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 []

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Check the appropriate box:

[] Preliminary Proxy Statement

[X] Definitive Proxy Statement

[] Definitive Additional Materials

- [] Soliciting Material Pursuant to sec.240.14a-11(c) or sec.240.14a-12
- [] Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

MKS Instruments, Inc. (Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement)

PAYMENT OF FILING FEE (CHECK THE APPROPRIATE BOX): [X] No fee required.

[] Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

- 1) Title of each class of securities to which transaction applies:
- 2) Aggregate number of securities to which transaction applies:
- 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):
- 4) Proposed maximum aggregate value of transaction:
- 5) Total fee paid:
- [] Fee paid previously with preliminary materials.
- [] Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - 1) Amount Previously Paid:
 - 2) Form, Schedule or Registration Statement No.:
 - 3) Filing Party:
 - 4) Date Filed:

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(MKS LOGO)

MKS INSTRUMENTS, INC.

SIX SHATTUCK ROAD ANDOVER, MASSACHUSETTS 01810

April 14, 2003

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of MKS Instruments, Inc. (the "Company") to be held on Wednesday, May 14, 2003, at 10:00 a.m. at the Andover Country Club, 60 Canterbury Street, Andover, Massachusetts 01810.

At the Annual Meeting you will be asked to: (i) elect two (2) Class I Directors for a three (3) year term; and (ii) ratify the selection of PricewaterhouseCoopers LLP as the Company's independent auditors for fiscal 2003. Details of the matters to be considered at the Annual Meeting are contained in the Proxy Statement, which we urge you to review carefully.

Whether or not you plan to attend the Annual Meeting, please complete, date, sign and return your Proxy Card promptly in the enclosed envelope, which requires no postage if mailed in the United States. If you attend the Annual Meeting, you may vote in person if you wish, even if you have previously returned your Proxy Card.

On behalf of the Board of Directors, I would like to express our appreciation for your continued interest in the affairs of the Company.

Sincerely,

/s/ John R. Bertucci

JOHN R. BERTUCCI Chairman, Chief Executive Officer and President (MKS LOGO)

MKS INSTRUMENTS, INC. SIX SHATTUCK ROAD ANDOVER, MASSACHUSETTS 01810

NOTICE OF 2003 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 14, 2003

To the Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of MKS INSTRUMENTS, INC. (the "Company"), a Massachusetts corporation, will be held on Wednesday, May 14, 2003 at 10:00 a.m. at the Andover Country Club, 60 Canterbury Street, Andover, Massachusetts 01810, for the following purposes:

1. To elect two (2) Class I Directors for a three (3) year term; and

2. To ratify the selection of PricewaterhouseCoopers LLP as the Company's independent auditors for the year ending December 31, 2003.

The Board of Directors has fixed the close of business on March 27, 2003 as the record date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting and any adjournment or adjournments thereof. The stock transfer books of the Company will remain open for the purchase and sale of the Company's Common Stock.

A copy of the Company's Annual Report to Stockholders for the year ended December 31, 2002, which contains consolidated financial statements and other information of interest to stockholders, accompanies this Notice and the enclosed Proxy Statement.

If you would like to attend the Annual Meeting and your shares are held by a broker, bank or other nominee, you must bring to the Annual Meeting a letter from the nominee confirming your beneficial ownership of such shares. You must also bring a form of personal identification. In order to vote your shares at the Annual Meeting, you must obtain from the nominee a proxy issued in your name.

By Order of the Board of Directors

/s/ Richard S. Chute

RICHARD S. CHUTE Clerk

Andover, Massachusetts April 14, 2003

IMPORTANT

WHETHER OR NOT YOU EXPECT TO ATTEND IN PERSON, PLEASE PROMPTLY SIGN, DATE, AND RETURN THE ENCLOSED PROXY. PROMPTLY SIGNING, DATING, AND RETURNING THE PROXY WILL SAVE THE COMPANY THE EXPENSE AND EXTRA WORK OF ADDITIONAL SOLICITATION. AN ADDRESSED ENVELOPE FOR WHICH NO POSTAGE IS REQUIRED IF MAILED IN THE UNITED STATES IS ENCLOSED FOR THAT PURPOSE. SENDING IN YOUR PROXY WILL NOT PREVENT YOU FROM VOTING YOUR STOCK AT THE ANNUAL MEETING IF YOU DESIRE TO DO SO, AS YOUR PROXY IS REVOCABLE AT YOUR OPTION.

MKS INSTRUMENTS, INC. SIX SHATTUCK ROAD ANDOVER, MASSACHUSETTS 01810

PROXY STATEMENT

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors of MKS Instruments, Inc. (the "Company" or "MKS"), a Massachusetts corporation, for use at the Annual Meeting of Stockholders to be held on May 14, 2003, at 10:00 a.m. at the Andover Country Club, 60 Canterbury Street, Andover, Massachusetts 01810, and at any adjournment or postponement thereof (the "Annual Meeting").

All proxies will be voted in accordance with the stockholders' instructions. If no choice is specified, the shares will be voted in favor of the matters set forth in the accompanying Notice of 2003 Annual Meeting of Stockholders. Any proxy may be revoked by a stockholder at any time before its exercise by delivery of written revocation to the Clerk of the Company. Attendance at the Annual Meeting will not in itself be deemed to revoke a Proxy unless the stockholder gives affirmative notice at the Annual Meeting that the stockholder intends to revoke the proxy and vote in person.

VOTING SECURITIES AND VOTES REQUIRED

At the close of business on March 27, 2003, the record date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting, there were issued and outstanding and entitled to vote 51,383,573 shares of Common Stock, no par value per share, of the Company (the "Common Stock"). Each share entitles the record holder to one vote on each matter.

Under the Company's Amended and Restated By-Laws (the "By-Laws"), the holders of a majority of the shares of Common Stock issued and outstanding and entitled to vote at the Annual Meeting shall constitute a quorum for the transaction of business at the Annual Meeting. Shares of Common Stock present in person or represented by proxy (including shares which abstain or do not vote with respect to one or more of the matters presented for stockholder approval) will be counted for purposes of determining whether a quorum exists at the Annual Meeting.

The affirmative vote of the holders of a plurality of the shares of Common Stock voting on the matter is required for the election of Directors. The ratification of PricewaterhouseCoopers LLP requires the approval of the holders of a majority of the shares of Common Stock present or represented by proxy at the Annual Meeting and voting on the matter.

Shares held by stockholders who abstain from voting as to a particular matter, and shares held in "street name" by brokers or nominees, who indicate on their proxies that they do not have discretionary authority to vote such shares as to a particular matter, will not be counted as votes in favor of such matter, and also will not be counted as shares voting on such matter. Accordingly, abstentions and "broker non-votes" will have no effect on the voting on a matter that requires the affirmative vote of a certain percentage of the shares voting on the matter. THE NOTICE OF ANNUAL MEETING, THIS PROXY STATEMENT AND THE COMPANY'S ANNUAL REPORT TO STOCKHOLDERS FOR THE YEAR ENDED DECEMBER 31, 2002 ARE BEING MAILED TO STOCKHOLDERS ON OR ABOUT APRIL 14, 2003. A COPY OF THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2002 AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION (THE "COMMISSION"), EXCLUDING EXHIBITS, WILL BE FURNISHED WITHOUT CHARGE TO ANY STOCKHOLDER UPON WRITTEN REQUEST TO: INVESTOR RELATIONS DEPARTMENT, MKS INSTRUMENTS, INC., SIX SHATTUCK ROAD, ANDOVER, MA 01810. EXHIBITS WILL BE PROVIDED UPON WRITTEN REQUEST AND PAYMENT OF AN APPROPRIATE PROCESSING FEE.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of Common Stock by (i) each stockholder known to the Company to be the beneficial owner of more than 5% of the outstanding shares of Common Stock; (ii) each current director of the Company; (iii) the executive officers named in the Summary Compensation Table below; and (iv) all directors and executive officers of the Company as a group. Unless otherwise indicated in the footnotes to the table, (i) all information set forth in the table is as of January 31, 2003; and (ii) the address for each director and executive officer of the Company is: c/o MKS Instruments, Inc., Six Shattuck Road, Andover, Massachusetts 01810.

NUMBER OF SHARES PERCENTAGE OF NAME OF BENEFICIAL OWNERS BENEFICIALLY OWNED(1) CLASS OUTSTANDING - ---------- John R. Bertucci..... 11,643,022(2) 22.7% Ronald C. Weigner..... 338,580(3) * Leo Berlinghieri..... 300,044(4) * William D. Stewart..... 311,583(5) * John A. Smith..... 50,120(6) * Robert R. Anderson..... 68,421(7) * James G. Berges..... --Richard S. Chute..... 37,092(4) * Hans-Jochen Kahl..... 30,122(8) * Owen W. Robbins..... 37,092(4) * Louis P. Valente.... 39,992(9) * All directors and officers as a group (13 persons)..... 13,181,118(10) 25.7% Other 5% shareholder Emerson Electric Co. 12,000,000 23.4% 800 West Florissant Avenue St. Louis, MO 63136

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* Represents less than 1% of the outstanding Common Stock.

- (1) The Company believes that each stockholder has sole voting and investment power with respect to the shares listed, except as otherwise noted. The number of shares beneficially owned by each stockholder is determined under rules of the Commission, and the information is not necessarily indicative of ownership for any other purpose. Under such rules, beneficial ownership includes any shares as to which the person has sole or shared voting power or investment power and also any shares which the individual has the right to acquire within 60 days after January 31, 2003 through the exercise of any stock option or other right. The inclusion herein of any shares of Common Stock deemed beneficially owned does not constitute an admission by such stockholder of beneficial ownership of those shares of Common Stock. Shares of Common Stock which an individual or entity has a right to acquire within the 60-day period following January 31, 2003 pursuant to the exercise of options or warrants are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or entity, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person or entity shown in the table.
- (2) Includes 5,155,353 shares held directly by Mr. Bertucci, 5,453,927 shares held directly by Mr. Bertucci's wife, 500,000 shares held by certain trusts for which Mr. Bertucci serves as a co-trustee and 500,000 shares held by a limited partnership. In addition, includes 33,742 shares subject to options exercisable within 60 days of January 31, 2003.

- (3) Consists of 1,163 shares held directly by Mr. Weigner and 337,417 shares subject to options exercisable within 60 days of January 31, 2003.
- (4) Consists solely of options exercisable within 60 days of January 31, 2003.
- (5) Consists of 1,112 shares held directly by Mr. Stewart and 310,471 shares subject to options exercisable within 60 days of January 31, 2003.
- (6) Consists of 2,058 shares held directly by Mr. Smith and 48,062 shares subject to options exercisable within 60 days of January 31, 2003.
- (7) Consists of 40,000 shares held directly by Mr. Anderson, 12,103 shares held in trust and other accounts, and 16,318 shares subject to options exercisable within 60 days of January 31, 2003.
- (8) Consists of 18,491 shares held directly by Mr. Kahl, and 11,631 shares subject to options exercisable within 60 days of January 31, 2003.
- (9) Consists of 3,682 shares held directly by Mr. Valente and 36,310 shares subject to options exercisable within 60 days of January 31, 2003.
- (10) Includes 1,306,554 shares subject to options exercisable within 60 days of January 31, 2003.

To the knowledge of the Company, there are no agreements among any of the foregoing persons or entities with respect to the voting of shares of Common Stock of the Company.

PROPOSAL ONE ELECTION OF DIRECTORS

The By-Laws of the Company provide for a Board of Directors which is divided into three classes. The term of the Class I Directors expires at the 2003 Annual Meeting. The term of the Class II Directors expires at the 2004 Annual Meeting, and the term of the Class III Directors expires at the 2005 Annual Meeting. Mr. Hans-Jochen Kahl and Mr. Louis P. Valente are currently proposed for election to serve as Class I Directors.

Shares represented by all proxies received by the Board of Directors and not so marked as to withhold authority to vote for an individual director will be voted (unless one or both nominees are unable or unwilling to serve) for the election of the nominees named below. The Board of Directors expects that each of the nominees named below will be available for election, but if either of them is not a candidate at the time the election occurs, it is intended that such proxies will be voted for the election of a substitute nominee to be designated by the Board of Directors.

BOARD RECOMMENDATION

THE BOARD OF DIRECTORS BELIEVES THAT APPROVAL OF THE ELECTION OF MR. HANS-JOCHEN KAHL AND MR. LOUIS P. VALENTE TO SERVE AS CLASS I DIRECTORS IS IN THE BEST INTERESTS OF MKS AND ITS STOCKHOLDERS AND THEREFORE RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

DIRECTORS

Set forth below are the names and ages of each member of the Board of Directors (including those who are nominees for election as Class I Directors) and the positions and offices held, principal occupation and business experience during the past five years, the names of other publicly held companies of which the individual serves as a director and the year of the commencement of the term as director of MKS. Information with respect to the number of shares of Common Stock beneficially owned by each director, directly or indirectly, as of January 31, 2003, appears under the heading "Security Ownership of Certain Beneficial Owners and Management."

CLASS TO WHICH NAME AGE POSITION DIRECTOR BELONGS ----- --- ----- ------------- John R. Bertucci..... 62 Director; Chairman, Chief Executive III Officer and President Robert R. Anderson(2)..... 65 Director III James Berges(1)..... 55 Director II Richard S. Chute..... 64 Director; Clerk II *Hans-Jochen Kahl(1).....63 Director I Owen W. Robbins(2)..... 73 Director II *Louis P. Valente(1)(2)..... 72 Director I

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- (1) Member of Compensation Committee
- (2) Member of Audit Committee
- * Nominee for election at this meeting

Mr. Bertucci has served as a director of MKS since 1974 and has been Chairman of the Board of Directors and Chief Executive Officer since November 1995. Mr. Bertucci served as President of MKS from 1974 to May 1999 and again from November 2001 to the present. From 1970 to 1974, he was Vice President and General Manager. Mr. Bertucci has an M.S. in Industrial Administration and a B.A. in Metallurgical Engineering from Carnegie-Mellon University. Mr. Bertucci is a member of the Board of Trustees of Carnegie-Mellon University and a member of the Executive Board of The Massachusetts High Technology Council.

Mr. Anderson has served as a director of MKS since January 2001. Mr. Anderson is a private investor. From October 1998 to October 2000, Mr. Anderson served as Chairman of Yield Dynamics, Inc., a private semiconductor control software company and presently serves as a director. He also served as CEO of Yield Dynamics from October 1998 to April 2000. Mr. Anderson also served as CEO of Silicon Valley Research, Inc., a semiconductor design automation software company from December 1996 to August 1998 and as Chairman from January 1994 to January 2001. Mr. Anderson currently serves as a director of Metron Technology N.V., a distributor of parts and equipment for the semiconductor industry, Trikon Technologies, Inc., a manufacturer of semiconductor test and burn-in equipment. He also serves as a director to three other private development stage companies, and as a trustee of Bentley College.

Mr. Berges has served as a Director of MKS since February 2002. Mr. Berges is currently President and a director of Emerson Electric Co., and is also a director of PPG Industries, Inc.

Mr. Chute has served as a director of MKS since 1974. Mr. Chute was a member of the law firm of Hill & Barlow, a Professional Corporation, from 1971 to January 2003, and is currently in private practice.

Mr. Kahl has served as a director of MKS since January 2001. From June 1994 through September 1996, Mr. Kahl served as a consultant to Ebara, a Japanese manufacturer of industrial water pumps and vacuum process equipment for the semiconductor industry. Mr. Kahl was employed by Leybold AG, formerly Leybold-Heraeus GmbH, a leading international manufacturer of vacuum pumps and other vacuum process equipment for the semiconductor industry, from July 1983 to March 1992, where he served as a managing director and was primarily responsible for sales, marketing and strategic planning. From September 1995 to November 2000, he was a director of Applied Science and Technology, Inc. (ASTeX) which was acquired by MKS. Since November 1996, he has served as a director of Solid State Management, a privately held manufacturer of high precision measurement tools.

Mr. Robbins has served as a director of MKS since February 1996. Mr. Robbins was Executive Vice President of Teradyne, Inc., a manufacturer of electronic test systems and backplane connection systems used in the electronics and telecommunications industries, from March 1992 to May 1997, and its Chief Financial Officer from February 1980 to May 1997.

Mr. Valente has served as a director of MKS since February 1996. Mr. Valente is Chairman of Palomar Medical Technologies, Inc., a company which designs, manufactures and markets cosmetic lasers, since September 1997. He has been a director of Palomar Medical Technologies, Inc. since February 1997 and was its President and Chief Executive Officer from May 1997 to May 2002. Mr. Valente is also a director of Surgilight, Inc., Medical Information Technology, Inc. and a privately held medical company.

DIRECTOR COMPENSATION

Directors of MKS are reimbursed for expenses incurred in connection with their attendance at Board of Directors and committee meetings. Directors who are not employees of MKS are paid an annual fee of \$10,000 and \$1,000 for each Board of Directors meeting they attend and \$500 for each committee meeting they attend which is not held on the same day as a Board of Directors meeting. Messrs. Chute, Robbins and Valente have each been granted options, under MKS's 1996 Director Stock Option Plan (under which no further grants will be made), to purchase 8,592 shares of Common Stock at a weighted average exercise price of \$4.81 per share. Each has also been granted options to purchase 34,500 shares of Common Stock at a weighted average exercise price of \$26.27 per share under the 1997 Director Stock Option Plan (the "1997 Director Plan"). Mr. Anderson and Mr. Kahl have each been granted options to purchase 17,250 shares of Common Stock at a weighted average exercise price of \$26.45 per share under the 1997 Director Plan. Mr. Berges has elected not to receive compensation for serving as a Director of MKS.

1997 DIRECTOR STOCK OPTION PLAN

MKS's 1997 Director Plan authorizes the issuance of up to an aggregate of 300,000 shares of Common Stock. The 1997 Director Plan is administered by MKS's Board of Directors. Options are granted under the 1997 Director Plan only to directors of MKS who are not employees of MKS. Under the 1997 Director Plan, non-employee directors receive an option to purchase 11,250 shares of Common Stock upon their initial election to the Board of Directors. Each initial option vests over a three-year period in twelve (12) equal quarterly installments following the date of grant. On the date of each annual meeting of the stockholders, options are automatically granted to each eligible director who has been in office for at least six (6) months prior to the date of the annual meeting of the stockholders. Each annual option entitles the holder to purchase 6,000 shares of Common Stock. Each annual option will generally become exercisable on the day prior to the first annual meeting of stockholders following the date of grant, or if no such meeting is held within thirteen (13) months after the date of grant, on the thirteen (13) month anniversary of the date of grant. The exercise price of all options granted under the 1997 Director Plan is equal to the fair market value of the Common Stock on the date of grant. Options granted under the 1997 Director Plan terminate upon the earlier of three 6

(3) months after the optionee ceases to be a director of MKS or ten (10) years after the grant date. In the event of a change in control of MKS, the vesting of all options then outstanding would be accelerated in full and any restrictions on exercising outstanding options would terminate.

The Company's 1996 Director Stock Option Plan, under which options have been granted to, and may still be exercised by, four non-employee directors of MKS, has been terminated. See "Director Compensation."

COMMITTEES OF THE BOARD OF DIRECTORS

The Compensation Committee for the year 2002 consisted of Messrs. Berges, Kahl and Valente. Mr. Berges joined the committee in February 2002 upon the resignation of Mr. Robert Therrien as a Director of the Company. The Compensation Committee reviews and evaluates the salaries, supplemental compensation and benefits of all officers of MKS, reviews general policy matters relating to compensation and benefits of employees of MKS and makes recommendations concerning these matters to the Board of Directors. The Compensation Committee also administers MKS's stock option and stock purchase plans, and sets grants to executive officers, under the Company's Stock Plans. The Compensation Committee held two meetings in 2002.

The Audit Committee, for the year 2002, consisted of Messrs. Anderson, Robbins and Valente. The Audit Committee reviews with MKS's independent auditor the scope and timing of its audit services, the auditor's report on MKS's financial statements following completion of its audit and MKS's policies and procedures with respect to internal accounting and financial controls. In addition, the Audit Committee makes annual recommendations to the Board of Directors for the appointment of independent auditors for the ensuing year. The Audit Committee held six meetings in 2002.

The Board of Directors held four meetings during 2002. Each director attended at least 75% of the total number of meetings of the Board of Directors and all committees of the Board on which he served.

COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

The Company's executive compensation program is administered by the Compensation Committee of the Board of Directors. In 2002, the Compensation Committee (the "Committee") was initially comprised of three non-employee directors, Messrs. Therrien, Valente and Kahl. Mr. Therrien resigned as a director and from the Committee in February 2002 and was replaced by Mr. Berges. The Committee is responsible for determining the salaries of, establishing bonus programs for, and granting stock options to, the Company's executive officers.

The Committee believes that the primary objectives of the Company's compensation policies are to attract, retain, motivate, and reward a management team that can effectively implement and execute the Company's strategic business plan and lead the Company in achieving its long-term growth and earnings goals. These compensation policies include an overall management compensation program that: (i) is competitive with management compensation programs at companies of similar size; (ii) recognizes individual initiative, leadership and achievement; (iii) provides short-term bonus incentives for management to meet the Company's net income performance goals; and (iv) provides long-term incentive compensation in the form of stock options to encourage management to continue to focus on shareholder return.

The Committee's goal is to use compensation policies to closely align the interests of the Company's management with the interests of shareholders so that the Company's management have incentives to achieve short-term performance goals while building long-term value for the Company's shareholders. In establishing base salaries for executive officers, the Committee considers numerous factors such as the executive's

responsibilities, the executive's importance to the Company, the executive's performance, historical salary levels of the executive, and the salaries of executives at certain other companies whose business is similar to that of the Company. The Committee will review its compensation policies from time to time in order to determine the reasonableness of the Company's compensation programs and to take into account factors which are unique to the Company.

The Company has entered into employment agreements with certain senior officers of the Company. The Committee believes that the salaries and benefits provided to these senior officers reflect appropriate base salaries and benefits as compared to senior officers of other companies of similar size. These agreements provide for termination for cause as well as termination without cause and for certain severance benefits and restrict the officers' ability to compete with the Company.

BONUS PLAN

To further provide incentives for management to continue to improve operating results, the Committee oversees the administration of the Management Incentive Plan ("Bonus Plan"). The amounts to be distributed pursuant to the Bonus Plan are determined by the financial results of the Company. The Committee believes that the Bonus Plan provides significant incentive to the executive officers of the Company to exceed the Company's financial goals.

LONG-TERM INCENTIVE COMPENSATION

Long-term incentive compensation, in the form of stock options, allows the executive officers to share in any appreciation in the value of the Company's Common Stock. The Committee believes that stock option participation aligns executive officers' interests with those of the stockholders. In addition, the Committee believes that awarding options to executive officers helps to balance the short-term focus of annual incentive compensation with a longer term view and may help to retain key executive officers. Moreover, because options granted to executive officers generally become exercisable over a four year period and terminate upon or shortly after the termination of the executive's employment with the Company, stock options serve as a means of retaining these executives.

When establishing stock option grant levels, the Committee considers general corporate performance, the Chief Executive Officer's recommendations, level of seniority and experience, the dilutive impact of the options, previous grants of stock options, vesting schedules of outstanding options and the current stock price.

It is the policy of the Company to make an initial stock option grant to all executive officers at the time they commence employment consistent with the number of options granted to executive officers in the industry at similar levels of seniority. In addition, the Committee may also make grants throughout the year. In making such grants, the Committee considers individual contributions to the Company's financial, operational and strategic objectives.

Senior management also participates in Company-wide employee benefit plans, including the Company's 401(k) Plan. Benefits under these plans are not dependent upon individual performance.

COMPENSATION OF CHIEF EXECUTIVE OFFICER

Mr. Bertucci's compensation was based upon a careful analysis of other comparable companies' Chief Executive Officers' compensation and Mr. Bertucci's efforts and success in improving the Company's operating results, establishing strategic goals and objectives for long-term growth of the Company, and advancing the Company in obtaining its strategic goals.

SECTION 162(M)

Section 162(m) of the Internal Revenue Code generally disallows a tax deduction to public companies for certain compensation in excess of \$1.0 million paid to the company's chief executive officer and the four other most highly compensated executive officers. Certain compensation, including qualified performance-based compensation, will not be subject to the deduction limit if certain requirements are met.

The Committee reviews the potential effect of Section 162(m) periodically and generally seeks to structure the long-term incentive compensation granted to its executive officers through option issuances under the Second Restated 1995 Stock Incentive Plan in a manner that is intended to avoid disallowance of deductions under Section 162(m). Nevertheless, there can be no assurances that compensation attributable to awards granted under the Second Restated 1995 Stock Incentive Plan will be treated as qualified performance-based compensation under Section 162(m). Because the Company's Bonus Plan is not operated in a manner designed to qualify as performance-based compensation under Section 162(m), it is possible that a portion of any bonus payable to Mr. Bertucci and certain other executives under the Bonus Plan will not be deductible for federal income tax purposes. The Committee reserves the right to use its judgment to authorize compensation payments which may be in excess of the Section 162(m) limit when the Committee believes such payments are appropriate, after taking into consideration changing business conditions or the officer's performance, and are in the best interests of the stockholders.

> Hans-Jochen Kahl, Chairman James G. Berges Louis P. Valente

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

In 2002, the Compensation Committee comprised Messrs. Kahl, Berges and Valente. Messrs. Kahl, Berges and Valente were not, at any time, officers or employees of MKS or any subsidiary of MKS. None of them had any relationship with MKS requiring disclosure under Item 404 of Regulation S-K under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), with the exception of Mr. Berges, which is described below. No executive officer of MKS serves or has served as a member of the Board of Directors or Compensation Committee (or other committee serving an equivalent function) of any other entity which has one or more executive officers serving as a member of MKS's Board of Directors or Compensation Committee.

Mr. Berges, a director of MKS, is the president and director of Emerson Electric Co. ("Emerson"). On January 31, 2002, MKS completed its acquisition of the business of Emerson and its subsidiaries operating as the "ENI Division" pursuant to an Agreement and Plan of Merger with respect to the Acquisition of the ENI business dated October 30, 2001 between MKS and Emerson. At the effective time of the acquisition, MKS issued an aggregate of 12 million shares of its Common Stock to Emerson, in exchange for the businesses and assets of ENI. The purchase price was approximately \$265,000,000. During 2002, MKS purchased materials and services from Emerson and its subsidiaries totaling approximately \$1,156,000.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee of the Company's Board of Directors is currently composed of three members and acts under a written charter first adopted and approved in 2000. The members of the Audit Committee are independent directors, as defined by its charter and the rules of the Nasdaq Stock Market, and possess the financial sophistication required by such charter and rules. The Audit Committee held six meetings during the fiscal year ended December 31, 2002.

Management is responsible for the Company's internal controls and the financial reporting process. The Company's independent accountants, PricewaterhouseCoopers LLP ("PwC"), are responsible for performing an independent audit of the Company's financial statements in accordance with accounting principles generally accepted in the United States, and issue a report on those financial statements. The Audit Committee is responsible for monitoring and overseeing these processes. As appropriate, the Audit Committee reviews and evaluates, and discusses with the Company's management, internal accounting, financial and auditing personnel and the independent auditors, the following:

- the plan for, and the independent auditors' report on, each audit of the Company's financial statements;
- the Company's financial disclosure documents, including all financial statements and reports filed with the Securities and Exchange Commission ("SEC") or sent to shareholders;
- management's selection, application and disclosure of critical accounting policies;
- major changes in the Company's significant: accounting practices, principles, controls or methodologies;
- significant developments or changes in accounting rules applicable to the Company; and
- the adequacy of the Company's internal controls and accounting, financial and auditing personnel.

The Audit Committee reviewed the Company's audited financial statements for the fiscal year ended December 31, 2002, and discussed these financial statements with the Company's management. Management represented to the Audit Committee that the Company's financial statements had been prepared in accordance with accounting principles generally accepted in the United States. The Audit Committee also reviewed and discussed the audited financial statements and the matters required by Statement on Auditing Standards No. 61 "Communication with Audit Committees" (SAS 61) with PwC, the Company's independent auditors. SAS 61 requires the Company's independent auditors to discuss with the Company's Audit Committee, among other things, the following:

- methods to account for significant unusual transactions;
- the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus;
- the process used by management in formulating particularly sensitive accounting estimates and the basis for the auditors' conclusions regarding the reasonableness of those estimates; and
- disagreements with management over the application of accounting principles, the basis for management's accounting estimates and the disclosures in the financial statements.

The Company's independent auditors also provided the Audit Committee with the written disclosures and the letter required by Independence Standards Board Standard No. 1 "Independence Discussions with Audit Committees". Independence Standards Board Standard No. 1 requires auditors annually to disclose in writing all relationships that in the auditor's professional opinion may reasonably be thought to bear on independence, confirm their perceived independence and engage in a discussion of independence. In addition, the Audit Committee discussed with the independent auditors their independence from the Company. The Audit Committee also considered whether the independent auditors' provision of the other, non-audit related services to the Company which are referred to below is compatible with maintaining such auditors' independence.

Based on its discussions with management and the independent auditors, and its review of the representations and information provided by management and the independent auditors, the Audit Committee recommended to the Company's Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2002.

Management has advised the Audit Committee that for the year ended December 31, 2002, the Company was billed by its independent auditors, PwC, for services in the following categories:

2002 2001
Audit\$ 654,000 \$ 381,000 Audit
Related
273,000 380,000
Tax
039,000 074,000 AII Other
167,000
Total

\$1,933,000 \$1,635,000 ======== ================

Audit Fees for the years ended December 31, 2002 and 2001, respectively, were for professional services rendered for the audits of our consolidated financial statements and statutory and subsidiary audits, consents, income tax provision procedures, and assistance with review of documents filed with the SEC.

Audit-Related Fees as of the years ended December 31, 2002 and 2001, respectively, were for assurance and related services related to employee benefit plan audits and due diligence related to mergers and acquisitions.

Tax Fees as of the years ended December 31, 2002 and 2001, respectively, were for services related to tax compliance, including the preparation of tax returns and claims for refund; and tax planning and tax advice, including assistance with acquisitions, foreign sales and foreign subsidiaries.

All Other Fees for the year ended December 31, 2002 were for other acquisition related services.

The Audit Committee has not yet enacted pre-approval policies and procedures for audit and non-audit services. Therefore, the proxy disclosure does not include pre-approval policies and procedures and related information. The Company is early-adopting components of the proxy fee disclosure requirements; the requirement does not become effective until periodic annual filings for the first fiscal year ending after December 15, 2003.

We have considered and determined that the provision of the non-audit services noted in the foregoing table is compatible with maintaining PwC's independence.

By the Audit Committee of the Board of Directors of MKS Instruments, Inc.

Robert R. Anderson, Chairman Owen W. Robbins Louis P. Valente The following is a brief summary of the background of each executive officer of MKS, other than Mr. Bertucci, whose background is described under the heading "Directors" above:

Ronald C. Weigner, Vice President and Chief Financial Officer, Age 57.

Mr. Weigner has served as Vice President and Chief Financial Officer of MKS since November 1995. From September 1993 until November 1995, he was Vice President and Corporate Controller and from 1980 to 1993 he was Corporate Controller. Mr. Weigner is a certified public accountant and has a B.S. in Business Administration from Boston University.

Leo Berlinghieri, Vice President, Global Sales and Service, Age 49.

Mr. Berlinghieri has served as Vice President, Global Sales and Service of MKS since November 1995. From 1980 to November 1995, he served in various management positions of MKS, including Manufacturing Manager, Production and Inventory Control Manager, and Director of Customer Support Operations. Mr. Berlinghieri is Director at Large of the TQM-BASE Council, Inc., a non-profit quality management consortium comprised of Boston area semiconductor capital equipment manufacturers.

William D. Stewart, Vice President and General Manager, Vacuum Products, Age 58.

Mr. Stewart has served as Vice President and General Manager, Vacuum Products group since November 1997. From October 1986 to November 1997, he was President of HPS Products group, which MKS acquired in 1986. Mr. Stewart co-founded HPS in 1976. Mr Stewart has an M.B.A. from Northwestern University and a B.S. in Business Administration from the University of Colorado. Mr. Stewart also serves on the Board of Directors of the Janus Fund.

John A. Smith, Vice President and General Manager, Instruments and Control Systems, Age 52.

Dr. John A. Smith has served as Vice President and General Manager of the Instruments and Control Systems Product Group, which comprises Pressure Measurement and Control, Materials Delivery, Gas Composition and Analysis, and Control and Information Technology products since December 2002. Prior to this position, Dr. Smith served as Vice President and General Manager of Materials Delivery Products (MDP) and Advanced Process Control (APC), from February 2002 to December 2002. From July 1994 until February 2002, he was Managing Director of MKS Instruments, U.K. Ltd. Dr. Smith has a Ph.D. in Electronic Engineering from the University of Manchester, U.K.

Executive officers of MKS are elected by the Board of Directors on an annual basis and serve until their successors are duly elected and qualified. There are no family relationships among any of the executive officers or directors of MKS.

The following table sets forth information with respect to the compensation of MKS's Chief Executive Officer, each of the four other most highly compensated executive officers (the "Named Executive Officers") for the years ended December 31, 2002, 2001 and 2000.

SUMMARY COMPENSATION TABLE

LONG-TERM COMPENSATION AWARDS OTHER ANNUAL COMPENSATION
SECURITIES OTHER ANNUAL UNDERLYING ALL OTHER NAME
AND PRINCIPAL POSITION YEAR SALARY BONUS COMPENSATION OPTIONS(#)
COMPENSATION(1)
John R. Bertucci
2002 \$371,441 Chairman, Chief Executive 2001 400,437
Officer and President 2000 391,281 593,372 - 8,500 Ronald C.
Weigner 2002 196,475 60,503 5,500 Vice President and Chief 2001 210,701
Chief 2001 210,701 155,950 5,100 Financial Officer 2000 196,743 160,871 12,000 13,600
160,871 12,000 13,600 Leo Berlinghieri 2002 186,351 60,466
Vice President Global Sales 2001 196,410
155,880 and Service 2000 179,783 145,528 11,000 8,500 William D.
Stewart 2002 190,721 55,490 5,500 Vice President and
General 2001 201,087 - 155,926 5,100 Manager Vacuum Products 2000
206,135 170,449 11,000 13,600 John A. Smith 2002 183,987 30,461
1,750 Vice President and General 2001 124,494 - 62,500 Manager
Instruments and 2000 124,921 92,907 7,500 - - Control Systems

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⁽¹⁾ Represents amounts paid into a 401(k) plan. Other compensation in the form of perquisites and other personal benefits has been omitted in those instances where such perquisites and other personal benefits constituted less than the lesser of \$50,000 or 10 percent of the total salary and bonus for each Named Executive Officer for such year.

OPTION GRANTS IN FISCAL YEAR 2002

INDIVIDUAL GRANTS ------------ POTENTIAL REALIZABLE VALUE AT NUMBER OF % OF TOTAL ASSUMED ANNUAL RATES OF STOCK SECURITIES OPTIONS PRICE APPRECIATION FOR OPTION UNDERLYING GRANTED TO EXERCISE OF TERM(5) OPTIONS EMPLOYEES IN BASE PRICE EXPIRATION -------------- NAME GRANTED FISCAL YEAR(3) (\$/SH) DATE(4) 5% 10% ---------- ------------- ------ John R. Bertucci.... --Ronald C. Weigner.... 30,000(1) \$23.50 1/30/2012 \$443,370.71 \$1,123,588.43 506(2) \$18.44 6/24/2012 \$ 5,867.99 \$ 14,870.64 30,000(1) 1.59% \$16.88 11/22/2012 \$318,472.24 \$ 807,071.18 Leo Berlinghieri.... 30,000(1) \$23.50 1/30/2012 \$443,370.71 \$1,123,588.43 466(2) \$18.44 6/24/2012 \$ 5,404.12 \$ 13,695.09 30,000(1) 1.58% \$16.88 11/22/2012 \$318,472.24 \$ 807,071.18 William D. Stewart... 25,000(1) \$23.50 1/30/2012 \$369,475.59 \$ 936,323.70 490(2) \$18.44 6/24/2012 \$ 5,682.44 \$ 14,400.42 30,000(1) 1.45% \$16.88 11/22/2012 \$318,472.24 \$

807,071.18 John A. Smith...... 461(2) \$18.44 6/24/2012 \$ 5,346.13 \$ 13,548.15 30,000(1) 0.80% \$16.88 11/22/2012 \$318,472.24 \$ 807,071.18

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- (1) The Option will become exercisable as follows: 25% of the shares become exercisable on the first anniversary of the date of issue. An additional 6.25% of the initial grant of options vests on each successive quarter.
- (2) This option will become exercisable as follows: 33 1/3% after the first year and each successive 12 month period thereafter.
- (3) In the fiscal year ended December 31, 2002, options to purchase a total of 3,791,042 shares of Common Stock were granted to employees of MKS, including officers.
- (4) The options are subject to earlier termination upon certain events related to termination of employment.
- (5) The dollar gains under these columns result from calculations discussing hypothetical growth rates as set by the Commission and are not intended to forecast future price appreciation of the Common Stock.

NUMBER OF SECURITIES VALUE OF UNEXERCISED IN-THE- UNDERLYING UNEXERCISED MONEY OPTIONS AT FISCAL YEAR SHARES OPTIONS AT FISCAL YEAR END END(1) ACQUIRED ON VALUE ------------- NAME EXERCISE(#) REALIZED EXERCISABLE UNEXERCISABLE EXERCISABLE UNEXERCISABLE - ------------------------ John R. Bertucci..... -- -- 33,742 -- \$ 106,312 -- Ronald C. Weigner.... -- -- 324,292 90,761 2,016,960 \$87,840 Leo Berlinghieri..... -- -- 286,981 90,365 1,577,760 87,840 William D. Stewart.... -- --298,596 85,670 1,716,960 87,840 John A. Smith.... -- 43,687 85,774 52,245 18,225

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(1) Total value of "in-the-money" unexercised options is based on the difference between the last sales price of the Company's Common Stock on the Nasdaq Stock Market on December 31, 2002 (\$16.43 per share) and the exercise price of "in-the-money" options, multiplied by the number of shares subject to such options.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Mr. Chute, a director of MKS and MKS's clerk, and Thomas Belknap, were co-trustees of certain Bertucci family trusts. Messrs. Chute and Belknap were attorneys at the law firm of Hill & Barlow, a Professional Corporation. Hill & Barlow provided legal services to MKS during the calendar year ended December 31, 2002 for which it was compensated by MKS in the aggregate amount of \$231,270. As of May 31, 2002, Mr. Chute and Mr. Belknap were no longer Trustees of the Bertucci Family Trusts.

Mr. Stewart, Vice President and General Manager of the Vacuum Products group, is the general partner of Aspen Industrial Park Partnership ("Aspen"). MKS leases from Aspen certain facilities occupied by MKS's Vacuum Products group in Boulder, Colorado. MKS paid Aspen \$866,181 in 2002 to lease such facilities.

Mr. Berges, a director of MKS, is the president and director of Emerson Electric Co. ("Emerson"). On January 31, 2002, MKS completed its acquisition of the business of Emerson and its subsidiaries operating as the "ENI Division" pursuant to an Agreement and Plan of Merger with respect to the Acquisition of the ENI business dated October 30, 2001 between MKS and Emerson. At the effective time of the acquisition, MKS issued an aggregate of 12 million shares of its Common Stock to Emerson, in exchange for the businesses and assets of ENI. The purchase price was approximately \$265,000,000. During 2002, MKS purchased materials and services from Emerson and its subsidiaries totalling approximately \$1,156,000. The following table provides information about the securities authorized for issuance under our equity compensation plans as of December 31, 2002:

NUMBER OF SECURITIES REMAINING AVAILABLE FOR NUMBER OF SECURITIES TO WEIGHTED-AVERAGE FUTURE ISSUANCE UNDER BE ISSUED UPON EXERCISE EXERCISE PRICE OF EQUITY COMPENSATION PLANS OF OUTSTANDING OPTIONS, OUTSTANDING OPTIONS, (EXCLUDING SECURITIES PLAN CATEGORY WARRANTS AND RIGHT(1) WARRANTS AND RIGHTS REFLECTED IN COLUMN (A)) - ----------- (A) (B) (C) Equity compensation plans approved by security holders..... 7,906,595 19.15 865,004(2)(3) Equity compensation plans not approved by security holders..... -- -- --Total..... 7,906,595 19.15 865,004(2)(3)

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- (1) Excludes an aggregate of 378,098 shares issuable upon the exercise of outstanding options assumed by the Company in connection with an acquisition. The weighted average exercise price of the excluded options is \$23.11.
- (2) Securities available for future issuance under the Second Restated 1995 Stock Option plan increase on January 1 of each year by 5% of the issued and outstanding shares as of December 31 of the prior year up to the amount authorized by the shareholders.
- (3) Includes 357,581 shares issuable under the Company's Second Restated Employee Stock Purchase Plan and 35,984 shares issuable under the Company's Restated International Employee Stock Purchase Plan as of December 31, 2002.

EMPLOYMENT AGREEMENTS

MKS entered into employment agreements with each of Messrs. Weigner, Berlinghieri, Stewart and Smith. The terms of such employment agreement are included in the summary below.

Each agreement sets the base salary for each employee which is reviewed annually. In addition to a base salary, each employee is entitled, under MKS's Management Incentive Program, to a bonus equal to a percentage of his base salary if MKS attains specified financial goals during the year. Each employee is also entitled to standard benefits including:

- participation in a profit sharing and retirement savings plan
- vacation days
- life insurance
- medical/dental insurance

The remaining provisions of each agreement are also substantially the same.

The term of employment for each is month to month with termination:

- upon the death of the employee

- at the election of MKS if the employee fails or refuses to perform
- at the election of MKS if the employee commits any acts not in MKS's best interest

Payment by MKS upon termination depends on how employment is terminated:

- if employment is terminated by death, MKS must pay the employee's estate the compensation owed to him at the end of the month of his death
- if employment is terminated at the election of MKS because the employee fails or refuses to perform, MKS must pay the employee through the last day of actual employment

Each of the agreements contains non-competition provisions during the term of employment and for the period of one year after termination of employment. Under these provisions, Messrs. Weigner, Berlinghieri, Stewart and Smith may not:

- engage in any competitive business or activity
- for the 12 months subsequent to termination, work for, employ, become a partner with, or cause to be employed, any employee, officer or agent of MKS
- for the 12 months subsequent to termination, give, sell or lease any competitive services or goods to any customer of MKS
- have any financial interest in or be a director, officer, stockholder, partner, employee or consultant to any competitor of MKS

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act ("Section 16(a)") requires executive officers, directors, and persons who beneficially own more than ten percent (10%) of the Company's stock to file initial reports of ownership on Form 3 and reports of changes in ownership on Form 4 with the Commission and any national securities exchange on which the Company's securities are registered. Executive officers, directors and greater than ten percent (10%) beneficial owners are required by the Commission's 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 furnished to the Company and written representations from the executive officers and directors pursuant to Item 405 of Regulation S-K, the Company believes that all filing requirements applicable to its officers, directors and greater than ten percent (10%) stockholders were complied with, except that Mrs. Claire Bertucci did not timely file a Form 4 for a transaction occurring in January 2001, but such transaction was subsequently reported on a Form 5. The Company believes that all other of its executive officers, directors and greater than ten percent (10%) beneficial owners complied with all applicable Section 16(a) filing requirements.

COMPARATIVE STOCK PERFORMANCE

The following graph compares the cumulative total stockholder return (assuming reinvestment of dividends) from investing \$100 on March 30, 1999 (the Company's first trading day), and plotted at the last trading day of each of the fiscal years ended December 31, 1999, 2000, 2001 and 2002, in each of (i) the Company's Common Stock; (ii) a Peer Group Index of semiconductor equipment/material manufacturers (the "MG Group Index"), compiled by Media General Financial Services, Inc. ("Media General"); and (iii) the Nasdaq Market Index of companies (the "Nasdaq Market Index"). The graph was compiled by Media General. The stock price performance on the graph below is not necessarily indicative of future price performance. The Company's Common Stock is listed on the Nasdaq National Market under the ticker symbol "MKSI".

PERFORMANCE GRAPH

COMPARISON OF CUMULATIVE TOTAL RETURN OF ONE OR MORE COMPANIES, PEER GROUPS, INDUSTRY INDEXES AND/OR BROAD MARKETS

[PERFORMANCE GRAPH]

ASSUMES \$100 INVESTED ON MAR. 30, 1999 ASSUMES DIVIDEND REINVESTED FISCAL YEAR ENDING DEC. 31, 2002

3/30/99 12/31/99 12/31/00 12/31/01 12/31/02 ------ MKS Instruments, Inc. 100.00 256.89 110.22 192.21 116.84 MG Group Index. 100.00 219.29 134.68 147.45 88.21 NASDAQ Market Index. 100.00 163.32 102.65 81.83 87.08

PROPOSAL TWO

RATIFICATION OF APPOINTMENT OF INDEPENDENT ACCOUNTANTS

On February 6, 2003, the Board of Directors, on the recommendation of its Audit Committee, appointed the firm of PricewaterhouseCoopers LLP ("PwC") as the Company's independent accountants for the fiscal year of the Company ending December 31, 2003. PwC was the Company's independent accountants for the fiscal year ended December 31, 2002.

Representatives of PwC are expected to be present at the Annual Meeting and will have the opportunity to make a statement if they so desire and will be available to respond to appropriate questions from stockholders. In the event that the ratification of the appointment of PwC as the independent accountants for the Company is not obtained at the Annual Meeting, the Board of Directors will reconsider its appointment.

THE BOARD OF DIRECTORS BELIEVES THAT THE PROPOSAL TO RATIFY THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS INDEPENDENT ACCOUNTANTS OF THE COMPANY FOR THE FISCAL YEAR ENDING DECEMBER 31, 2003 IS IN THE BEST INTERESTS OF MKS AND ITS STOCKHOLDERS AND THEREFORE RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

OTHER MATTERS

The Board of Directors does not know of any other matters which may come before the meeting. However, if any other matters are properly presented to the meeting, it is the intention of the persons named in the accompanying proxy to vote, or otherwise act, in accordance with their judgment on such matters.

All costs of solicitation of proxies will be borne by the Company. In addition to solicitations by mail, the Company's directors, officers and regular employees, without additional remuneration, may solicit proxies by telephone, telegraph and personal interviews and the Company reserves the right to retain outside agencies for the purpose of soliciting proxies. Brokers, custodians and fiduciaries will be requested to forward proxy soliciting material to the owners of stock held in their names, and the Company will reimburse them for their reasonable out-of-pocket expenses incurred in connection with the distribution of proxy materials.

DEADLINE FOR SUBMISSION OF STOCKHOLDER PROPOSALS FOR THE 2004 ANNUAL MEETING

Proposals of stockholders intended to be presented at the 2004 Annual Meeting of Stockholders must be received by the Company at its principal office in Andover, Massachusetts not later than December 15, 2003, for inclusion in the proxy statement for that meeting.

In addition, MKS' By-laws require that MKS be given advance notice of matters that stockholders wish to present for action at an Annual Meeting of stockholders (other than matters included in MKS' proxy statement in accordance with Rule 14a-8 of the Exchange Act). The required written notice must be delivered to the Clerk of MKS at the principal offices of MKS at least sixty (60) days prior to the Annual Meeting, but no more than ninety (90) days prior to such meeting. However, if less than forty (40) days notice of the Annual Meeting is provided to the stockholders, the written notice of the stockholder must be sent to the Clerk of MKS no later than ten (10) days after the notice of the Annual Meeting was received. The advance notice provisions of MKS's By-Laws contain the requirements of the written notice of stockholders and supersede the notice requirement contained in Rule 14a-4(c)(1) under the Exchange Act.

IMPORTANT NOTICE REGARDING DELIVERY OF SECURITY HOLDER DOCUMENTS

Some banks, brokers and other nominee record holders are already "householding" proxy statements and annual reports. This means that only one copy of our proxy statement or annual report may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you if you call or write us at the following address or phone number: MKS Instruments, Inc., Six Shattuck Road, Andover, Massachusetts 01810, (978) 975-2350, Attn: Investor Relations. If you want to receive separate copies of the annual report and proxy statement in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker, or other nominee record holder, or you may contact us at the above address and phone number.

By Order of the Board of Directors

/s/ Richard S. Chute Richard S. Chute Clerk

April 14, 2003

THE BOARD OF DIRECTORS ENCOURAGES STOCKHOLDERS TO ATTEND THE MEETING. WHETHER OR NOT YOU PLAN TO ATTEND, YOU ARE URGED TO COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY IN THE ACCOMPANYING ENVELOPE. A PROMPT RESPONSE WILL GREATLY FACILITATE ARRANGEMENTS FOR THE MEETING AND YOUR COOPERATION WILL BE APPRECIATED. STOCKHOLDERS WHO ATTEND THIS MEETING MAY VOTE THEIR STOCK PERSONALLY EVEN THOUGH THEY HAVE SENT IN THEIR PROXIES.

APPENDIX A

MKS INSTRUMENTS, INC. 2003 ANNUAL MEETING OF STOCKHOLDERS MAY 14, 2003

THE PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned stockholder of MKS Instruments, Inc., a Massachusetts corporation (the "Company"), hereby acknowledges receipt of the Notice of Annual Meeting of Stockholders and Proxy Statement, each dated April 14, 2003, and hereby appoints Richard S. Chute and Ronald C. Weigner, and each of them acting singly, proxies and attorneys-in-fact, with full power to each of substitution, on behalf and in the name of the undersigned, to represent the undersigned at the 2003 Annual Meeting of Stockholders of the Company to be held on May 14, 2003, at 10:00 a.m. at the Andover Country Club, 60 Canterbury Street, Andover, Massachusetts 01810, and at any adjournment(s) thereof, and to vote all shares of Common Stock which the undersigned would be entitled to vote if then and there personally present, on the matters set forth on the reverse side, and, in their discretion, upon any other matters which may properly come before the meeting.

(CONTINUED AND TO BE SIGNED ON THE REVERSE SIDE)

ANNUAL MEETING OF STOCKHOLDERS OF MKS INSTRUMENTS, INC. MAY 14, 2003 PLEASE DATE, SIGN AND MAIL YOUR PROXY CARD IN THE ENVELOPE PROVIDED AS SOON AS POSSIBLE. Please detach and mail in the envelope provided. THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2. PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE [X] To elect two (2) members of the Board of Directors for a term of three (3) 1. vears.] FOR ALL NOMINEES Nominees:] WITHHOLD AUTHORITY FOR ALL NOMINEES o Hans-Jochen Kahl [] FOR ALL EXCEPT o Louis P. Valente Γ (See instructions below) Instruction: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: To ratify the appointment of PricewaterhouseCoopers LLP as independent 2. accountants for the Company for the fiscal year ending December 31, 2003. FOR AGAINST ABSTAIN Г 1 [] Γ 1 This proxy, when properly executed, will be voted as directed below, or, if no contrary direction is indicated, will be voted FOR the election of the two (2) nominees listed below as Directors of the Company, FOR proposal 2 and as said proxies deem advisable on such other matters as may properly come before the meeting. TO ENSURE YOUR REPRESENTATION AT THE ANNUAL MEETING, PLEASE MARK, SIGN AND DATE THIS PROXY AND RETURN IT AS PROMPTLY AS POSSIBLE. MARK HERE FOR ADDRESS] Γ CHANGE AND NOTE ABOVE MARK HERE IF YOU PLAN TO] 1 ATTEND Signature of Stockholder: Date: -----Signature of Stockholder: Date: -----

NOTE: This proxy should be marked, dated and signed by the stockholder(s) exactly as his or her name appears hereon, and returned promptly in the enclosed envelope. When shares are held by joint tenants, both should sign. When signing as, executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by president or other authorized officer. If signer is a partnership, please sign in partnership name by authorized person, who should state his or her title.