

[GRAPHIC OMITTED]

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

TO THE SHAREHOLDERS OF ELECTRO SCIENTIFIC INDUSTRIES, INC.:

The Annual Meeting of Shareholders of Electro Scientific Industries, Inc. (ESI) will be held at ESI's Offices, 14000 NW Science Park Drive, Portland, Oregon, on Thursday, September 30, 1999 at 1:00 p.m. Pacific time, for the following purposes:

1. Electing two directors for a term of three years.
2. Voting on the selection of independent auditors for the Company.
3. Transacting such other business as may properly come before the meeting.

Only shareholders of record at the close of business on August 3, 1999 will be entitled to vote at the annual meeting.

You are requested to date and sign the enclosed proxy and return it by mail. You may attend the meeting in person even though you have sent in your proxy, since retention of the proxy is not necessary for admission to or identification at the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

Joseph L. Reinhart
Vice President and Corporate Secretary

Portland, Oregon
August 10, 1999

ELECTRO SCIENTIFIC INDUSTRIES, INC.
PROXY STATEMENT

The mailing address of the principal executive offices of the Company is 13900 NW Science Park Drive, Portland, Oregon 97229-5497. The approximate date this proxy statement and the accompanying proxy forms are first being mailed to shareholders is August 10, 1999.

SOLICITATION AND REVOCABILITY OF PROXY

The enclosed proxy is solicited on behalf of the Board of Directors of Electro Scientific Industries, Inc., an Oregon corporation, for use at the Annual Meeting of Shareholders to be held on September 30, 1999. The Company will bear the cost of preparing and mailing the proxy, proxy statement and any other material furnished to the shareholders by the Company in connection with the annual meeting. Proxies will be solicited by use of the mails, and officers and employees of the Company may, without additional compensation, also solicit proxies by telephone or personal contact. Copies of solicitation materials will be furnished to fiduciaries, custodians and brokerage houses for forwarding to beneficial owners of the stock held in their names.

Any person giving a proxy in the form accompanying this proxy statement has the power to revoke it at any time before its exercise. The proxy may be revoked by filing an instrument of revocation or a duly executed proxy bearing a later date with the Corporate Secretary of the Company. The proxy may also be

revoked by affirmatively electing to vote in person while in attendance at the meeting. However, a shareholder who attends the meeting need not revoke the proxy and vote in person unless he or she wishes to do so. All valid, unrevoked proxies will be voted at the Annual Meeting in accordance with the instructions given.

VOTING SECURITIES AND PRINCIPAL SHAREHOLDERS

The Common Stock is the only outstanding authorized voting security of the Company. The record date for determining holders of Common Stock entitled to vote at the Annual Meeting is August 3, 1999. On that date there were 13,139,874 shares of Common Stock outstanding, entitled to one vote per share. The Common Stock does not have cumulative voting rights.

The following table shows ownership of the Common Stock of the Company on May 31, 1999 by each person who, to the knowledge of the Company, owned beneficially more than 5 percent of the Common Stock.

NAME AND ADDRESS OF BENEFICIAL OWNER -----	AMOUNT AND NATURE OF BENEFICIAL OWNERSHIP (1) -----	APPROXIMATE PERCENT -----
EQSF Advisors, Inc. 767 Third Avenue, New York, NY 10017	1,605,300 (2)	14.07%
J & W Seligman & Co., Incorporated 100 Park Avenue, New York, NY 10017	1,219,600 (3)	9.39%
The Parnassus Fund One Market, Steuart Tower, Ste 1600, San Francisco, CA 94105	600,000 (4)	5.2%

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- (1) Shares are held directly with sole investment and voting power unless otherwise indicated.
 - (2) Based solely on information provided as of February 12, 1999 in a Schedule 13G filed by the shareholder.
 - (3) Based solely on information provided as of April 30, 1999 in a Schedule 13G filed by the shareholder.
 - (4) Based solely on information provided as of February 10, 1999 in a Schedule 13G filed by the shareholder.

The following table, which was prepared on the basis of information furnished by the persons described, shows ownership of the Company's Common Stock as of May 31, 1999, by each Director, each Executive Officer named in the Summary Compensation Table, and by all Directors and Executive Officers as a group.

NAME OF BENEFICIAL OWNER -----	AMOUNT AND NATURE OF BENEFICIAL OWNERSHIP (1) -----	APPROXIMATE PERCENT -----
Robert E. Belter	9,546 (2)	*
David F. Bolender	58,078 (3)	*
Barry A. Glasgow	2,650 (4)	*
Larry L. Hansen	15,487 (5)	*
Jonathan C. Howell	35,588 (6)	*
John R. Kurdock	16,181 (7)	*
W. Arthur Porter	5,500 (5)	*
Vernon B. Ryles, Jr.	5,500 (5)	*
Douglas C. Strain	126,191 (8) (5)	1.0%

Gerald F. Taylor	750 (9)	*
Keith L. Thomson	5,900 (5)	*
Jon D. Tompkins	750 (9)	*
Donald R. VanLuvanee	114,691 (10)	*
23 Directors and executive officers as a group	824,121 (11)	6.3%

*Less than 1 percent

- (1) Shares are held directly with sole investment and voting power unless otherwise indicated. Includes shares awarded as performance-based restricted stock and time-based restricted stock that are subject to forfeiture in certain circumstances.
- (2) Includes 5,600 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (3) Includes 23,000 shares owned by Mr. Bolender's wife, as to which he disclaims beneficial ownership and includes 8,140 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (4) Includes 1,250 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (5) Includes 5,500 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (6) Includes 19,749 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (7) Includes 8,239 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (8) Includes 2,000 shares owned by Mr. Strain's wife and 216 shares owned by Douglas C. Strain and Leila Cleo Strain Charitable Remainder Trust, as to which he disclaims beneficial ownership.
- (9) Includes 750 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (10) Includes 73,552 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.
- (11) Includes 210,993 shares that are subject to stock options currently exercisable or exercisable within 60 days of May 31, 1999.

PROPOSAL 1: ELECTION OF DIRECTORS

Pursuant to the Company's Bylaws, the Board of Directors is divided into three classes, and the term of office of one class expires each year. The terms of W. Arthur Porter, Douglas C. Strain and Gerald F. Taylor expire in 1999. Mr. Strain is retiring at the end of his term and the number of directors will thereafter be eight. Dr. Porter and Mr. Taylor are nominees for re-election. Under Oregon law, if a quorum of shareholders is present at the 1999 Annual Meeting, the two nominees for election as Directors who receive the greatest number of votes cast at the meeting shall be elected Directors. Abstentions and broker non-votes will have no effect on the results of the vote. Unless otherwise instructed, proxy holders will vote the proxies they receive for Dr. Porter and Mr. Taylor. If any of the nominees for Director at the 1999 Annual Meeting becomes unavailable for election for any reason (none being known), the proxy holders will have discretionary authority to vote pursuant to the proxy for a suitable substitute or substitutes.

The following table briefly describes the Company's nominees for Directors and the Directors whose terms will continue. Except as otherwise noted, each has held his principal occupation for at least five years.

NAME, AGE, PRINCIPAL OCCUPATION, AND OTHER DIRECTORSHIPS	DIRECTOR SINCE	TERM EXPIRES
-----	-----	-----
NOMINEES		
W. ARTHUR PORTER, 58, in July 1998, Dr. Porter was appointed the Dean of the College of Engineering at the University of Oklahoma. He was formerly the President of the Houston Advanced Research Center. Dr. Porter is a Director of Stewart Information Services Corporation, and Medici Medical Group Inc. Dr. Porter, formerly Chairman of the Board of Directors, serves as Chairman	1980	1999

of the Audit Committee of the Board of Directors.

GERALD F. TAYLOR, 59, retired in 1998 as Senior Vice President and CFO of Applied Materials, Inc., a manufacturer of semi-conductor equipment. Mr. Taylor is a member of the Audit Committee of the Board of Directors.	1998	1999
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DIRECTORS WHOSE TERMS CONTINUE

DAVID F. BOLENDER, 67, in March 1998, Mr. Bolender became CEO and Chairman of the Board of Directors of Protocol Systems, Inc., a manufacturer of vital sign monitoring equipment for the medical industry. Mr. Bolender retired in 1991 from the position of President of the Electric Operations Group of PacifiCorp, a diversified public utility located in Portland, Oregon. In January 1992, Mr. Bolender became Chairman of the Board of the Company. Mr. Bolender is a member of the Audit Committee of the Board of Directors.	1988	2000
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LARRY L. HANSEN, 70, retired in 1992 from the position of Executive Vice President of Tylan General Inc., a manufacturer of high technology components for industrial processes located in San Diego, California. Prior to December 1988 he was Executive Vice President and a Director of Varian Associates, Inc., an electronics manufacturer located in Palo Alto, California. Mr. Hansen is also a Director of Signal Technology Corp., and Micrel, Inc. Mr. Hansen is a member of the Compensation Committee of the Board of Directors.	1986	2001
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NAME, AGE, PRINCIPAL OCCUPATION, AND OTHER DIRECTORSHIPS -----	DIRECTOR SINCE ----	TERM EXPIRES -----
VERNON B. RYLES, JR., 61, President and CEO of Poppers Supply Co., a manufacturer of popcorn snacks and jobber/distributor of recreational food and equipment. In addition, Mr. Ryles is on the Board of Directors of Northwest Pipe and Casing, a manufacturer of steel pipe. He is a Director and former Board Chairman of the National Association of Concessionaires and on the Advisory Council of the Oregon State University Agricultural Trade and Marketing Program. Mr. Ryles is a member of the Compensation Committee of the Board of Directors.	1995	2001
KEITH L. THOMSON, 60, retired as Vice President of Intel Corporation and Oregon Site Manager in 1998. Mr. Thomson joined Intel in 1969 and moved to the Intel, Oregon operation in 1978. Prior to that he worked for Lockheed Missiles and Space Corporation, and the Semiconductor Division of Fairchild Camera and Instruments. Mr. Thomson was elected to the Board of Directors in 1994 and is the Chairman of the Compensation Committee of the Board of Directors.	1994	2000
JON D. TOMPKINS, 59, retired as CEO of KLA-Tencor Corporation, a manufacturer of semiconductor equipment in 1998 and retired as Chairman of the Board of Directors of KLA - Tencor in June, 1999. He remains a member of the Board of Directors of KLA-Tencor. In addition, Mr. Tompkins is on the Board of Directors of Cymer, Inc., a manufacturer of excimer laser illumination sources for use in deep ultraviolet (DUV) photolithography systems located in San Diego, California. Mr. Tompkins is a member of the Compensation Committee of the Board of Directors.	1998	2000
DONALD R. VANLUVANEE, 55, President and CEO of ESI since July 1992. From 1991 to July 1992, Mr. VanLuvanee was President, Chief Executive Officer, and a Director at Mechanical Technology Incorporated (MTI), a supplier of contract research and development services and a manufacturer of technologically advanced equipment. Mr. VanLuvanee is also a Director of FEI Company, which designs, manufactures and markets focused ion beam workstations, and Micro Component Technology, Inc., a leading manufacturer of automated test handling equipment.	1992	2001

BOARD COMPENSATION

The Board of Directors met six times during the last fiscal year, of which two were telephone meetings. Each Director attended at least 75 percent of the aggregate of the meetings of the Board of Directors and the committees of which he was a member. Each director who is not an employee of the Company receives an annual retainer of \$10,000, plus \$1,000 for each board meeting attended, \$500 for each committee meeting attended and \$500 for telephone meetings when formal business is conducted. Non-employee directors are also automatically granted an option for 3,000 shares of Common Stock on July 31 of each year, with an option price equal to the closing market price on the date of grant, a ten-year term and a four-year vesting schedule.

BOARD COMMITTEES

The Board of Directors has standing Audit and Compensation Committees. The Compensation Committee makes recommendations to the Board of Directors concerning officers' compensation and has been delegated authority to grant options and other awards under the Company's stock option plan and stock incentive plan. It met four times in fiscal year 1999. The Audit Committee meets with management, and with representatives of ESI's outside auditing firm, Arthur Andersen LLP including meetings without the presence of management. The Audit Committee met four times in fiscal year 1999 to review the scope, timing and fees for the annual audit and the results of the audit.

Shareholders who wish to submit names for consideration for Board membership should do so in writing addressed to the Board of Directors, c/o Chairman of the Board, Electro Scientific Industries, Inc., 13900 NW Science Park Drive, Portland, Oregon 97229-5497.

EXECUTIVE COMPENSATION

The following table shows, as to the Chief Executive Officer and each of the next four most highly compensated executive officers of the Company, information concerning compensation paid for services to the Company in all capacities during the fiscal year ended May 31, 1999, as well as total compensation paid to each such individual for the Company's two previous fiscal years (if such person was the Chief Executive Officer or an executive officer, as the case may be, during any part of such fiscal year):

I. SUMMARY COMPENSATION TABLE

Name & Principal Position	Fiscal Year	Annual Compensation			Long-Term Compensation		
		Salary	Bonus (1)	Other Annual Compensation (2)	Restricted Stock Awards (3)	Options Granted (#)	All Other Compensation (4)
Donald R. VanLuvanee Chief Executive Officer and President	1999	\$358,000	---	---	---	53,300	\$ 4,000
	1998	\$312,750	\$ 443,000	\$57,000	---	26,900	\$ 4,000
	1997	\$285,000	\$ 243,000	---	\$ 218,500	6,674	\$ 2,098
Jonathan C. Howell Chief Financial Officer and Senior Vice President	1999	\$202,500	---	---	---	16,900	\$ 4,000
	1998	\$166,667	\$ 75,740	\$34,000	---	6,100	\$ 4,000
	1997	\$145,760	\$ 43,296	---	\$ 133,000	3,430	\$ 2,098
John R. Kurdock Vice President	1999	\$202,500	---	---	---	16,900	\$ 4,000
	1998	\$166,667	\$ 29,926	---	---	6,100	\$ 177,552 (5)
	1997	\$ 73,990	\$ 26,811	---	---	13,430	\$ 1,850
Robert E. Belter Vice President	1999	\$184,167	---	---	---	12,900	\$ 4,000
	1998	\$177,083	\$ 23,814	---	---	2,400	\$ 4,000
	1997	\$ 3,125	\$ 211	---	---	10,000	---
Barry A. Glasgow Vice President	1999	\$184,032 (6)	---	---	---	7,900	\$ 79,026 (7)
	1998	---	---	---	---	---	---
	1997	---	---	---	---	---	---

- 1) Bonus for fiscal year 1999 performance has not yet been determined.
- 2) Represents amounts paid by the Company to cover taxes due on the vesting of restricted stock awards.
- 3) Represents the closing market price of the Company's Common Stock on the date of grant multiplied by the number of shares awarded. Messrs. VanLuvanee and Howell were awarded stock grants in the amount of 11,500 and 7,000 restricted shares in fiscal year 1997, respectively. Each award vested for 50% of the shares in April 1997 and for the remaining balance in April 1998. Performance-based restricted stock awards are not shown above, but instead are reported in the Long-Term Incentive Plans table below.
- 4) Except as otherwise indicated, represents 401(k) matching contributions made by the Company.

- 5) Includes \$173,552 in relocation expenses.
6) Includes \$20,538 in commissions.
7) Includes \$75,026 in relocation expenses.

II. OPTIONS TABLE

The following table sets forth details regarding stock options granted to the named executive officers in fiscal year 1999. In addition, there are shown the hypothetical gains or "option spreads" that would exist for the respective options, assuming rates of annual compound stock appreciation of 5% and 10% from the date the options were granted over the full option term.

Name	Option Grants in Last Fiscal Year			Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term		
	Options Granted(1) (#)	% of Total Options Granted to Employees in Fiscal Year	Exercise or Base Price (\$/Sh)	Expiration Date	5%	10%
Donald R. VanLuvanee	53,300	10.77%	\$37.75	05/06/09	\$1,384,761	\$3,396,818
Jonathan C. Howell	16,900	3.41%	\$37.75	05/06/09	\$439,070	\$1,077,040
John R. Kurdock	16,900	3.41%	\$37.75	05/06/09	\$439,070	\$1,077,040
Robert E. Belter	12,900	2.61%	\$37.75	05/06/09	\$335,148	\$822,119
Barry A. Glasgow	5,000	1.01%	\$29.63	06/15/08	\$103,311	\$252,259
	12,900	2.61%	\$37.75	05/06/09	\$335,148	\$822,119

- 1) All options become exercisable for 25 percent of the shares covered by the option on each of the first four anniversaries of the grant date. The grant dates for the options shown in the table above were June 15, 1998 and May 6, 1999. All options become fully exercisable upon termination of the Optionee's employment within one year after a "change in control" of the Company as defined in the Stock Option Plan. Unless the transaction is approved by the Board of Directors, a "change in control" generally includes (a) the acquisition by any person of 20 percent or more of the Company's Common Stock and (b) the election of a new majority of the Company's directors without the approval of the incumbent directors.

III. OPTION EXERCISES AND FISCAL YEAR-END OPTION VALUE TABLE

The following table sets forth information with respect to the named executive officers concerning options exercised and the status of exercisable and unexercisable options held as of May 31, 1999.

Name	Options Exercised During Year Ended May 31, 1999		Number of Unexercised Options at May 31, 1999		Value of Unexercised In-the-Money Options at May 31, 1999	
	Shares Acquired on Exercise	Value Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
Donald R. VanLuvanee	---	\$0	73,552	78,233	\$1,806,127	\$138,830
Jonathan C. Howell	---	\$0	19,749	24,185	\$425,586	\$50,686
John R. Kurdock	---	\$0	8,239	28,191	\$83,532	\$92,553
Robert E. Belter	---	\$0	5,600	19,700	\$36,250	\$36,250

IV. LONG TERM INCENTIVE PLANS - AWARDS IN LAST FISCAL YEAR

The following table sets forth information with respect to performance-based restricted stock awards made to named executive officers in fiscal year 1999.

Name	Number of Shares	Performances or Other Period Until Maturation or Payout (1)
Donald R. VanLuvanee	5,700	3 to 5 Years
Jonathan C. Howell	1,800	3 to 5 Years
John R. Kurdock	1,800	3 to 5 Years
Robert E. Belter	1,400	3 to 5 Years
Barry A. Glasgow	1,400	3 to 5 Years

- The base price for these awards is \$37.75 per share, the closing market price of the Company's Common Stock on May 6, 1999, the date of grant. Awards are subject to forfeiture unless (i) the market price of the Common Stock increases at a rate in excess of 15% per year, compounded annually, over a minimum 3-year period following the grant as measured based on the average closing price of the Company's Common Stock during any one of the eight fiscal quarters of the Company between June 1, 2002 and May 31, 2004 and (ii) the award recipient is employed by the Company at the time the performance measure is achieved.

V. SEVERANCE AGREEMENTS

In July 1991, the Board of Directors of the Company approved the Company's entry into severance agreements with executive officers of the Company. These agreements generally provide for the payment upon the termination of the employee's employment by the Company without cause or by the employee for "good reason" (as defined in the severance agreement) within two years following a change of control of the Company of an amount equal to three times the employee's annual salary and three years continued coverage under life, accident and health plans. The benefit is capped as necessary to prevent any portion of the benefit from being subject to excise tax. Each employee is obligated under the severance agreement to remain in the employ of the Company for a period of 270 days following a "potential change in control" (as defined in the severance agreements). All executive officers of the Company have executed severance agreements.

VI. PERFORMANCE GRAPH

INDEXED STOCK PRICE PERFORMANCE

[GRAPHIC]

Assumes that \$100.00 was invested on May 31, 1994 in Electro Scientific Industries, Inc. (ESIO) Common Stock, the S&P 500 and the S&P High Tech Index, and that all dividends were reinvested.

5/31/1994	\$10.50	100.0	465.50	100.0	248.29	100.0
5/31/1995	\$24.38	232.1	533.40	114.5	354.09	142.6
5/31/1996	\$26.50	252.3	669.12	143.7	465.73	187.5
5/30/1997	\$38.00	361.9	848.28	182.2	653.99	263.4
5/29/1998	\$31.50	300.0	1090.82	234.3	825.86	332.6
5/28/1999	\$37.50	357.1	1301.84	279.6	1311.57	528.2

COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

The Compensation Committee of the Board of Directors makes recommendations to the Board regarding the general compensation policies for ESI, including salaries and incentives for executive officers. The Committee also has general authority to make option grants and other awards under the Company's 1989 Stock Option Plan and 1996 Stock Incentive Plan. The Committee is composed of four directors.

The Compensation Committee's executive compensation recommendations and actions during the 1999 fiscal year were in three areas: (1) compensation adjustments for the chief executive and other executive officers of the Company; (2) the key employee cash incentive bonus program; and (3) the key employee long term incentive program.

The Compensation Committee policies for compensation of ongoing executive officers are designed to fairly compensate the Company's executives and to provide incentives for the officers to manage and operate the Company for long term success. The Compensation Committee recommends, and the Board of Directors determines, based on such recommendation, compensation for the Chief Executive Officer. The Compensation Committee also recommends compensation levels for the remaining executive officers of the Company based on the recommendations of the Chief Executive Officer.

The total compensation of the executive officers takes into account several factors, including competitive compensation in the electronics industry, individual experience and performance, and the performance of the Company. The Committee does not assign a specific weight to these factors. The Company operates in marketplaces which are global, cyclical and subject to technology shifts. The Committee's evaluations of individual performance considers the leadership of each individual's contribution toward achieving the Company's corporate objectives. The objectives include: (1) adequate return on, and efficient use of, invested capital and (2) generating positive earnings throughout the entire range of business conditions.

The methodology used in determining salary, cash incentive bonus and long-term incentive grants is as follows:

Target compensation for each executive is set annually by the Compensation Committee. These targets are based on the results of periodic salary surveys of comparable-sized companies in the electronics industries conducted by the Company's independent compensation consultants and on the level of individual responsibility and job complexity. The Company's target is to pay executives at the mid-point based on the surveys.

Base salaries are determined annually for each executive officer with reference to the target level for the individual. Salary increases are given when warranted by individual performance and when base salary levels are relatively low as compared to companies that compete with the Company for executive talent to keep base salaries competitive.

The Chief Executive's base salary was \$358,000 during the fiscal year, representing an increase of \$45,250 from the prior year and a level at approximately the mid-point of salary survey data.

Cash incentives in the form of cash bonuses are paid at the discretion of the Compensation Committee to executive officers who the Committee determines have made substantial contributions to the profits of the Company in the preceding fiscal year. At the beginning of each fiscal year, the Board of Directors approves the business plan for the year, including sales and pre-tax profit goals. At the same time, the Board of Directors approves a target bonus percentage for executive officers if the established goals are met. If the goals are met, the Compensation Committee

determines, on an individual basis, the extent to which the officer will be awarded the target bonus. Factors considered include individual performance, responsibility and contribution to profits.

The amounts of bonuses for officers for fiscal year 1999 have not been determined, but are expected to be determined by the Compensation Committee and approved by the Board of Directors in September 1999.

The Company uses stock options and performance-based restricted stock grants to reward senior management and to link executive compensation to shareholder interests reflected in increases in share value. By using a combination of annual options and restricted stock awards, the Company intends to provide a potential level of incentive compensation to executive officers equal to competitive levels as determined by the Company's compensation consultant, without excessive shareholder dilution. In determining the size of option grants and restricted stock awards, the Compensation Committee takes into account the executive's position and job responsibilities. All options are granted at an exercise price equal to the fair market value of the shares on the date of grant, and vest in 25 percent annual increments during the four year period following the date of grant. The number of options granted to executive officers in fiscal year 1999 was 222,600 including 53,300 to Donald R. VanLuvanee. Fiscal year 1999 stock option grants include a special one-time stock option award for the purpose of retaining and providing incentives to senior management. The total number of options granted to the executive officers under this one-time award was 116,300 shares including 32,300 to Donald R. VanLuvanee. The number of shares of performance-based restricted stock granted to executive officers in fiscal year 1999, was 19,300 including 5,700 to Mr. VanLuvanee.

DEDUCTIBILITY OF COMPENSATION. Section 162(m) of the Internal Revenue Code of 1986 limits to \$1,000,000 per person the amount that the Company may deduct for compensation paid to any of its most highly compensated officers in any year. The levels of salary and bonus generally paid by the Company do not exceed this limit. Substantially all of the options granted under the Company's 1989 Stock Option Plan have been Incentive Stock Options. The Company receives no tax deduction from the exercise of an Incentive Stock Option unless the optionee disposes of the acquired shares before satisfying certain holding periods. Under IRS regulations, the \$1,000,000 cap on deductibility applies to compensation recognized by an optionee upon such an early disposition, as well as compensation recognized upon the exercise of a Nonstatutory Stock Option, unless the option meets certain requirements. It is the Company's policy generally to grant options that meet the requirements of the IRS regulations so that any such compensation recognized by an optionee will be fully deductible. The Committee believes that the grant of Incentive Stock Options, despite the general nondeductibility, benefits the Company by encouraging the long-term ownership of Company stock by officers and other employees. Performance-based restricted stock awards are also intended to be granted in compliance with the IRS regulations so that any compensation recognized on vesting of such awards will be fully deductible.

By the Compensation Committee: Keith L. Thomson, Chairman; Larry L. Hansen, Vernon B. Ryles, Jr., and Jon D. Tompkins.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation Committee consists of Directors Keith L. Thomson, Larry L. Hansen, Vernon B. Ryles, Jr., and Jon D. Tompkins. No Compensation Committee member is or has been an employee of the Company.

PROPOSAL 2: APPROVAL OF SELECTION OF AUDITORS

The Board of Directors has selected Arthur Andersen LLP as the Company's independent auditors for the fiscal year ending May 31, 2000 and is submitting the selection to shareholders for approval. Arthur Andersen LLP are independent certified public accountants and have audited the accounts of the Company and its subsidiaries since 1983. Proxies will be voted in accordance with the instructions specified in the proxy form. If no instructions are given, proxies will be voted for approval of Arthur Andersen LLP as independent

auditors. Representatives of Arthur Andersen LLP are expected to be present at the Annual Meeting, will be given the opportunity to make a statement if they desire to do so, and will be available to respond to appropriate questions.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's executive officers, directors and persons who own more than ten percent of the Common Stock to file reports of ownership and changes in ownership with the Securities and Exchange Commission ("SEC"). Executive officers, directors and beneficial owners of more than ten percent of the Common Stock are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on a review of the copies of such forms received by the Company and on written representations from certain reporting persons that they have complied with the relevant filing requirements, the Company believes that all Section 16(a) filing requirements applicable to its executive officers and directors for transactions during fiscal 1999 were complied with.

DISCRETIONARY AUTHORITY

While the Notice of Annual Meeting of Shareholders provides for transaction of such other business as may properly come before the meeting, the Board of Directors has no knowledge of any matters to be presented at the meeting other than those referred to herein. However, the enclosed proxy gives discretionary authority to the proxy holders to vote in accordance with the recommendation of management if any other matters are presented.

SHAREHOLDER PROPOSALS

Any shareholder proposals to be considered for inclusion in proxy material for the Company's next annual meeting in September 2000 must be received at the principal executive office of the Company no later than April 12, 2000. In connection with any matter proposed by a shareholder at the 2000 annual meeting, but not proposed for inclusion in Company proxy material, the Company may exercise discretionary voting authority with respect to proxies solicited for that meeting if appropriate notice of the shareholder proposal is not received by the Company at its principal executive office by June 26, 2000.

BY ORDER OF THE BOARD OF DIRECTORS

Joseph L. Reinhart
Vice President and Corporate Secretary

Portland, Oregon
August 10, 1999

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ELECTRO SCIENTIFIC INDUSTRIES, INC. ANNUAL MEETING SEPTEMBER 30, 1999 PROXY SOLICITED BY THE BOARD OF DIRECTORS

P The undersigned hereby appoints David F. Bolender, Donald R. VanLuvanee
R and Joseph L. Reinhart, and each of them, proxies with power of substitution
O to vote on behalf of the undersigned all shares which the undersigned may be
X entitled to vote at the Annual Meeting of Share holders of Electro
Y Scientific Industries, Inc. on September 30, 1999 and any adjournments
thereof, with all powers that the undersigned would possess if personally
present, with respect to the matters referred to on this proxy. A majority
of the proxies or substitutes present at the meeting may exercise all powers
granted hereby.

Election of Directors - Nominees:

CHANGE OF ADDRESS

3 year term: W. Arthur Porter
Gerald F. Taylor

(If you have written in the space,
please mark the corresponding box
on the reverse side of this card)

THE PROXIES WILL VOTE THE SHARES REPRESENTED BY THIS PROXY AS SPECIFIED BY YOU ON THE REVERSE SIDE, BUT IF NO SPECIFICATION IS MADE, THE PROXIES WILL VOTE THE SHARES FOR THE ELECTION OF DIRECTORS AND FOR APPROVAL OF ALL PROPOSALS.

SEE REVERSE
SIDE

/x/ Please mark your
votes as in this
example.

9320

FOR WITHHELD
1. Election of / / / /
Directors.
(see reverse)

FOR AGAINST WITHHELD
/ / / / / /
2. Voting on the
selection of
independent auditors
for the Company.

For, except vote withheld from the
following nominee(s):

Change of address on / /
reverse side

The proxies may vote in their
discretion as to other matters which
may come before the meeting.
Please date and sign exactly as name
is imprinted hereon, including the
designation as executor, trustee,
etc., if applicable. A Corporation
may sign in its name by the president
or other authorized officer. All
co-owners must sign.

PLEASE SIGN AND RETURN IMMEDIATELY

SIGNATURE (S)

DATE