	-----
Anil K. Jain	52	1979
Kenneth A. Olsen	54	1980
Gregory J. Von Wald	49	1997
William R. Franta	57	1998
Larry Pressler	57	1999

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 is Vice President for Technical Services for NorCom Advanced Technologies, Inc., a firm providing telecommunications equipment and related services. He has been with NorCom, or its predecessor, Tel Serv Telecommunications, Inc., as an owner or officer, since 1992. He 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. Mr. Von Wald retired from the U.S. Marine Corps in 1991 as a Lieutenant Colonel.

Dr. William R. Franta is Vice President of Marketing for Centron-DPL, a VAR/Integrator for networking infrastructure. From 1987 through 1996, he served as a senior vice president and in other positions with Network Systems Corporation (which was acquired by Storage

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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.

Larry Pressler is currently a partner in the Washington, D.C. law firm of O'Connor & Hannan, L.L.P., where he serves as head of its Telecommunications and Business Group. From 1979 to 1996, he served as United States Senator from the State of South Dakota. He currently serves as a director of Plus Communications, American Technologies Group, Inc., and Global Light Telecommunications, Inc.

BOARD MEETINGS. The Board of Directors held five meetings during fiscal 1999, all of which were attended by all directors then serving. The directors also acted once by a consent in writing without a meeting.

COMMITTEES. The members of the audit committee are Gregory J. Von Wald (chairman), William R. Franta, and Anil K. Jain. The 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 1999. The compensation committee, of which Mr. Hudson served as Chair until his retirement, currently consists of Messrs. Franta, Von Wald and Olsen. The compensation committee met once during fiscal 1999 to consider the compensation of the executive officers.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION IN COMPENSATION DECISIONS. During fiscal 1999, members of the Compensation Committee included William R. Franta, Lincoln Hudson, Kenneth A. Olsen, and Gregory J. Von Wald. Mr. Olsen is an executive officer of the Company.

COMPENSATION OF DIRECTORS. Each of the directors who is not also an employee of the Company is paid a quarterly director's fee of \$500 and reasonable expenses for attending Board meetings. The Company paid a total of \$4,000 in directors' fees for services rendered during fiscal 1999.

Under the terms of the Company's 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 such option is based on 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 1998, two options to purchase 5,000 shares at \$5.65 per share were awarded pursuant to the plan. The option granted to Mr. Hudson expired upon his retirement prior to serving a full year.

EXECUTIVE COMPENSATION

SUMMARY COMPENSATION TABLE. The following table sets forth certain information regarding compensation paid during each of the Company's last three fiscal years to the Company's chief executive officer, the only executive officer whose total annual compensation in fiscal 1999 (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	1999	\$135,000	--
President and Chief	1998	131,190	\$9,204
Executive Officer	1997	124,926	1,445

(1) Bonus paid for services in prior fiscal year.

STOCK OPTIONS. No options were granted to or exercised by the Named Executive Officer in fiscal 1999, and no options were outstanding at the close of fiscal 1999.

CHANGE OF CONTROL ARRANGEMENT. The Company has entered into agreements with Anil K. Jain providing for certain benefits in the event of a change in control of the Company. An agreement regarding employment/compensation provides that 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 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 occurs such that during any period of two consecutive years, individuals who at the beginning of such period constituted the entire Board of Directors cease for any reason to constitute a majority thereof (with certain exceptions).

In addition, the Company has entered into 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 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

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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

The Compensation Committee of the Board is comprised of Messrs. Franta, Olsen, and Von Wald. Until his retirement in December 1998, Mr. Hudson also served on the Compensation Committee. The Compensation Committee develops the general compensation policies of the Company 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 Compensation 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 Company 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. In fiscal 1999, no increases were made to the base salaries of the executive officers. This decision reflected the Committee's belief that the salaries were competitive and the Company's financial performance in fiscal 1998.

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. The target bonus is determined as a percentage of the recipient's base salary. For fiscal 1999 target bonus amounts ranged from 12.5% to 25% of base salary. If performance does not meet the specified performance targets, bonuses are reduced or not paid. As of the mailing of this Proxy Statement, the Compensation Committee had not yet determined whether goals were achieved and bonuses would be paid for fiscal 1999. 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, primarily at the time they are hired.

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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 1999, the annual base salary of the Company's President and Chief Executive Officer remained the same as in fiscal 1998 for the reasons noted above. The amount of any bonus paid to the Chief Executive Officer for fiscal 1999 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. The Compensation Committee had not made this determination as of the date of mailing of this Proxy Statement.

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

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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 April 1, 1994, through March 31, 1999. 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.

[PLOT POINTS CHART]

<TABLE>
<CAPTION>

	Mar. 31, 1994	Mar. 31, 1995	Mar. 31, 1996	Mar. 31, 1997	Mar. 31, 1998	Mar. 31, 1999
<S>	<C>	<C>	<C>	<C>	<C>	<C>
APA Optics, Inc.	100	74	121	129	140	165
Nasdaq Stock Market (U.S.)	100	111	151	168	255	342
Nasdaq Non-Financial	100	110	148	160	239	332

</TABLE>

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

SUBLEASE FOR COMPANY FACILITY. Effective December 1, 1984, the Company entered into a sublease for its 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. The sublease expired in fiscal 1995, and the Company exercised the option to extend the sublease for an additional five years. Certain terms of this lease are set forth in Note 9 of Notes to Financial Statements included in the 1999 Annual Report, which is being distributed with this Proxy Statement. The Company made lease payments of \$116,000 and \$118,000 to Jain-Olsen Properties during fiscal 1999 and 1998, respectively, and is obligated to make payments in fiscal 2000 of \$77,000 (amount due through November 1999). The sublease is scheduled to expire in November 1999. It is anticipated that the Company will exercise its option to renew the lease for an additional five years and that the annual rent will increase. The Company believes the lease terms to be at least as favorable to the Company as could have been received from an unrelated third party.

KEY MAN INSURANCE. The Company maintains 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 of the Company. Up to \$500,000 of the proceeds of each policy is intended to be used to purchase shares of the Company's 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 of the Company's Common Stock will be the fair market value of the Common Stock, based on the average of the bid and ask prices as of the date of the event triggering the repurchase.

SPLIT DOLLAR INSURANCE. In November 1989, the Company adopted a split dollar life insurance plan (the "1989 Plan") for the benefit of its president, Anil K. Jain. Under the terms of the 1989 Plan, the Company pays 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 the Company 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 the Company will recover all premium payments and advances made by it on account of the

Policy held by the Trust. The Company's interest in the premium payments and advances made with respect to the Policy is secured by a collateral assignment of the Policy. Upon the death of the last to die of Dr. Jain and his spouse, the Company will be reimbursed from the insurance proceeds paid to the Trust in an amount equal to the total premiums and advances made by the Company with respect to the Policy. In the event the trustee of the Trust surrenders the Policy for its cash surrender value at some date in the future, the Company will be reimbursed for the premiums it has paid on the Policy.

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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, except that a Form 5 reporting the grant of a stock option to Gregory Von Wald, a director, was filed one day late.

MISCELLANEOUS

The Board of Directors is not aware that any matter, other than those described in the Notice, will be presented for action at the Meeting. If, however, other matters do properly come before the Meeting, it is the intention of the persons named in the Proxy 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, 1999. The Company anticipates that Ernst & Young LLP will be retained as the Company's independent auditors for fiscal 2000. 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 2000 ANNUAL MEETING

The Company's 2000 Annual Meeting of Shareholders is expected to be held on or about August 23, 2000, and proxy materials in connection with that meeting are expected to be mailed on or about July 16, 2000. 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 21, 2000.

In addition, pursuant to the Company's Bylaws, a shareholder must give notice to the Company prior to May 21, 2000 of any nominations for director or any proposal which such shareholder intends to raise at the 2000 Annual Meeting. If the Company receives notice of such nomination or proposal on or after May 21, 2000, such nomination or proposal will not be considered at the annual meeting.

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ADDITIONAL INFORMATION

A copy of the Company's Report to Shareholders for the fiscal year ended March 31, 1999, 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, 1999, TO EACH PERSON WHO IS A SHAREHOLDER OF THE COMPANY AS OF JUNE 30, 1999, 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

By Order of the Board of Directors

Kenneth A. Olsen
Secretary

July 19, 1999

APA OPTICS, INC.
PROXY
ANNUAL MEETING OF SHAREHOLDERS - AUGUST 18, 1999

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 1999 Annual Meeting of Shareholders to be held at Sheraton Minneapolis Metrodome, 1300 Industrial Boulevard, Minneapolis, Minnesota 55431, August 18, 1999, 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
Larry Pressler

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

2. 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 SHAREHOLDERS' INSTRUCTIONS. IF THE SHAREHOLDER(S) WHO EXECUTE THIS PROXY DO NOT WITHHOLD THEIR VOTES FOR THE ELECTION OF DIRECTORS, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE PROPOSED DIRECTORS.

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

Dated and Signed _____, 1999

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.