

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 fees (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
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(4) Proposed maximum aggregate value of transaction:

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Check box if any part of the fee is offset as provided
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which the offsetting fee was paid previously. identify the
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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

PROXY STATEMENT

ANNUAL MEETING OF SHAREHOLDERS TO BE HELD AUGUST 20, 1997

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 1997 Annual Meeting of the Shareholders of the Company, to be held on August 20, 1997, 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 18, 1997.

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 19, 1997. 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 and FOR Item 2. 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 July 1, 1997, are entitled to notice of and to vote at the meeting or any adjournment thereof. As of that date, there were issued and outstanding 8,307,124 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.

The following table sets forth certain information as of July 1, 1997, 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 Officers, and all officers and directors 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)	20.0%
Kenneth A. Olsen 2950 N.E. 84th Lane Blaine, Minnesota 55449	839,332(2)	10.1%
Herman Lee Route 1, Box 55 Borup, Minnesota 56519	788,800(3)	9.4%
Lincoln Hudson	22,500(4)	*
Gregory J. Von Wald	- 0 -	--
M. Asif Khan	- 0 -	--
All officers and directors as a group (7 persons)	2,527,834(1) (2) (4)	30.4%

* 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 105,000 shares Mr. Lee may acquire upon exercise of currently exercisable warrants.
- (4) Includes 10,000 shares Mr. Hudson may acquire upon exercise of currently exercisable options and options that become exercisable within sixty days of the record date.

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.

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	51	1979
Kenneth A. Olsen	53	1980
Lincoln Hudson	73	1988
Gregory J. Von Wald	47	1997

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 July 1, 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.

Lincoln Hudson currently provides management consultant services. He served as a consultant to the Company for planning, engineering, and marketing from June 1987 to July 1992. Prior to

his retirement in 1987, Mr. Hudson had served in several management positions for various divisions of Honeywell, Inc., Minneapolis, Minnesota.

Gregory J. Von Wald was appointed as a director in April 1997. He is serving as a representative of the Aberdeen Development Council, one of the funding sources for the Company's Aberdeen, South Dakota, manufacturing facility. Since 1992, Mr. Von Wald has served as General Manager of Tel Serv Telecommunications, Inc., Aberdeen, South Dakota, a firm providing telecommunications equipment and related services. Mr. Von Wald retired from the U.S. Marine Corps in 1991 as a Lieutenant Colonel.

Board Meetings. The Board of Directors held six meetings during fiscal 1997, all of which were attended by all directors then serving.

Committees. The Company has no audit or nominating committee. Those functions are performed by the Board with certain directors abstaining where a potential conflict of interest exists. The compensation committee, which consists of Messrs. Hudson and Olsen, met once during fiscal 1997 to consider the compensation of the chief executive officer.

Compensation of Directors. Each of the directors who is not also an employee of the Company is paid a quarterly director's fee of \$400 and reasonable expenses for attending Board meetings. The Company paid a total of \$1,600 in directors' fees for services rendered during fiscal 1997.

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 1997, one option to purchase 5,000 shares at \$5.65 per share was awarded pursuant to the plan. During fiscal 1997, one director exercised options to purchase 4,000 shares, realizing aggregate net value (market value less exercise price) of approximately \$6,750.

ITEM NO. 2

APPROVAL OF 1997 STOCK COMPENSATION PLAN

The 1997 Stock Compensation Plan (the "Plan") was adopted by the Board of Directors in March 1997, primarily to provide a method of attracting, retaining and rewarding individuals who serve as managers of the Company's facility in Aberdeen, South Dakota.

Description of Plan. The Plan provides for grants of both incentive stock options, intended to qualify as such under Section 422 of the Internal Revenue Code of 1986 (the "Code"), and nonstatutory stock options, stock appreciation rights, and other stock-based awards. Except for the authority to grant incentive stock options, which expires in 2007, the Plan has no expiration date but may be terminated by the Board of Directors at any time, subject to the rights of the holders of options or other awards previously granted under the Plan.

Shares Subject to the Plan. A total of 500,000 shares of Common Stock have been reserved for issuance under the Plan. The shares of Common Stock that may be issued or transferred to grantees under the Plan may be authorized but unissued shares or treasury shares. The Plan provides for appropriate adjustment in the number of shares subject to the Plan and to the grants previously made if there is a stock split, stock dividend, reorganization or other relevant change affecting the Company's corporate structure or its equity securities. If shares subject to an award are not issued to the extent permitted prior to expiration of the award or an award is otherwise forfeited, such shares will become available for inclusion in future grants. On July 1, 1997, the closing price for the Common Stock on The Nasdaq Small-Cap Market was \$5.875 per share.

Administration. The Plan will be administered by the Board or a committee composed of "non-employee" directors (as defined in Rule 16b-3 promulgated under Section 16 of the Securities

Exchange Act of 1934 (the "Exchange Act"). The Board or committee will determine the participants, grant stock options, with or without stock appreciation rights, and other awards, establish rules and regulations for the operation of the Plan, and determine the price, term, vesting schedule, number of shares and other terms of options and other awards. The Board or committee may delegate its powers and duties to members of the Company's administration with respect to participants who are not subject to Section 16.

Eligible Participants. Employees eligible to receive grants under the Plan are officers and certain other key employees of the Company who are employed in the Company's Aberdeen facility. The number of grantees could vary from year to year as the Company increases the number of employees at the Aberdeen facility. As of July 1, 1997, four persons were employed in Aberdeen, of which two persons were eligible to participate in the Plan. In fiscal 1997, options to purchase 70,000 shares were granted to one employee.

Stock Options. Options granted under the Plan may be in the form of either options that qualify as "incentive stock options" under Section 422 of the Code ("ISOs") or those that do not qualify as such ("NQSOs"). The term of an option will be fixed by the Board or committee, but no option may have a term of more than ten years from the date of grant. Options will be exercisable at such times as determined by the Board or committee. The option exercise price will be determined by the Board or committee at the time of grant but will not be less than 85% of the fair market value of the Common Stock on the date of grant (100% of the fair market value for ISOs). The grantee may pay the option price in cash or, if permitted by the Board or committee, by delivering to the Company shares of Common Stock already owned by the grantee that have a fair market value equal to the option exercise price. The Code also places the following additional restrictions on the award of ISOs. If an ISO is granted to a participant who owns, at the date of grant, in excess of 10% of the Company's outstanding Common Stock, the exercise price must be at least 110% of the fair market value on the date of grant and the term of the ISO may be no more than five years from the date of grant. The total fair market value of shares subject to ISOs which are exercisable for the first time by any participant in any given calendar year cannot exceed \$100,000 (valued as of the date of grant).

Stock Appreciation Rights. The Board or committee may grant stock appreciation rights ("SARs") in connection with a stock option granted under the Plan. If a grantee exercises a SAR, the grantee will receive an amount equal to the excess of the fair market value of the shares with respect to which the SAR is being exercised over the option exercise price of the shares. If a SAR is exercised in whole or in part, the right under the related option to purchase shares with respect to which the SAR has been exercised will terminate to the same extent. If a stock option is exercised, any SAR related to the shares purchased will terminate.

Other Stock-Based Awards. The Board or committee, in its discretion, may grant other awards that are valued in whole or in part by reference to, or otherwise based on, the Common Stock, including, without limitation, performance shares, convertible preferred stock, convertible debentures, or exchangeable securities. Such awards may be granted in addition to or in tandem with stock options or stock appreciation rights granted under the Plan. The Board or committee may set such terms with regard to the vesting of such awards as it deems reasonable.

Termination of Employment. Unless otherwise provided in the related award agreement, awards granted under the Plan are generally not transferable other than by the laws of descent and distribution or pursuant to a Qualified Domestic Relations Order as defined by the Code or Title I of the Employee Retirement Income Security Act, or the rules and regulations thereunder. Following the death of an optionee, any option held may be exercised, to the extent such option was exercisable at the time of death or on such accelerated basis as the Board or committee may determine at or after grant, by the legal representative of the optionee's estate or by any person who acquired the option by will or the laws of descent and distribution for a period of one year (or such other period as the Board or committee may specify at grant) from the date of such death or until the expiration of the stated term of the option, whichever period is shorter. If a participant's employment by the Company is terminated by reason of disability, any option held by such participant may thereafter be exercised, to the extent it was exercisable at the time of

termination or on such accelerated basis as the Board or committee may determine at or after grant until the expiration of the stated term of such option (unless otherwise specified by the Board or committee at the time of grant). If the optionee dies prior to the expiration of any unexercised option, the option may thereafter be exercised to the extent it was exercisable at the time of death for a period of one year from the date of death or until the expiration of the stated term of the option, whichever period is shorter. If any optionee's employment by the Company is terminated for any other reason, the option may be exercised, to the extent otherwise then exercisable, for the lesser of three months from the date of termination of employment or the balance of the term of the option. Terms for awards other than stock options and stock appreciation rights may be set by the Board or committee at the time of the granting of the award.

Change of Control. In the event of a "Change in Control" (as defined in the Plan) any award granted under the Plan will become fully exercisable and vested. For purposes of the Plan, a "Change in Control" occurs when (i) the majority of the directors of the Company are persons other than persons whose election has been solicited by the Board of Directors or have been appointed by the Board to fill vacancies created by death, resignation, or a new position, (ii) any person or group of persons (as defined in Section 13(d) of the Exchange Act and the rules thereunder) acquires 30% or more of the outstanding voting stock of the Company, or (iii) the shareholders of the Company approve a merger or consolidation (other than a merger or consolidation with a subsidiary of the Company or in which the Company is the surviving corporation and the shareholders of the Company immediately prior to the merger own more than 70% of the outstanding voting stock of the surviving corporation or its parent corporation), exchange of shares, sale or other disposition of all or substantially all of the Company's assets, or liquidation or dissolution of the Company.

Tax Rules. The following is a brief summary of the federal income tax rules currently applicable to stock options and other awards that may be granted under the Plan.

The grant of a NQSO will have no immediate tax consequences to the grantee or to the Company. Upon the exercise of a NQSO, the grantee will recognize ordinary income (and the Company will generally be entitled to a compensation deduction) in an amount equal to the excess of the fair market value of the shares of Common Stock on the date of the exercise of the option over the option exercise price. The grantee's tax basis in the shares will be the exercise price plus the amount of ordinary income recognized by the grantee, and the grantee's holding period will commence on the date the shares are transferred. Special rules apply in the event all or a portion of the exercise price is paid in the form of stock. Other special rules may also apply to a grantee who is subject to Section 16 of the Exchange Act.

Upon a subsequent sale of shares of Common Stock acquired pursuant to the exercise of an NQSO, any difference between the grantee's tax basis in the shares and the amount realized on the sale is treated as long-term or short-term capital gain or loss, depending on the holding period of the shares.

The grant of an ISO will have no immediate tax consequences to the grantee or to the Company. The exercise of an ISO by the payment of cash to the Company will generally have no immediate tax consequences to the grantee (except to the extent it is an adjustment in computing alternative minimum taxable income) or to the Company. If a grantee holds the shares acquired pursuant to the exercise of an ISO for the required holding period, the grantee generally will realize long-term capital gain or long-term capital loss upon a subsequent sale of the shares in the amount of the difference between the amount realized upon the sale and the purchase price of the shares (i.e., the exercise price). In such a case, no compensation deduction will be allowable to the Company in connection with the grant or exercise of the ISO or the sale of shares of Common Stock acquired pursuant to such exercise.

If, however, a grantee disposes of the shares prior to the expiration of the required holding period (a "disqualifying disposition"), the grantee will recognize ordinary income (and the Company will generally be entitled to a compensation deduction) equal to the excess of the fair market value of the shares of Common Stock on the date of exercise (or the proceeds of the disposition, if less) over the exercise price. Special rules apply in the event all or a portion of the exercise price is paid in the form of stock.

No income will be realized by a participant and the Company is not entitled to a compensation deduction in connection with a grant of a SAR. When the SAR is exercised, the participant will generally be required to include as taxable ordinary income in the year of exercise an amount equal to the amount of cash and the fair market value of any shares of Common Stock received. The Company will be entitled to a compensation deduction at the time and in the amount included in the participant's income by reason of the exercise. If the participant receives Common Stock upon exercise of a SAR, the post-exercise appreciation or depreciation will be treated in the same manner as discussed above regarding the tax treatment of NQSOs.

The federal income tax treatment of other stock-based awards will depend on the nature of any such award and the restrictions applicable to such award. Such an award may, depending upon the conditions applicable to the award, be taxable as an option or as an award of restricted or deferred stock. In certain instances, a participant may be entitled to defer recognition of income on the value of a grant of stock if the stock is subject to substantial risk of forfeiture. The participant will be subject to tax at ordinary income rates on the fair market value of the stock on the date that income is recognized. The Company generally will be entitled to a compensation deduction equal to the amount that is taxable as ordinary income to the participant in the year that such income is taxable. With respect to the subsequent sale of stock received, the holding period to determine whether a participant will recognize long-term or short-term capital gain or loss will generally begin when any restriction period expires (or the date on which the participant recognizes income), and the tax basis for such shares will generally be the fair market value of the shares on that date.

Certain limitations apply to the Company's deduction of compensation payable to the person serving as its chief executive officer or to any of its four other most highly compensated executives in office as of the end of the year in which such compensation would otherwise be deductible. In general, the Company may not deduct compensation, other than "performance-based" compensation, payable to such an executive in excess of \$1 million for any year.

The affirmative vote of a majority of the shares of Common Stock present and voting on such matter is necessary for the approval of the 1997 Stock Compensation Plan.

The Board of Directors recommends that you vote FOR the approval of the 1997 Stock Compensation Plan. Your Proxy will be so voted unless you specify otherwise.

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 and to the only other executive officer whose total annual compensation in fiscal 1996 (based on salary and bonus) exceeded \$100,000 (the "Named Executive Officers").

Name and Principal Positions	Fiscal Year	Annual Compensat ion Salary	All Other Compensation
Anil K. Jain	1997	\$126,371	-0-
President and Chief Executive Officer	1996	120,464	\$39,965
	1995	116,023	30,690
M. Asif Khan	1997	\$102,948	-0-
Vice President	1996	98,256	-0-
of Optoelectronics(1)	1995	94,248	-0-

(1) Mr. Khan terminated his employment with the Company prior to the end of the 1997 fiscal year.

Stock Options. No options were granted to or exercised by the Named Executive Officers in fiscal 1997, and no options were outstanding at the close of fiscal 1997.

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 10 of Notes to Financial Statements included in the 1997 Annual Report, which is being distributed with this Proxy Statement. The Company made lease payments of \$118,000 and \$117,000 to Jain-Olsen Properties during fiscal 1997 and 1996, respectively, and is obligated to make payments in fiscal 1998 of \$121,000. 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 annual 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.

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.

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 report on Form 4 with regard to a sale by M. Asif Khan in July 1996 was not filed and a report on Form 3 with regard to the initial ownership of Jamshid Pooladdij was not timely filed. The Form 3 was filed in May 1997.

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, 1997. The Company anticipates that Ernst & Young LLP will be retained as the Company's independent auditors for fiscal 1998. 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 1998 ANNUAL MEETING

All shareholder proposals intended to be presented at the 1998 Annual Shareholders' Meeting must be received by the Company at its offices on or before March 20, 1997.

ADDITIONAL INFORMATION

A copy of the Company's Report to Shareholders for the fiscal year ended March 31, 1997, accompanies this Notice of Annual Meeting and Proxy Statement.

THE COMPANY WILL FURNISH WITHOUT CHARGE A COPY OF ITS ANNUAL REPORT ON FORM 10-KSB (EXCLUSIVE OF EXHIBITS) FOR THE FISCAL YEAR ENDED MARCH 31, 1997, TO EACH PERSON WHO IS A SHAREHOLDER OF THE COMPANY AS OF JULY 1, 1997, 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 18, 1997

APA OPTICS, INC.
 PROXY

ANNUAL MEETING OF SHAREHOLDERS - AUGUST 20, 1997

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 1997 Annual Meeting of Shareholders to be held at Sheraton Minneapolis Metrodome, 1300 Industrial Boulevard, Minneapolis, Minnesota 55431, August 20, 1997, 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, Lincoln Hudson and Gregory J. Von Wald

(INSTRUCTION: To withhold authority for any individual nominee, write that nominee's name in the space provided below.)

2. APPROVAL OF the 1997 Stock Compensation Plan

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 SHAREHOLDERS' INSTRUCTIONS. IF THE SHAREHOLDER(S) WHO EXECUTE THIS PROXY DO

NOT WITHHOLD THEIR VOTES FOR THE ELECTION OF DIRECTORS OR VOTE AGAINST OR ABSTAIN FROM VOTING ON ITEM NO. 2, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE PROPOSED DIRECTORS AND FOR ITEM 2. It is urgent that each shareholder complete, date, sign, and mail this Proxy as soon as possible. Your vote is important!

Dated _____ and Signed _____, 1997

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 give your title as such.

PLEASE DO NOT FORGET TO DATE THIS PROXY.

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 1997 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 20, 1997, at 3:30 p.m., Central Daylight Time, to consider and vote upon the following matters:

1. Election of directors of the Company.
2. Approval of the 1997 Stock Compensation Plan.
3. 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 July 1, 1997, 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 18, 1997

APA OPTICS, INC.

1997 STOCK COMPENSATION PLAN

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APA OPTICS, INC.

1997 STOCK COMPENSATION PLAN

1. Purpose; Definitions.

The purpose of the APA Optics, Inc. 1997 Stock Compensation Plan (the "Plan") is to enable APA Optics, Inc. (the "Company"), and its Parents, Subsidiaries, and Affiliates, to attract, retain, and reward employees and to strengthen the mutuality of interests between such employees and the Company's shareholders, by offering such employees stock options and/or other equity-based incentives.

In addition to definitions that may be contained elsewhere in this Plan, for purposes of the Plan, the following terms shall be defined as set forth below:

(a) "Affiliate" means any entity other than the Company and its Parents and Subsidiaries that is designated by the Board as a participating employer under the Plan, provided that the Company directly or indirectly owns at least 20% of the combined voting power of all classes of stock of such entity or at least 20% of the ownership interests in such entity.

(b) "Award" means any Option, Stock Appreciation Right, or Other Stock-Based Award, or any other right, interest, or option relating to Stock or other securities of the Company granted pursuant to the provisions of this Plan.

(c) "Award Agreement" means any written agreement, contract or other instrument or document evidencing any Award granted by the Committee hereunder and signed by both the Company and the Participant.

(d) "Board" means the Board of Directors of the Company.

(e) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and any successor

thereto.

(f) "Committee" means the Committee referred to in Section 2 of the Plan. If at any time no Committee shall be in office, then the functions of the Committee specified in the Plan shall be exercised by the Board. Where the Board has retained administrative authority with respect to the Plan, references herein to the "Committee" shall refer to the Board.

(g) "Company" means APA Optics, Inc., a corporation organized under the laws of the State of Minnesota, or any successor corporation.

(h) "Disability" means disability as determined under procedures established by the Committee for purposes of this Plan or, as applied to Incentive Stock Options, as defined in Section 22(e)(3) of the Code.

(i) "Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time.

(j) "Fair Market Value" means as of any given date, unless otherwise determined by the Committee in good faith, the closing bid price of the Stock as reported on The Nasdaq Small-Cap Market or, if the Stock is then traded on The Nasdaq National Market or a national or regional securities exchange, the closing price of the Stock on The Nasdaq National Market or such exchange.

(k) "Incentive Stock Option" means any Stock Option intended to be and designated as an "Incentive Stock Option" within the meaning of Section 422 of the Code.

(l) "Nonqualified Stock Option" means any Stock Option that is not an Incentive Stock Option.

(m) "Other Stock-Based Award" means an Award under Section 7 below that is valued in whole or in part by reference to, or is otherwise based on, Stock.

(n) "Parent" means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company if, at the time of granting of an Award, each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in the chain.

(o) "Participant" means any person who is selected by the Committee to receive an Award under the Plan.

(p) "Plan" means this APA Optics, Inc. 1997 Stock Compensation Plan, as hereafter amended from time to time.

(q) "Stock" means the Common Stock, \$.01 par value per share, of the Company.

(r) "Stock Appreciation Right" or "SAR" means the right to receive a payment in cash or Stock as determined by the Committee.

(s) "Stock Option" or "Option" means any option to purchase shares of Stock granted pursuant to Section 5 below.

(t) "Subsidiary" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if, at the time of the granting of an Award, each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in the chain.

In addition, the term "Change in Control" shall have the meaning set forth in Section 8(b) below.

The Plan shall be administered by a Committee of not fewer than two members of the Board, who shall be appointed by the Board and serve at the pleasure of the Board. The functions of the Committee specified in the Plan shall be exercised by the Board, if and to the extent that no Committee exists that has the authority to so administer the Plan, or to the extent that the Board retains authority to administer the Plan under specified circumstances. As to the selection of and grants of Awards to persons who are not subject to Sections 16(a) and 16(b) of the Exchange Act, the Committee may delegate any or all of its responsibilities to members of the Company's administration. The grants of Awards and determination of the terms thereof to persons who are subject to Sections 16(a) and 16(b) of the Exchange Act shall be made in a manner that satisfies the requirements of Rule 16b-3 under the Exchange Act, or any successor rule.

The Committee shall have full power and authority, consistent with the provisions of the Plan and subject to such orders or resolutions not inconsistent with the provisions of the Plan as may be adopted by the Board:

(a) to select the employees of the Company and any Parent, Subsidiary, or Affiliate to whom Awards may from time to time be granted hereunder;

(b) to determine the type or types of Awards to be granted to employees hereunder;

(c) to determine the number of shares of Stock to be covered by each Award granted hereunder:

(d) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder;

(e) to determine whether, to what extent, and under what circumstances an Award may be settled in cash, Stock or other property or canceled or suspended;

(f) to determine whether, to what extent, and under what circumstances cash, Stock, and other property and other amounts payable with respect to an Award shall be deferred either automatically or at the election of the Participant;

(g) to interpret and administer the Plan and any instrument or agreement entered into thereunder;

(h) to establish such rules and regulations and appoint such agents as it shall deem appropriate for proper administration of the Plan; and

(i) to make any other determination and take any other action that the Committee deems necessary or desirable for administration of the Plan.

Members of the Board and of the Committee acting under the Plan shall be fully protected in relying in good faith upon the advice of counsel and shall incur no liability except for gross negligence or willful misconduct in the performance of their duties.

Decisions of the Committee shall be made in the Committee's sole discretion and shall be final, conclusive, and binding on all persons, including the Company, any Participant, any shareholder, and any employee of the Company or any Parent, Subsidiary, or Affiliate.

3. Stock Subject to Plan.

The total number of shares of Stock reserved and available for distribution under the Plan shall be 500,000 shares of Stock. Such shares may consist, in whole or in part, of authorized and unissued shares or treasury shares.

Subject to the possible adjustments described in the last paragraph of this Section 3, the total number of shares of Stock reserved and authorized for issuance upon exercise of Incentive Stock Options shall be 500,000. To the extent that such shares are not used for Incentive Stock Options, they shall be available for other Awards to

be granted under the Plan.

If any shares of Stock subject to an Award are not issued to a Participant because an Option or SAR is not exercised or an Award is otherwise forfeited or any such Award otherwise terminates without a payment being made to the Participant in the form of Stock, such shares shall again be available for distribution in connection with future Awards under the Plan.

In the event of any merger, reorganization, consolidation, recapitalization, Stock dividend, Stock split, or other change in corporate structure affecting the Stock, such substitution or adjustment shall be made in the aggregate number of shares reserved for issuance under the Plan, in the number and option price of shares subject to outstanding Options granted under the Plan, and in the number of shares subject to other outstanding Awards granted under the Plan as may be determined to be appropriate by the Board, in its sole discretion, provided that the number of shares subject to any Award shall always be a whole number. Any such adjusted option price shall also be used to determine the amount payable by the Company upon the exercise of any Stock Appreciation Right associated with any Stock Option.

4. Eligibility.

Officers, management, or highly compensated employees of the Company and any Subsidiary, Parent, or Affiliate who are employed at the Company's Aberdeen, South Dakota, facility are eligible to be granted Awards under the Plan. The Committee shall have the exclusive authority to determine what constitutes management or a "highly compensated employee" and in making such a determination shall take into consideration guidelines established by the Department of Labor and court decisions as to what constitutes a "select group of management or highly compensated employees."

5. Stock Options.

Stock Options may be granted alone, in addition to, or in tandem with other Awards granted under the Plan. Any Stock Option granted under the Plan shall be in such form as the Committee may from time to time approve.

Stock Options granted under the Plan may be of two types: (i) Incentive Stock Options and (ii) Nonqualified Stock Options. Options may be issued with or without Stock Appreciation Rights.

Options granted under the Plan shall be subject to the following terms and conditions and shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as the Committee shall deem desirable:

(a) Exercise Price. Except as provided in Section 5(i), the exercise price per share of Stock purchasable under a Stock Option shall be determined by the Committee at the time of grant but shall be not less than 85% of the Fair Market Value of the Stock on the date of grant.

(b) Option Term. Except as provided in Section 5(i) hereof, the term of each Stock Option shall be fixed by the Committee.

(c) Exercisability. Stock Options shall be exercisable at such time or times and subject to such terms and conditions as shall be determined by the Committee at or after grant; provided, however, that, except as provided in Sections 5(f), (g), and (h) and Section 8, unless otherwise determined by the Committee at or after grant, no Stock Option shall be exercisable prior to the first anniversary date of the granting of the Option. If the Committee provides, in its sole discretion, that any Stock Option is exercisable only in installments, the Committee may waive such installment exercise provisions at any time at or after grant in whole or in part, based on such factors as the Committee shall determine, in its sole discretion.

(d) Method of Exercise. Subject to whatever

installment exercise provisions apply under Section 5(c), Stock Options may be exercised in whole or in part at any time during the option period.

Payment of the exercise price may be made by check, note (if approved by the Board), or such other instrument or method as the Committee may accept. If so provided in the related Award Agreement, payment in full or in part may also be made by delivery of Stock owned by the optionee for at least six months prior to the exercise of the Option (based on the Fair Market Value of the Stock on the date the Option is exercised, as determined by the Committee). Payment of the exercise price may be made through exercise of either Tandem SARs or Freestanding SARs held by the optionee.

No shares of Stock shall be issued until full payment therefor has been made. An optionee shall generally have the rights to dividends or other rights of a shareholder with respect to shares subject to the Option after the optionee has given written notice of exercise, has paid in full for such Stock, and, if requested, has given the representation described in Section 11(a).

(e) Nontransferability of Options. Subject to Section 5(i) hereof, unless otherwise provided in the related Award Agreement, no Stock Option shall be transferable by the optionee otherwise than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act, or the rules and regulations thereunder, and all Stock Options shall be exercisable during the optionee's lifetime only by the optionee.

(f) Termination by Death. Subject to Section 5(i), if an optionee's employment by the Company or any Subsidiary, Parent, or Affiliate terminates by reason of death, any Stock Option held by such optionee may thereafter be exercised, to the extent such Option was exercisable at the time of death or on such accelerated basis as the Committee may determine at or after grant (or as may be determined in accordance with procedures established by the Committee), by the legal representative of the optionee's estate or by any person who acquired the Option by will or the laws of descent and distribution, for a period of one year (or such other period as the Committee may specify at grant) from the date of such death or until the expiration of the stated term of such Stock Option, whichever period is the shorter.

(g) Termination by Reason of Disability. Subject to Section 5(i), if an optionee's employment by the Company or any Subsidiary, Parent, or Affiliate terminates by reason of Disability, any Stock Option held by such optionee may thereafter be exercised by the optionee, to the extent it was exercisable at the time of termination or on such accelerated basis as the Committee may determine at or after grant (or as may be determined in accordance with procedures established by the Committee), until the expiration of the stated term of such Stock Option (unless otherwise specified by the Committee at the time of grant); provided, however, that, if the optionee dies prior to such expiration (or within such other period as the Committee shall specify at grant), any unexercised Stock Option held by such optionee shall thereafter be exercisable to the extent to which it was exercisable at the time of death for a period of one year from the date of such death or until the expiration of the stated term of such Stock Option, whichever period is the shorter.

(h) Other Termination. Subject to Section 5(i), unless otherwise determined by the Committee (or pursuant to procedures established by the Committee) at or after grant, if an optionee's employment by the Company or any Subsidiary, Parent, or Affiliate terminates for any reason other than death or Disability, the Stock Option shall be exercisable, to the extent otherwise then exercisable, for the lesser

of three months from the date of termination of employment or the balance of such Stock Option's term.

(i) Incentive Stock Options. Anything in the Plan to the contrary notwithstanding, no term of this Plan relating to Incentive Stock Options shall be interpreted, amended, or altered, nor shall any discretion or authority granted under the Plan be exercised, so as to disqualify the Plan under Section 422 of the Code or, without the consent of the optionee(s) affected, to disqualify any Incentive Stock Option under such Section 422.

To the extent required for "incentive stock option" status under Section 422 of the Code (taking into account applicable Internal Revenue Service regulations and pronouncements and court decisions), the Plan shall be deemed to provide:

(i) that Incentive Stock Options may be granted only to employees of the Company or any Parent or Subsidiary of the Company;

(ii) that the exercise price of any Incentive Stock Option shall not be less than 100% of the Fair Market Value of the Stock as of the date of grant (110% for an optionee who owns stock possessing more than 10% of the voting power of all classes of stock of the Company or of a Parent or Subsidiary);

(iii) that the maximum term of exercise for any Incentive Stock Option shall not exceed ten years (five years in the case of an optionee who owns stock possessing more than 10% of the voting power of all classes of stock of the Company or of a Parent or Subsidiary); and

(iv) that Incentive Stock Options shall not be transferable by the optionee otherwise than by will or the laws of descent and distribution and shall be exercisable, during the optionee's lifetime, only by the optionee.

To the extent permitted under Section 422 of the Code or applicable regulations thereunder or any applicable Internal Revenue Service pronouncements:

(i) if a Participant's employment is terminated by reason of death or Disability and the portion of any Incentive Stock Option that becomes exercisable during the post-termination period specified in Section 5(f) or (g) hereof exceeds the \$100,000 limitation contained in Section 422(d) of the Code, such excess shall be treated as a Nonqualified Stock Option; and

(ii) if the exercise of an Incentive Stock Option is accelerated by reason of a Change in Control, any portion of such Option that exceeds the \$100,000 limitation contained in Section 422(d) of the Code shall be treated as a Nonqualified Stock Option.

(j) No Tandem Options. Options consisting of both an Incentive Stock Option and a Nonqualified Stock Option shall not be granted under the Plan.

6. Stock Appreciation Rights.

(a) Grant and Exercise. Stock Appreciation Rights may be granted either alone ("Freestanding SAR") or in addition to other Awards granted under the Plan and may, but need not, relate to all or part of any Stock Option granted under the Plan ("Tandem SAR"). In the case of a Nonqualified Stock Option, a Tandem SAR may be granted either at or after the time of the grant of such Stock Option. In the case of an Incentive Stock Option, a Tandem SAR may be granted only at the time of the grant of such Stock Option.

A Tandem SAR shall terminate and no longer be exercisable upon the termination or exercise of the related Stock Option, subject to such provisions as the Committee may specify at grant where a Tandem SAR

is granted with respect to less than the full number of shares covered by a related Stock Option. Stock Options relating to exercised Tandem SARs shall no longer be exercisable to the extent that the related Tandem SARs have been exercised.

A Stock Appreciation Right may be exercised, subject to Section 6(b), in accordance with the procedures established by the Committee for such purpose and as set forth in the related Award Agreement. Upon such exercise, the optionee shall be entitled to receive an amount determined in the manner prescribed in Section 6(b).

(b) Terms and Conditions. Stock Appreciation Rights shall be subject to such terms and conditions, not inconsistent with the provisions of the Plan, as shall be determined from time to time by the Committee, including the following:

(i) The exercise price of a Tandem SAR shall be the exercise price of the related Option. The exercise price of a Freestanding SAR shall be not less than 100% of the Fair Market Value of the Stock on the date of grant of the Freestanding SAR. Notwithstanding the foregoing, the Committee may unilaterally limit the appreciation in value of Stock attributable to an SAR at any time prior to its exercise.

(ii) Stock Appreciation Rights shall be exercisable only at such time or times and to the extent provided in the related Award Agreement; provided, however, that the exercise provisions of an SAR granted in tandem with an Incentive Stock Option shall be the same as the related Option.

(iii) Upon the exercise of a Stock Appreciation Right, the holder shall be entitled to receive an amount in cash or shares of Stock equal in value to the excess of the Fair Market Value of one share of Stock on the date of exercise, or such other date as the Committee shall specify in the Award Agreement, over the exercise price per share specified in the related Award Agreement multiplied by the number of shares in respect of which the Stock Appreciation Right shall have been exercised, with the Committee having the right to determine the form of payment. When payment is to be made in Stock, the number of shares to be paid shall be calculated on the basis of the Fair Market Value of the Stock on the date of exercise.

(iv) Unless otherwise provided in the related Award Agreement, Stock Appreciation Rights shall not be transferable except under the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act, or the rules thereunder, and shall be exercisable during the lifetime of the Participant only by the Participant.

(v) Upon the exercise of a Stock Appreciation Right, any related Stock Option or part thereof to which such Stock Appreciation Right is related shall be deemed to have been exercised for the purpose of the limitation set forth in Section 3 of the Plan on the number of shares of Stock to be issued under the Plan.

7. Other Stock-Based Awards.

(a) Administration. Other Awards of Stock or that are valued in whole or in part by reference to, or are otherwise based on, Stock ("Other Stock-Based Awards"), including, without limitation, performance shares, convertible preferred stock, convertible debentures, or exchangeable securities, may be granted either alone or in addition to or in tandem with Stock Options or Stock Appreciation Rights granted under the Plan.

Subject to the provisions of the Plan, the Committee shall have authority to determine the persons to whom and the time or times at which such Awards shall be made, the number of shares of Stock to be awarded pursuant to such Awards, and all other conditions of the Awards. The Committee may also provide for the grant of Stock upon the completion of a specified performance period.

The provisions of Other Stock-Based Awards need not be the same with respect to each recipient.

(b) Terms and Conditions. Unless otherwise provided in the related Award Agreement, Stock subject to Awards made under this Section 7 may not be sold, assigned, transferred, pledged, or otherwise encumbered prior to the date on which the Stock is issued or, if later, the date on which any applicable restriction, performance, or deferral period lapses.

The Participant shall be entitled to receive, currently or on a deferred basis, interest or dividends or interest or dividend equivalents with respect to the Stock covered by the Award, as determined at the time of the Award by the Committee, in its sole discretion, and the Committee may provide that such amounts (if any) shall be deemed to have been reinvested in additional Stock or otherwise reinvested.

Any Award under Section 7 and any Stock covered by any such Award shall vest or be forfeited to the extent so provided in the Award Agreement, as determined by the Committee, in its sole discretion.

In the event of the Participant's retirement, Disability, or death, or in cases of special circumstances, the Committee may, in its sole discretion, waive in whole or in part any or all of the remaining limitations imposed with respect to any or all of an Award under this Section 7.

Each Award under this Section 7 shall be confirmed by, and subject to the terms of, an Award Agreement or other instrument entered into by the Company and the Participant.

Stock (including securities convertible into Stock) issued on a bonus basis under this Section 7 may be issued for no cash consideration. The purchase price of any Stock (including securities convertible into Stock) subject to a purchase right awarded under this Section 7 shall be at least 85% of the Fair Market Value of the Stock on the date of grant.

8. Change in Control Provisions.

(a) Impact of Event. In the event of a "Change in Control" as defined in Section 8(b), any Award granted under this Plan shall become fully exercisable and vested.

(b) Definition of "Change in Control." For purposes of Section 8(a), a "Change in Control" means the happening of any of the following:

(i) A majority of the directors of the Company shall be persons other than persons

(A) For whose election proxies shall have been solicited by the Board, or

(B) Who are then serving as directors appointed by the Board to fill vacancies on the Board caused by death or resignation (but not by removal) or to fill newly-created directorships,

(ii) 30% or more of the outstanding voting stock of the Company is acquired or beneficially owned (as defined in Rule 13d-3 under the Exchange Act or any successor rule thereto) by any person (other than the Company or a subsidiary of the Company) or

group of persons acting in concert (other than the acquisition and beneficial ownership by a parent corporation or its wholly-owned subsidiaries, as long as they remain wholly-owned subsidiaries, of 100% of the outstanding voting stock of the Company as a result of a merger which complies with paragraph (iii)(A)(2) hereof in all respects), or

(iii) The shareholders of the Company approve a definitive agreement or plan to

(A) Merge or consolidate the Company with or into another corporation other than

(1) a merger or consolidation with a subsidiary of the Company or

(2) a merger in which

(a) the Company is the surviving corporation,

(b) no outstanding voting stock of the Company (other than fractional shares) held by shareholders immediately prior to the merger is converted into cash, securities, or other property (except (i) voting stock of a parent corporation owning directly, or indirectly through wholly owned subsidiaries, both beneficially and of record 100% of the voting stock of the Company immediately after the merger and (ii) cash upon the exercise by holders of voting stock of the Company of statutory dissenters' rights),

(c) the persons who were the beneficial owners, respectively, of the outstanding common stock and outstanding voting stock of the Company immediately prior to such merger beneficially own, directly or indirectly, immediately after the merger, more than 70% of, respectively, the then outstanding common stock and the then outstanding voting stock of the surviving corporation or its parent corporation, and

(d) if voting stock of the parent corporation is exchanged for voting stock of the Company in the merger, all holders of any class or series of voting stock of the Company immediately prior to the merger have the right to receive substantially the same per share consideration in exchange for their voting stock of the Company as all other holders of such class or series,

(B) exchange, pursuant to a statutory exchange of shares of voting stock of the Company held by shareholders of the Company immediately prior to the exchange, shares of one or more classes or series of voting stock of the Company for cash, securities, or other property,

(C) sell or otherwise dispose of all or substantially all of the assets of the Company (in one transaction or a series of transactions), or

(D) liquidate or dissolve the Company.

9. Amendments and Termination.

The Board may amend, alter, discontinue, or terminate the Plan, or any portion thereof, but no amendment, alteration, or discontinuation shall be made which would impair the vested rights of a Participant under any Award theretofore granted without the Participant's consent or which, without the approval of the Company's shareholders, would:

(a) except as expressly provided in this Plan, increase the total number of shares reserved for the purpose of the Plan;

(b) authorize an increase in the total number of shares reserved for issuance upon exercise of Incentive Stock Options;

(c) decrease the option price of any Incentive Stock Option to less than 100% of the Fair Market Value on the date of grant;

(d) permit the issuance of Stock prior to payment in full therefor;

(e) change the employees or class of employees eligible to participate in the Plan; or

(f) extend the maximum option period under Section 5(i) of the Plan.

The Committee may amend the terms of any Award theretofore granted, prospectively or retroactively, but, subject to Section 3 above, no such amendment shall impair the vested rights of any holder without the holder's consent. The Committee may also substitute new Stock Options for previously granted Stock Options (on a one-for-one or other basis), including previously granted Stock Options having higher option exercise prices.

Subject to the above provisions, the Board shall have broad authority to amend the Plan to take into account changes in applicable securities and tax laws and accounting rules, as well as other developments.

10. Unfunded Status of Plan.

The Plan is intended to constitute an "unfunded" plan for incentive and deferred compensation. With respect to any payments not yet made to a Participant by the Company, nothing contained herein shall give any such Participant any rights that are greater than those of a general creditor of the Company. In its sole discretion, the Committee may authorize the creation of trusts or other arrangements to meet the obligations created under the Plan to deliver Stock or payments in lieu of or with respect to Awards hereunder; provided, however, that, unless the Committee otherwise determines with the consent of the affected Participant, the existence of such trusts or other arrangements is consistent with the "unfunded" status of the Plan.

11. General Provisions.

(a) The Committee may require each person purchasing shares pursuant to a Stock Option or receiving shares pursuant to any other Award under the Plan to represent to and agree with the Company in writing that the Participant is acquiring the shares without a view to distribution thereof. The certificates for such shares may include any legend which the Committee deems appropriate to reflect any restrictions on transfer.

All certificates for shares of Stock or other securities delivered under the Plan shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations, and other requirements of the Securities and Exchange Commission, any over-the-counter market on which the Stock is quoted, any stock exchange upon which the Stock is then listed, and any applicable

federal or state securities law, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

(b) The Committee may at any time offer to buy out for a payment in cash or Stock an Award previously granted, based on such terms and conditions as the Committee shall establish and communicate to the Participant at the time that such offer is made.

(c) Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, subject to shareholder approval if such approval is required; and such arrangements may be either generally applicable or applicable only in specific cases.

(d) Neither the adoption of this Plan nor the grant of any Award hereunder shall confer upon any employee of the Company or any Subsidiary, Parent, or Affiliate any right to continued employment with the Company or a Subsidiary, Parent, or Affiliate, as the case may be, or interfere in any way with the right of the Company or a Subsidiary, Parent, or Affiliate to terminate the employment of any of its employees at any time.

(e) No later than the date as of which an amount first becomes includable in the gross income of the Participant for federal income tax purposes with respect to any Award under the Plan, the Participant shall pay to the Company, or make arrangements satisfactory to the Committee regarding the payment of, any federal, state, or local taxes of any kind required by law to be withheld with respect to such amount. The obligations of the Company under the Plan shall be conditional on such payment or arrangements, and the Company and any Subsidiary, Parent, or Affiliate shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant. If so provided in the related Award Agreement, a Participant may authorize the withholding of shares of Stock otherwise deliverable upon exercise of an Option or the grant or vesting of an Award to satisfy any tax obligations arising from such exercise, grant, or vesting.

(f) The actual or deemed reinvestment of dividends or dividend equivalents in additional Stock at the time of any dividend payment shall only be permissible if sufficient shares of Stock are available under Section 3 for such reinvestment (taking into account then outstanding Stock Options and other Plan Awards).

(g) To the extent that federal laws (such as the Code, the Exchange Act, or the Employee Retirement Income Security Act of 1974) do not otherwise control, this Plan and all Awards made and actions taken hereunder shall be governed by and construed in accordance with the laws of the State of Minnesota.

(h) Unless otherwise provided in the related Award Agreement, no rights granted hereunder may be assigned, transferred, pledged, or hypothecated (whether by operation of law or otherwise) or be subject to execution, attachment, or similar process, and any attempted assignment, transfer, pledge, hypothecation, or other disposition or levy of attachment or similar process upon any such right will be null and void and without effect.

(i) If any term, provision, or portion of this Plan or any Award granted hereunder shall be deemed unenforceable or in violation of applicable law, such term, provision, or portion of the Plan or the Award shall be deemed severable from all other terms, provisions, or portions of this Plan or the Award or any other Awards granted hereunder, which shall otherwise continue in full force and effect.

The Plan shall be effective as of March 4, 1997, subject to the approval of the Plan by a majority of the votes cast by the holders of the Company's Common Stock at the annual shareholders' meeting next following adoption of the Plan. Any grants made under the Plan prior to such approval shall be effective when made (unless otherwise specified by the Committee at the time of grant), but shall be conditioned on, and subject to, such approval of the Plan by such shareholders.

13. Term of Plan.

No Incentive Stock Option shall be granted pursuant to the Plan on or after the tenth anniversary of the date of adoption of the Plan, but Incentive Stock Options granted prior to such tenth anniversary may extend beyond that date. All other Awards may be granted at any time and for any period unless otherwise provided by the Plan.

Approved and adopted by the Board of Directors of APA Optics, Inc. as of March 4, 1997, and approved by the shareholders on _____.