

AMERICAN SCIENCE & ENGINEERING INC
Form DEF 14A
July 29, 2005

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 14A

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 ☐ o

Check the appropriate box:

- ☐ o Preliminary Proxy Statement
☐ o **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
☒ x Definitive Proxy Statement
☐ o Definitive Additional Materials
☐ o Soliciting Material Pursuant to §240.14a-11(c) or §240.14a-12

AMERICAN SCIENCE AND ENGINEERING, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- ☒ x No fee required.
☐ o Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.
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| (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): |
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| (1) | Amount Previously Paid: |
| (2) | Form, Schedule or Registration Statement No.: |
| (3) | Filing Party: |
| (4) | Date Filed: |

AMERICAN SCIENCE AND ENGINEERING, INC.

829 Middlesex Turnpike

Billerica, MA 01821

July 28, 2005

To our stockholders:

You are cordially invited to attend the Annual Meeting of Stockholders of American Science and Engineering, Inc. to be held Thursday, September 15, 2005 at 10:30 a.m. at the Renaissance Bedford Hotel. The Board of Directors and management look forward to personally greeting those stockholders who will attend.

The accompanying Proxy Statement asks for your vote to re-elect the nominated directors to another one-year term. Our Board of Directors is elected each year by the stockholders to a one-year term.

The Proxy Statement also asks for your vote in favor of a new equity and incentive plan for our employees, officers, directors and consultants. The new plan is designed to provide long-term incentives and rewards to participants who are in a position to contribute to the long-term success of the Company, to assist the Company in attracting and retaining persons with the requisite experience and ability and to more closely align the interests of the employees, officers, directors and consultants with the interests of the Company's stockholders.

The Board of Directors would also like stockholders to ratify its selection of PricewaterhouseCoopers LLC, independent registered public accountants, as auditors for the fiscal year ending March 31, 2006.

The Board of Directors of your Company recommends that you vote **FOR** these proposals. If you have any questions, please call me, our Chairman, General William Odom, or Ken Galaznik, our Chief Financial Officer and Treasurer, at 800-225-1608.

Thank you for your consideration and I look forward to seeing you at our Annual Meeting on September 15, 2005.

Very truly yours,

Anthony R. Fabiano
President and CEO

AMERICAN SCIENCE AND ENGINEERING, INC.

829 Middlesex Turnpike

Billerica, Massachusetts 01821

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD SEPTEMBER 15, 2005

The Annual Meeting of Stockholders of American Science and Engineering, Inc. (the Company) will be held Thursday, September 15, 2005, at 10:30 A.M., at the Renaissance Bedford Hotel, 44 Middlesex Turnpike, Bedford, Massachusetts, for the following purposes:

- (1) To elect the persons named in the accompanying Proxy Statement to serve as Directors until the next Annual Meeting and until their successors are elected and qualified;
- (2) To approve the Company's 2005 Equity and Incentive Plan, including approval of its material terms and performance goal criteria for purposes of Internal Revenue Code Section 162(m);
- (3) To ratify the selection of PricewaterhouseCoopers LLP, independent registered public accountants, as auditors for the fiscal year ending March 31, 2006; and
- (4) To consider and act upon any other business that may properly come before the meeting and any adjournment or adjournments thereof.

Our proxy statement containing information for stockholders accompanies this Notice and a copy of our Annual Report for the fiscal year ended March 31, 2005 is also enclosed.

The Board of Directors has fixed the close of business, July 27, 2005, as the record date for the determination of stockholders entitled to notice of, and to vote at, the meeting.

By Order of the Board of Directors

Kenneth J. Galaznik
Assistant Clerk

July 28, 2005

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU INTEND TO ATTEND THE MEETING IN PERSON, PLEASE DATE AND SIGN THE ENCLOSED PROXY AND RETURN IT PROMPTLY IN THE ACCOMPANYING ENVELOPE. IF YOU ATTEND THE MEETING, YOU MAY REVOKE THE PROXY AND VOTE YOUR SHARES IN PERSON.

AMERICAN SCIENCE AND ENGINEERING, INC.

829 Middlesex Turnpike
Billerica, Massachusetts 01821

PROXY STATEMENT

The enclosed Proxy is solicited by the Board of Directors of American Science and Engineering, Inc. (the Company) for use at the Annual Meeting of Stockholders to be held on Thursday, September 15, 2005, at 10:30 a.m. at the Renaissance Bedford Hotel, 44 Middlesex Turnpike, Bedford, Massachusetts, and at any adjournment of the meeting (the Meeting). The matters to be considered and acted upon at the Meeting are described in the attached notice of the Meeting and in this Proxy Statement.

Stockholders of record at the close of business on July 27, 2005 are entitled to notice of and to vote at the Meeting. Each share of Common Stock of the Company outstanding on the record date is entitled to one vote. As of the close of business on July 27, 2005, 8,417,548 shares of Common Stock of the Company were outstanding. Each share represents the ability to exercise one vote.

We anticipate that this Proxy Statement and the accompanying Proxy will first be mailed to stockholders on or about August 11, 2005.

The votes of the stockholders present in person or represented by proxy at the Meeting will be tabulated by an inspector of elections appointed by the Company. The representation in person or by proxy of at least a majority of the outstanding shares of Common Stock of the Company is necessary to provide a quorum at the Meeting. Directors are elected by a plurality of the affirmative votes cast. Abstentions and broker non-votes are each counted as present in determining whether the quorum requirement is satisfied, but are not counted as votes properly cast with respect to the matter. Accordingly, such abstentions and broker non-votes will have no effect on the outcome of voting on the election of directors or the ratification of the selection of independent registered public accountants. Abstentions and non-votes have the effect of votes against proposals presented to the stockholders other than the election of directors. A non-vote occurs when a broker or other nominee holding shares for a beneficial owner does not vote on a proposal because the broker or other nominee does not have discretionary voting power and has not received instructions from the beneficial owner.

All proxies solicited by the Board of Directors of the Company that are properly executed and returned, but which are not expressly voted, will be voted at the Meeting in accordance with the recommendation of the Board of Directors of the Company, unless such proxies are revoked prior to the Meeting. A proxy may be revoked by delivering a written notice of revocation to the principal office of the Company or may be revoked in person at the Meeting at any time prior to the voting thereof. Attendance at the Meeting will not, by itself, revoke a proxy.

The solicitation of proxies in the enclosed form is made on behalf of the Board of Directors. The entire cost of soliciting these proxies, including the costs of preparing, printing and mailing to stockholders this Proxy Statement and accompanying materials, will be borne by the Company. In addition to use of the mails, proxies may be solicited personally or by telephone or otherwise by our officers, directors and employees, who will receive no additional compensation for such activities. Arrangements will also be made with brokerage houses and other custodians, nominees and fiduciaries to forward solicitation materials to the beneficial owners of shares held of record by such institutions and persons. Such parties will be reimbursed for their reasonable expenses incurred in connection with these activities.

PROPOSAL NO. 1**ELECTION OF DIRECTORS**

The Board of Directors currently consists of eight members, whose terms expire at the Meeting. Donald McCarren is not standing for re-election and will retire from the board when his current term expires at the 2005 annual meeting. Dr. McCarren has served on the board since 1993. We gratefully acknowledge his dedicated service and contributions to our Company.

We have included below the principal occupation and other information about the nominees. A plurality of the votes cast by stockholders present in person or represented by proxy at the Meeting and entitled to vote thereon is required to elect each of the nominated directors. Each director will serve for one year and until his successor is elected and qualified. If any nominee at the time of the election is unable or unwilling to serve or is otherwise unavailable for election, the Board of Directors may designate another nominee and the persons named as proxies will vote all proxies for such nominee. The Board of Directors has no reason to believe that any nominee is unwilling or unable to serve. There are no arrangements between any nominee and any other person relating to such nominee's nomination.

The Board of Directors recommends a vote FOR each of the below mentioned nominees as directors. Proxies solicited by the Board of Directors of the Company, if properly signed and returned and containing no instructions to the contrary, will be voted FOR electing the nominees listed below as directors of the Company.

Nominees

The names of, and certain information with respect to, the persons nominated by the Board of Directors for election as directors are as follows:

Name	Age	Positions and Offices of Company Held	Date Assumed Each Position
Denis R. Brown	66	Director	April 2004
Anthony R. Fabiano	52	Director	September 2003
		President and CEO	
Roger P. Heinisch	67	Director	August 1999
Hamilton W. Helmer	58	Director	February 1993
Ernest J. Moniz	60	Director	October 2002
William E. Odom	73	Director	September 1996
		Chairman	September 1998
Carl W. Vogt	69	Director	June 1997

Mr. Denis R. Brown was elected to the Board in April 2004. He is a seasoned CEO with significant experience in defense technology, commercial manufacturing, and service businesses. Since 1999, Mr. Brown has been a private investor and has advised a start-up software company serving the idea management market. As Chairman and CEO of Pinkerton, Inc. from 1994 to 1999, he successfully negotiated the merger with Securitas A.B. to form the largest security company in the world and significantly improved performance and shareholder value. From 1992 to 1996, Mr. Brown served as Chairman and principal owner of Engineering Technical Services until he successfully negotiated the company's sale. He has also served in the capacity of Chairman and CEO at Concurrent Computer Corporation (1990 to 1993), and as President and CEO (1985 to 1990) at Penn Central Industries, Inc. From 1970 to 1985, Mr. Brown served as President-Defense Communications Division and then as Corporate Vice President and Group Executive Defense Space Group for ITT Corporation. Mr. Brown holds a Bachelor's degree in Slavic Languages from the University of California and a Bachelor's degree in Communications Engineering from the U.S. Naval Postgraduate School, Monterey, California. He served

as a U.S. Navy Officer from 1962 to 1969. Mr. Brown currently serves on the Board of Trustees of Saint Mary's College, California.

Mr. Anthony Fabiano was appointed the Company's President and CEO in September 2003. He brought with him more than 20 years of senior management experience in the manufacture and sale of high technology products for both government and commercial applications. Prior to joining the Company, Mr. Fabiano served for five years as President and Chief Operating Officer at Minneapolis-based Despatch Industries, a leading designer and manufacturer of thermal processing equipment. Prior to Despatch, Mr. Fabiano spent three years as Vice President of Defense Systems Operations at Alliant Techsystems, a Fortune 500 aerospace and defense company with leading positions in propulsion, munitions and composite structure materials. Before advancing to Vice President, he was President of Alliant's Ferrulmatic Operations division, formerly Ferrulmatic Inc., an engineering and manufacturing company specializing in precision products for the munitions, industrial power tool, fluid control and medical industries. Prior to acquisition by Alliant, Mr. Fabiano worked at Ferrulmatic for more than a decade, where he served as Vice President and General Manager until he was promoted to President and CEO in 1985. Mr. Fabiano holds a Bachelor of Arts degree from Rutgers University.

Dr. Roger P. Heinisch served as Interim President and CEO of the Company from May 2003 to September 2003, and has served on the Company's Board of Directors since August 1999. In 1968, Dr. Heinisch joined the Honeywell Corporation where he served in various scientific and engineering positions before becoming Director of Research in 1978. In 1980, Dr. Heinisch became the Director of the Systems and Research Center and was named Vice President of the Center in 1982. He became Vice President of Honeywell's Flight Systems Operations in 1985. In 1988, Dr. Heinisch was appointed Corporate Vice President of Advanced Technology. In 1990, he became Vice President of Materials and Manufacturing for the Defense Systems group. When Alliant Techsystems was spun off from Honeywell in 1991, he assumed the position of Vice President, Engineering with the new company. From 1995 until April of 1997 he also assumed responsibility for Information Systems and Technology at Alliant. Dr. Heinisch is a former member of the Army Science Board and has been a member of various Department of Defense review panels and technical boards. Currently, Dr. Heinisch serves on the boards of Theseus Logic Inc., Third Wave Systems and Point Cloud. Dr. Heinisch holds a B.S. in Nuclear Engineering from Marquette University, a M.S. in Nuclear Engineering from Marquette University and a Ph.D. in Engineering Science from Purdue University. In addition, Dr. Heinisch has been recognized as an Outstanding Engineering Alumnus of Marquette and a Distinguished Engineering Alumnus of Purdue.

Dr. Hamilton Helmer is the originator of a body of business strategy intellectual capital known as Power Dynamics. Power Dynamics is the foundation of the investment strategies of Strategy Capital, a hedge fund management firm, and of the analytical approaches of Deep Strategy, a strategy consulting business. Dr. Helmer currently serves as Managing Director of both Strategy Capital (since 2002) and of Deep Strategy (since 2005). Prior to that, Dr. Helmer served as Managing Director of Helmer & Associates (Deep Strategy's predecessor firm) from 1982 to 2002. Deep Strategy and Helmer & Associates has served major clients such as Adobe Systems, Hewlett-Packard, John Hancock Mutual Life, Raychem, Pinkerton, Magnavox and Mentor Graphics. Previously, Dr. Helmer was employed at Bain & Company. He holds a Ph.D. in Economics from Yale and is a Phi Beta Kappa graduate of Williams College.

Dr. Moniz is Cecil and Ida Green Professor of Physics and Engineering Systems at the Massachusetts Institute of Technology where he has served on the faculty since 1973. At MIT, he served as Head of the Department of Physics and Director of the Bates Linear Accelerator Center, and is currently co-Director of the Laboratory for Energy and the Environment. From October 1997 to January 2001, he was Undersecretary of the Department of Energy, responsible for the Offices of Science; Fossil Energy; Energy Efficiency and Renewable Energy; Nuclear Energy, Science and Technology; Environmental Management; and Civilian Radioactive Waste Management. He was the Department's lead negotiator for cooperative programs with Russia dealing with nuclear weapons material control and disposition. Dr. Moniz also

served from 1995 to 1997 as Associate Director for Science in the Office of Science and Technology Policy in the Executive Office of the President. He previously served as a Director of the Company from 1990 to 1995. Dr. Moniz holds a Bachelor of Science degree in physics from Boston College, a doctorate in theoretical physics from Stanford University, and honorary doctorates from the University of Athens, the University of Erlangen-Nuremberg, and Michigan State University. Dr. Moniz is a fellow of the American Association for the Advancement of Science, the Humboldt Foundation, and the American Physical Society and is also a member of the Council on Foreign Relations. He is a senior associate of the Washington Advisory Group and serves on the Boards of the Gas Technology Institute and Nexant, Inc.

General William E. Odom is a Senior Fellow at the Hudson Institute in Washington, D.C. and an adjunct Professor in the Department of Political Science at Yale University. Prior to joining the Hudson Institute in 1988, General Odom spent 34 years as an officer in the United States Army, retiring with the rank of Lieutenant General. While on active duty, General Odom served as Director of the National Security Agency for three years, Assistant Chief of Staff for Intelligence for the Department of the Army for four years and Military Assistant to the President's National Security Advisor for four years. General Odom received his B.S. degree from West Point and Masters and Ph.D. degrees from Columbia University. General Odom is on the Board of Directors of V-ONE Corporation of Rockville, Maryland and the Institute for the Study of Diplomacy at Georgetown University. General Odom is the author of seven books and numerous articles.

Mr. Carl W. Vogt has been a Director of the Company since June 1997. In 2004, Mr. Vogt retired as counsel from Fulbright & Jaworski L.L.P., a nationally and internationally based law firm (where he was formerly a senior partner). He is currently a Director of the Scudder Investments Mutual Funds, Yellow Roadway Corporation and Waste Management, Inc. He was formerly a Director of the ISI Managed Funds from 1999 to 2004, a Director of the National Passenger Railroad Corporation (AMTRAK) from 1990 until 1992, and Chair of the U.S. National Transportation Safety Board from 1992 until 1994. He is a Trustee of Williams College, where he served as President (interim) from 1999 until 2000, Chair of the Flight Safety Foundation and a member of the American Council of Germany. Mr. Vogt is a Fellow of the Royal Aeronautical Society, a Fellow of the American Bar Foundation and an Industrial Fellow, Linacre College, Oxford University, England.

Executive Officers (who are not also Directors)

Name	Age	Positions and Offices of Company Held	Date Assumed Each Position
Kenneth A. Breur	50	Vice President, Operations	December 2003
Joseph Callera	55	Vice President, Science and Technology	June 1998
Kenneth J. Galaznik	53	Chief Financial Officer and Treasurer	February 2005
		Acting Chief Financial Officer	June 2004
Paul H. Grazewski	49	Vice President, Product Management	January 2004
Andrey V. Mishin	42	Vice President, High Energy Systems	January 2005
		Vice President, General Manager	August 1998
George M. Peterman	57	Vice President, Human Resources	February 2004
Robert G. Postle	51	Vice President, Worldwide Sales and Marketing	March 2004

Kenneth A. Breur is Vice President of Operations at the Company. Mr. Breur has more than 25 years experience in manufacturing technology with special focus on increasing operational effectiveness for product optimization and cost reduction. Prior to joining the Company in December 2003, Mr. Breur spent six years in management positions at Minneapolis-based Despatch Industries, a leading designer and manufacturer of thermal processing equipment. In his most recent role as Vice President, he managed worldwide sales and marketing, product management and engineering. Overseeing facilities in Minnesota, Michigan and California, Mr. Breur was responsible for profit & loss of all products, as well as product development initiatives. Before advancing to Vice President, Mr. Breur was Director of Product Management and Engineering. Mr. Breur holds a bachelor's degree in manufacturing engineering and a certificate in mechanical engineering from the New Jersey Institute of Technology in Newark, New Jersey.

Dr. Joseph Callera is Vice President of Science and Technology at the Company. Dr. Callera returned to the Company in April 2004 after an eleven-month sabbatical in Florence, Italy. Prior to initially joining the Company in 1998, Dr. Callera served at Raytheon Electronic Systems as Manager of Engineering and Technology Development. From 1993 to 1994, he served as Deputy General Manager of the Research Division of Raytheon, and from 1989 to 1992 he was Assistant General Manager of this Division. Prior to serving as Assistant General Manager, Dr. Callera held the position of Manager, Infrared Detector Laboratory and the Stable Sources Laboratory. From 1977 to 1980, Dr. Callera was a senior scientist in Medical Ultrasound at Raytheon's Research Division. Dr. Callera earned his Ph.D. and master's degree in physics from Harvard University, and holds a bachelor's degree in chemical physics from Columbia University. Dr. Callera also served as a Postdoctoral Fellow in physics at MIT from 1975 to 1977.

Kenneth J. Galaznik is Chief Financial Officer and Treasurer of the Company. Mr. Galaznik started with the Company as a consultant in August 2002, and joined the Company as Vice President of Finance in July 2003. Mr. Galaznik served as Acting Chief Financial Officer from June 2004 through February 2005 when he was appointed Chief Financial Officer and Treasurer. Prior to joining the Company, he was Vice President of Finance at Spectro Analytical Instruments, Inc. and has 27 years of experience in accounting and finance positions in manufacturing and real estate development entities. Mr. Galaznik holds a bachelor of business administration degree in accounting from the University of Houston.

Paul Grazewski is Vice President of Product Management at the Company. Mr. Grazewski has profit & loss accountability for the Company's X-ray product lines, and is responsible for developing growth strategies, building customer relationships and reducing costs. He joined the Company in 2002 as Vice President, Program Management. From 2000 to 2001, Mr. Grazewski served as Director of Programs for Alcatel, a communications solutions provider, where he led the development of a high-speed Internet router. From 1996 to 1999, Mr. Grazewski served as Vice President, Programs and Business Development at General Dynamics Armament Systems, where he delivered integrated defense systems to a worldwide client base. From 1993 to 1996, Mr. Grazewski was Director of Programs at Lockheed Martin, a leading systems integrator and information technology company. Mr. Grazewski holds a bachelor's degree in industrial engineering and operations research from the University of Massachusetts Amherst. He received his MBA from Xavier University in Cincinnati, Ohio.

Andrey V. Mishin is Vice President of High Energy Systems at the Company and is responsible for the development of high energy products, markets and product capabilities. Dr. Mishin assumed this position in January 2005 upon the successful completion of the sale of assets of the Company's High Energy System division where Dr. Mishin was Vice President, General Manager since 1998. Prior to joining the Company, Dr. Mishin served as Vice President of Research and Development and a member of the Board of Directors of Schonberg Research Corporation (SRC) and was instrumental in the sale of assets of SRC to the Company in 1998. Dr. Mishin received his doctorate in experimental physics from Moscow Engineering Physics Institute in 1992.

George M. Peterman is Vice President of Human Resources at the Company and is responsible for leading the development of the Company's Human Resources operations and programs. With over 30 years experience in organizational development, compensation program design and strategic recruiting, Mr. Peterman implements effective programs to build and support a world class workforce. Prior to joining the Company, Mr. Peterman spent eleven years in executive roles at King & Bishop, a leading New England Human Resource professional service provider. As Vice President and Managing Director, Mr. Peterman established King & Bishop's first organizational and HR outsourcing practice area. Mr. Peterman holds a Bachelor of Arts degree from Princeton University.

Robert G. Postle is Vice President of Worldwide Sales and Marketing at the Company, and leads the worldwide customer-focused sales and marketing organization. Prior to joining the Company in March 2004, Mr. Postle was Vice President of Sales and Marketing at SolVision Inc., a leader in automated visual inspection solutions for the microelectronics industry, from 2003 to 2004. From 2002 to 2003, Mr. Postle was the Vice President of Sales at Sagitta, Inc., a semiconductor/telecommunications equipment manufacturer. Prior to that, Mr. Postle served for seven years as Vice President of Sales, Marketing and International for PRI Automation, a semiconductor capital equipment company. Mr. Postle holds a bachelor's degree in business administration from the State University of New York in Brockport, New York.

Information Regarding the Board of Directors and its Committees

During the fiscal year ended March 31, 2005, the Board of Directors of the Company met six times. All of the directors attended 75% or more of the aggregate of the total number of meetings of the Board (held during the period they were directors) and of the meetings of committees of the Board on which they served. Our Board of Directors has determined that each of Mr. Denis Brown, Dr. Hamilton Helmer, Dr. Donald McCarren, Dr. Ernest Moniz, General William Odom, and Mr. Carl Vogt is an independent director as defined in the NASDAQ listing standards. The Board of Directors has three standing Committees: the Audit, the Compensation, and the Nominating and Corporate Governance Committees.

The Board of Directors, including a majority of the independent directors, has approved procedures for security holders to communicate directly with our Board of Directors on a confidential basis. Pursuant to these established procedures, the Board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. Specifically, the Chairman of the Board (if an independent director), or otherwise the Chairman of the Nominating and Corporate Governance Committee, with the assistance of the Company's General Counsel, is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he or she considers appropriate. Under the procedures approved by the Board of Directors, including a majority of the independent directors, communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the Chairman of the Nominating and Corporate Governance Committee considers to be important for the directors to know. In general, communications relating to corporate governance and long term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which the Company tends to receive repetitive or duplicative communications. Stockholders who wish to send communications on any topic to the Board should address such communications to Board of Directors c/o American Science and Engineering, Inc., 829 Middlesex Turnpike, Billerica, Massachusetts 01821.

Resolutions adopted by the Board of Directors provide that directors are expected to attend the Annual Meeting of Stockholders. All of the directors, with the exception of Mr. Carl Vogt, attended the 2004 Annual Meeting of Stockholders.

The Audit Committee, established in accordance with the rules and regulations of the SEC, consists of Dr. Hamilton W. Helmer, Dr. Donald J. McCarren and Mr. Denis R. Brown. In the opinion of the Board of Directors, and as "independent" is defined in Section 4200(a)(15) of the NASDAQ Marketplace Rules, these directors are independent of management and free of any relationship that would interfere with the exercise of independent judgment as members of the Audit Committee. Our Board of Directors has determined that Dr. Helmer and Mr. Brown both qualify as an "audit committee financial expert" as such term is defined under the rules and regulations of the SEC. The Board believes that the members of the Audit Committee have sufficient knowledge and experience with financial and accounting matters to perform their duties as members of the Audit Committee. This Committee, which met eleven times during fiscal 2005, is primarily responsible for reviewing the activities of the Company's independent auditors, reviewing and evaluating recommendations of the auditors, recommending areas of review to the Company's management, and reviewing and evaluating the Company's financial statements, accounting policies, reporting practices and internal controls. During the past fiscal year, the Audit Committee has spent significant time and effort overseeing the Company's efforts to comply with the Sarbanes-Oxley Act. Our Board of Directors has adopted a written charter for the Audit Committee.

The Compensation Committee consists of Mr. Carl W. Vogt, Dr. Roger P. Heinisch, and Mr. Denis Brown. This Committee, which met three times during fiscal 2005, is responsible for making recommendations to the Company's Board of Directors concerning the levels and types of compensation and benefits to be paid and granted to the Company's Chief Executive Officer and other executive employees of the Company and for the administration of the Company's equity incentive plans. The Company's Chief Executive Officer did not attend any meeting of the Compensation Committee during which the Compensation Committee prepared its recommendation regarding the level and type of compensation and benefits for the Chief Executive Officer. In the opinion of our Board of Directors, Mr. Vogt and Mr. Brown are "independent" as defined in Section 4200(a)(15) of the NASDAQ Marketplace Rules. The Board of Directors has determined that it is in the best interests of the Company and its stockholders to appoint Dr. Heinisch to the Committee under the exceptional and limited circumstances exception to the independence requirements, despite the fact that Dr. Heinisch served as Interim President and Chief Executive Officer of the Company from May 2003 to September 2003, as permitted under NASDAQ Marketplace Rule 4350(c)(3)(C), since Dr. Heinisch possesses invaluable business acumen, which was enhanced by the insight and experience he obtained as a result of his above-referenced tenure with the Company. Our Board of Directors has adopted a written charter for the Compensation Committee.

The Nominating and Corporate Governance Committee consists of Gen. William E. Odom, Mr. Carl W. Vogt and Dr. Roger P. Heinisch. The Committee met one time during fiscal 2005. The Committee is charged with the responsibility of identifying appropriate candidates for nomination to the Board. In the opinion of our Board of Directors, General Odom and Mr. Vogt are "independent" as defined in Section 4200(a)(15) of the NASDAQ Marketplace Rules. The Board of Directors has determined that it is in the best interests of the Company and its stockholders to appoint Dr. Heinisch to the Committee under the exceptional and limited circumstances exception to the independence requirements, despite the fact that Dr. Heinisch served as Interim President and Chief Executive Officer of the Company from May 2003 to September 2003, as permitted under NASDAQ Marketplace Rule 4350(c)(4)(C), since Dr. Heinisch possesses invaluable business acumen, which was enhanced by the insight and experience he obtained as a result of his above-referenced tenure with the Company. The Company By-Laws currently set forth the procedures for the nomination of candidates for director by stockholders. Our Board of Directors has adopted a written charter for the Nominating and Corporate Governance Committee which is posted on our website at www.as-e.com in the Corporate Governance section of the Investor Information page.

The process followed by the Nominating and Corporate Governance Committee to identify and evaluate director candidates includes requests to Board members and others for recommendations,

meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the Committee and the Board.

In considering whether to recommend any particular candidate for inclusion in the Board's slate of recommended director nominees, the Nominating and Corporate Governance Committee will apply criteria that include the candidate's integrity, business acumen, knowledge of the Company's business and industry, experience, diligence, conflicts of interest and the ability to act in the interests of all stockholders. The Committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. The Company believes that the backgrounds and qualifications of its directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow the Board to fulfill its responsibilities.

Stockholders may recommend individuals to the Nominating and Corporate Governance Committee for consideration as potential director candidates by following the procedures outlined in the By-Laws of the Company. The By-Laws specify the procedure whereby nominations of persons for election to the Board of Directors at the Annual Meeting of stockholders may be made at such Annual Meeting by any stockholder of record. However, nominations by stockholders shall be made only after giving timely notice in writing to the Clerk of the Company. In order to be timely given, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the Company (a) not less than 95 more than 125 days prior to the anniversary date of the immediately preceding Annual Meeting of stockholders of the Company or (b) if the Annual Meeting is called for a date not within 30 days before or after such anniversary date, not later than the close of business on the 10th day following the day on which notice of the date of the meeting was mailed or public disclosure of the date of the meeting was made, whichever first occurs. Such stockholder's notice to the Clerk shall set forth (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation, if any, which are beneficially owned by the person, (iv) any other information regarding the nominee as would be required to be included in a proxy statement or other filings required to be filed pursuant to the Proxy Rules, and (v) the consent of each nominee to serve as a director of the Company if so elected; and (b) as to the stockholder giving the notice, (i) the name and record address of the stockholder, (ii) the class and number of shares of capital stock of the Company which are beneficially owned by the stockholder as of the record date for the meeting (if such date shall then have been made publicly available) and as of the date of such notice, (iii) a representation that the stockholder intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice, (iv) a representation that the stockholder (and any party on whose behalf such stockholder is acting) is qualified at the time of giving such notice to have such individual serve as the nominee of such stockholder (and any party on whose behalf such stockholder is acting) if such individual is elected, accompanied by copies of any notifications or filings with, or orders or other actions by, and governmental authority which are required in order for such stockholder (and any party on whose behalf such stockholder is acting) to be so qualified, (v) a description of all arrangements or understandings between such stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by such stockholder, and (vi) such other information regarding such stockholder as would be required to be included in a proxy statement or other filings required to be filed pursuant to the Proxy Rules. The Company may require any proposed nominee to furnish such other information as may reasonably be required by the Company to determine the eligibility of such proposed nominee to serve as director.

The Chairman of the Board or other presiding officer of the meeting may, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the foregoing procedures, and if such officer should so determine, such officer shall so declare to the meeting and the defective nomination shall be disregarded. If the Board determines to nominate a stockholder-

recommended candidate and recommends his or her election, then his or her name will be included in the Company's proxy card for the next Annual Meeting.

Code of Ethics

The Company has a Code of Business Conduct and Ethics, which is applicable to all directors, officers and employees of the Company. The Code of Business Conduct and Ethics is available on our web site at www.as-e.com. The Company intends to satisfy any disclosure requirements regarding amendments to, or waivers from, any provision of the Code of Business Conduct and Ethics by posting such information on our web site at www.as-e.com.

Compensation of Directors

Directors who are also employees of the Company do not receive additional compensation as directors. Non-employee directors (other than the Chairman) receive annual grants equal to the lesser of Fair Market Shares or 2,000 shares of the Company Common Stock issuable on January 10th of each year, and options to purchase 7,000 shares of Common Stock at the closing price on the date of the Annual Meeting in each year. The Chairman receives the lesser of Fair Market Shares or 3,000 shares of Common Stock on January 10th, and 10,000 options at the Annual Meeting date, of each year. Fair Market Shares is defined as the number of shares (i) as to the Chairman of the Board, obtained by dividing \$45,000 by the fair market value of a share of the Company's Common Stock on the date of the award, and (ii) as to all other Board members, obtained by dividing \$30,000 by the fair market value of a share of the Company's Common Stock on the date of the award. In addition, each member of the Board of Directors is paid in cash a retainer of \$5,000 annually for participation on the Board of Directors and \$1,000 for each regular board meeting attended in person. Each member of a Committee receives \$500 for attendance at a qualifying committee meeting and the Chairperson receives \$750 for attendance at such meeting. Total fees paid in cash to members of the Company's board of directors in fiscal 2005 totaled \$55,500.

OWNERSHIP OF COMMON STOCK OF THE COMPANY BY CERTAIN PERSONS

The following table sets forth the number of shares of the Company's voting stock beneficially owned (as determined under the rules of the SEC) directly or indirectly as of July 18, 2005 by (i) each current director of the Company; (ii) each executive officer and former executive officer of the Company named in the Summary Compensation Table below; (iii) all current directors and executive officers of the Company as a group; and (iv) each person who is known to the Company to beneficially own more than five percent (5%) of the outstanding shares of any class of the Company's voting stock, as well as the percentage of the outstanding voting stock represented by each such amount. The information in the table is based on information available to the Company. The total number of shares of Common Stock outstanding as of July 18, 2005 was 8,416,948. Consistent with the rules of the Securities and Exchange Commission, the table below lists the ownership of the executive officers of the Company named in the Summary Compensation Table. The information regarding beneficial ownership of directors and executive officers as a group represents beneficial ownership of the Company's current directors and executive officers.

Name of Beneficial Owner(1)	Amount and Nature of Beneficial Ownership(2)	Percent of Class
Denis R. Brown	14,329	(3)
Joseph Callera	34,828	(3)
Anthony R. Fabiano	35,064	(3)
Kenneth J. Galaznik	1,193	(3)
Paul H. Grazewski	12,774	(3)
Roger P. Heinisch	24,869	(3)
Hamilton W. Helmer	34,869	(3)
Donald J. McCarren	54,677	(3)
Ernest J. Moniz	21,483	(3)
William E. Odom	38,304	(3)
Robert G. Postle	9,105	(3)
Carl W. Vogt	32,535	(3)
Directors and Officers as a Group (15 persons)	320,885	3.72 %
FMR Corp.(4)	750,000	8.91 %

(1) Unless otherwise indicated, the address of all persons listed above is c/o American Science and Engineering, Inc., 829 Middlesex Turnpike, Billerica, MA 01821.

(2) Includes shares that may be acquired under stock options exercisable within sixty days after the date of this table, as follows: Mr. Brown 9,520; Dr. Callera 24,000; Mr. Fabiano 25,000; Mr. Galaznik 1,000; Mr. Grazewski 12,000; Dr. Heinisch 21,000; Dr. Helmer 28,000; Dr. McCarren 21,000; Dr. Moniz 16,000; General Odom 15,000; Mr. Postle 9,000; and Mr. Vogt 14,000 and all Current Directors and Officers as a group 195,520.

(3) Amount owned constitutes less than one percent.

(4) FMR Corp.'s address is 82 Devonshire Street, Boston, MA 02109.

EXECUTIVE COMPENSATION

The table below shows the annual compensation of our Chief Executive Officer and our next four most highly compensated executive officers (the Named Executive Officers) for the fiscal year ended March 31, 2005.

Name and Principal Position	Fiscal Year	Annual Compensation		Long-Term Compensation Option Awards (#)	All other Compensation (\$)(1)
		Salary (\$)	Bonus (\$)		
Anthony R. Fabiano President and CEO	2005	312,000	616,000 (4)	28,000	47,000
	2004	151,000 (2)		75,000	
Joseph Callera Vice President, Science and Technology	2005	200,000	92,000	25,500	2,100
	2004	54,000 (3)			
	2003	210,000			2,000
Kenneth J. Galaznik Chief Financial Officer and Treasurer	2005	144,000	115,000	44,000	
	2004	82,000 (2)	3,000	6,000	
Paul H. Grazewski Vice President, Product Management	2005	155,000	120,000	33,000	
	2004	131,000		6,000	
	2003	125,000			
Robert G. Postle Vice President, Worldwide Sales and Marketing	2005	205,000	141,000	13,500	
	2004	11,000 (2)			

(1) All Other Compensation includes amounts paid for moving allowances to Mr. Fabiano and officer life insurance premiums paid for Mr. Fabiano and Mr. Callera.

(2) The indicated year was a year of partial employment with the Company for the named executive.

(3) Dr. Callera was on leave of absence for portion of fiscal 2004.

(4) Includes \$134,000 paid in fiscal 2005 earned in fiscal 2004

Mr. Fabiano has an employment arrangement with the Company that provided in September 2003 for his employment as President and Chief Executive Officer, and as a Director, at an initial annual salary of \$280,000, subject to annual review, plus performance bonuses tied to Company performance and specific accomplishments. Under the arrangement, Mr. Fabiano received a bonus of \$134,000 for fiscal 2004 based on his accomplishment of goals established by the Compensation Committee. Mr. Fabiano also was awarded a special bonus of \$175,000 during fiscal 2005 in connection with the successful sale of assets of the High Energy Systems division in January 2005. Mr. Fabiano received a bonus of \$306,000 for fiscal 2005 in recognition of having exceeded a combination of Company financial, organizational and operational objectives previously established by the board. Under his initial offer letter, the Company granted Mr. Fabiano options to purchase 75,000 shares of the Company's Common Stock at the fair market value of the Company's Common Stock on the date of grant. The options are exercisable at the rate of 25,000 options per year on the first three anniversaries of the grant. During fiscal 2005, Mr. Fabiano was also awarded 28,000 additional options that vest equally over three years. As of the beginning of fiscal 2006, Mr. Fabiano's annual base salary was set at \$336,750.

Mr. Fabiano's arrangement stipulates that in the event that Mr. Fabiano's employment with the Company is terminated, he would receive twelve months salary continuation and twelve months of health insurance continuation. The Company also has agreed to provide Mr. Fabiano protection in the event of a change of control.

Dr. Callerame has an employment agreement with the Company granting severance payments equal to one year's salary if he is terminated for any reason other than for cause or pursuant to a change of control, as defined in the agreement. Under the agreement, severance would also include continuation of benefits for a period equal to the lesser of one year or the start of new employment in which he receives substantially similar benefits.

OPTION GRANTS IN THE LAST FISCAL YEAR

The following table provides information on option grants in the fiscal year ended March 31, 2005 to the Named Executive Officers.

	Individual Grants		Exercise Price	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (1)	
	Options Granted	% of Total Options Granted To All Employees			5%/year	10%/year
Anthony R. Fabiano	28,000	5.5 %	\$ 39.06	12/2/2014	\$ 603,000	\$ 1,743,000
Joseph Callerame	12,000	2.4 %	15.65	4/15/2014	104,000	299,000
Joseph Callerame	13,500	2.6 %	39.06	12/2/2014	291,000	840,000
Kenneth J. Galaznik	9,000	1.8 %	39.06	12/2/2014	194,000	560,000
Kenneth J. Galaznik	35,000	6.9 %	44.35	2/25/2015	856,000	2,474,000
Paul H. Grazewski	24,000	4.7 %	20.55	6/28/2014	272,000	786,000
Paul H. Grazewski	9,000	1.8 %	39.06	12/2/2014	194,000	560,000
Robert Postle	13,500	2.6 %	39.06	12/2/2014	291,000	840,000

(1) The potential realizable value is calculated based on the term of the option at its date of grant. It is calculated assuming that the fair market value of the Company's Common Stock on the date of grant appreciates at the indicated annual rates compounded annually for the entire term of the option and that the option is exercised and sold on the last day for its term for the appreciated stock price. These numbers are calculated based on the requirements of the Securities and Exchange Commission and do not reflect our estimate of future stock price growth.

**AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR
AND FISCAL YEAR END OPTION VALUES**

The following table sets forth the information for the Named Executive Officers with respect to options exercised during the fiscal year ended March 31, 2005 and the value of options held as of March 31, 2005 by such persons.

	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Unexercised Options at Fiscal Year End March 31, 2005		Value of Unexercised In-The- Money Options at Fiscal Year End March 31, 2005	
			Exercisable (#)	Unexercisable (#)	Exercisable (\$)	Unexercisable (\$)
Anthony R. Fabiano	25,000	\$ 815,000		78,000	\$	\$ 1,880,000
Joseph Callera	23,000	\$ 444,000	37,333	32,167	\$ 1,194,000	\$ 647,000
Kenneth J. Galaznik	2,000	\$ 61,000		48,000	\$	\$ 195,000
Paul H. Grajewski	4,000	\$ 56,000	3,000	38,000	\$ 91,000	\$ 792,000
Robert G. Postle	3,000	\$ 100,000	9,000	37,500	\$ 295,000	\$ 862,000

(1) The value of in-the-money options for the Company represents the positive spread between the exercise price of the stock options and the closing price of the Common Stock as of March 31, 2005 which was \$44.71 per share.

**COMPENSATION COMMITTEE INTERLOCKS AND
INSIDER PARTICIPATION**

During the fiscal year ended March 31, 2005, the Company's Compensation Committee consisted of Dr. Roger Heinisch, Mr. Denis Brown and Mr. Carl Vogt. No reportable relationship existed with respect to any member of the Compensation Committee.

COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

The following Report of the Compensation Committee and the performance graph included elsewhere in this proxy statement do not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates this Report or the performance graphs by reference therein.

The Compensation Committee of the Board of Directors (consisting of two independent directors, Mr. Brown and Mr. Vogt, and Dr. Heinisch, who was appointed pursuant to the exception to the independence requirements as referenced above) has sole responsibility for compensation issues relating to the Chief Executive Officer. Compensation practices and policies for the other executive officers are set by the Chief Executive Officer with the advice and oversight of the Compensation Committee.

Typically, the Chief Executive Officer makes recommendations to the Committee with respect to executive compensation. The Committee reviews his proposals and makes a final determination concerning the scope and nature of compensation arrangements. In the case of compensation for the Chief Executive Officer, the Committee's determination is reviewed by the full AS&E Board of Directors excluding the Chief Executive Officer. The Committee also oversees the administration of stock option and equity incentive plans. The Committee reports regularly to the full Board of Directors.

Executive Compensation Philosophy. The Company's executive compensation program is designed to align executive compensation with financial performance, business strategies and Company values and objectives. This program seeks to enhance the profitability of the Company, and thereby enhance stockholder value, by linking the financial interests of the Company's executives with those of its stockholders. Under the guidance of the Compensation Committee, the Company has developed and implemented an executive compensation program to achieve these objectives while providing executives with compensation opportunities that are competitive with companies of comparable size in related industries. The Committee expects to revise this program in light of new accounting guidelines in the area of share-based payments and changing industry standards as appropriate. It is the Company's philosophy to pay at or near the average for companies in similar or related high technology and security industries for base salaries and to use a combination of short and long-term incentives to reward outstanding Company performance and link the level of the reward to increases in AS&E's value as a company as represented by increasing revenue, profits and sustainable operations. The incentive compensation programs of the Company are matched to the level of responsibility of the individual in the Company. Critical path individual contributor goals are driven by operation issues. Executive goals are driven by revenue, profit, product development and operational improvement goals that are intended to result in a sustainable increase in revenue and profits over the long term. All incentive compensation is dependent upon the Company achieving threshold financial performance which is established by the Compensation Committee in consultation with management.

In applying this philosophy, the Compensation Committee has established a program to (1) attract and retain executives of outstanding abilities who are critical to the long-term success of the Company, and (2) reward executives for attainment of business objectives and enhancement of stockholder value by providing equity ownership in the Company. Through these objectives, the Company integrates its compensation programs with its annual and long-term strategic initiatives. The Compensation Committee reviews commissioned and independently produced compensation surveys and studies as appropriate, and consults with independent professionals as it deems advisable.

Executive Compensation Program. The Committee approves the executive compensation program on an annual basis, including specific levels of compensation for all executive officers. The Company's executive compensation program has been designed to implement the objectives described above and is comprised of the following fundamental elements:

- a base salary;
- a performance based annual cash bonus; and
- long term incentive compensation in the form of equity-based awards.

Each of these elements of compensation is discussed below.

Salary Compensation. The Compensation Committee annually reviews and determines the base salaries of the Chief Executive Officer and other members of senior management, with its determination with respect to the Chief Executive Officer being subject to approval by the entire Board excluding the Chief Executive Officer. The executive's performance for the year is measured against pre-determined financial and operational goals, and the results are used as a guide for any salary increase. In addition, salary levels for the Company's executive officers are reviewed periodically against comparable industry benchmarks, including nationally recognized salary surveys and an analysis of SEC filings of selected public companies in similar or related high technology and security industries, to ensure that such compensation remains at market median levels. The Company maintains no formal perquisite program and we believe any perquisites enjoyed by our executives are modest.

Performance Based Annual Bonus Compensation. Performance based annual bonus compensation is an important element to reward and motivate executives by making a significant portion of their compensation dependent on the Company's financial performance. Executives, with the exception of the Chief Executive Officer, did not receive bonuses during fiscal year 2004, but were eligible for bonuses in respect of fiscal year 2005 based on meeting predetermined management objectives, including individual and group operating performance goals intended to further the sustainable financial and operational improvement goals of the Company, and Company financial targets.

Bonus compensation for executive officers is reviewed by the Compensation Committee on an annual basis. The Compensation Committee believes its current bonus incentive compensation to be at industry standards for growth oriented companies in similar or related high technology and security industries.

In April 2005, the Board of Directors voted to accelerate the vesting of certain unvested stock options previously awarded to employees as a reward for their significant contributions in connection with the outstanding performance of the Company. This determination, which was previously disclosed in a

Form 8-K, was thought to be in the best interest of the Company as it was believed that such acceleration would engender loyalty, promote equity ownership, increase future performance by the subject employee population, and reduce the anticipated expense calculation for unvested options that will result from the implementation of FAS123(R). Options held by the Chief Executive Officer, the Chief Financial Officer, all other members of management and any other employees participating in incentive or commission plans were not included in such acceleration program.

Long-Term Incentive Compensation. The Company is in the process of changing the long-term incentive compensation component of its executive compensation program. Historically, the Committee has granted only stock options to executives for the purpose of aligning executive interests with the long-term interests of stockholders by linking executive compensation with stockholder enhancement. In addition, the program motivates executives to improve long-term stock market performance by allowing them to develop and maintain a long-term equity ownership position in the Company's Common Stock. These long term incentive grants are awarded by the Compensation Committee based on three year Company goals including revenue and profit growth, and other objectives of strategic importance to the

Company. If the stockholders approve the 2005 Equity and Incentive Plan, the Committee anticipates it will adjust its approach to long-term incentive compensation to include grants of stock-settled stock appreciation rights, restricted stock, or other stock-based awards in lieu of option grants. (see PROPOSAL 2 2005 EQUITY AND INCENTIVE PLAN).

Chief Executive Officer Compensation. The Compensation Committee evaluates the performance of the Chief Executive Officer on an annual basis and reports its assessment to the members of the Board other than Mr. Fabiano. The Compensation Committee's assessment of the Chief Executive Officer is based on a number of factors, including the following:

- achievement of short and long-term financial and strategic targets and objectives, considering factors such as revenue, bookings, operating income and operation improvements, including specific annual goals;
- the Company's position within the high technology security and inspection industry in which it competes;
- overall economic climate and the relative economic performance of other companies in our industry;
- individual contribution to the Company in general and Mr. Fabiano specifically, exceeded the performance expectation set by the Compensation Committee. The substantial increase in common stock value is, in part, a direct result of this excellent performance; and
- such other factors as the Compensation Committee may deem appropriate, including compensation survey data.

The Compensation Committee has reviewed all components of the CEO's compensation including base salary, bonus, realized and unrealized long-term incentive compensation, retirement benefits, and the value of fringe benefits under a variety of employment scenarios (including termination, retirement, and change of control). Based on our review, the Committee has determined that Mr. Fabiano's total compensation in the aggregate is reasonable and appropriate. The Company revenues grew from \$76,342,000 to \$88,314,000 during fiscal year 2005. In addition, the price of the Company's common stock rose from \$16.50 to \$44.71 during the same period. The Compensation Committee, in consultation with the full board considers this to be exceptional performance.

Compliance with Internal Revenue Code Section 162(m). Section 162(m) of the Code generally disallows a tax deduction to public companies for certain compensation in excess of \$1 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. In general, the Company structures and administers its stock option plans in a manner intended to comply with the performance-based exception to Section 162(m). Nevertheless, there can be no assurance that compensation attributable to awards granted under the Company's stock option plans will be treated as qualified performance-based compensation under Section 162(m). In addition, the Compensation Committee reserves the right to use its judgment to authorize compensation payments that may be subject to the limit when the Compensation Committee believes such payments are appropriate and in the best interests of the Company and its stockholders, after taking into consideration changing business conditions and the performance of its employees.

Report Submitted By: Roger Heinisch, Denis Brown and Carl Vogt

Equity Compensation Plan Information

The following table provides information about the Company's stock option plans and the common stock that may be issued upon the exercise of options and rights under all existing equity compensation plans as of March 31, 2005.

Plan category	Number of securities to be issued upon exercise of outstanding options and rights as of March 31, 2005 (a)	Weighted-average exercise price of outstanding options and rights (b)	Number of securities remaining available for future issuance under equity compensation plans as of March 31, 2005 (excluding securities reflected in column(a))
Equity compensation plans approved by security holders:			
1995 Combination Plan	75,499	\$ 11.28	
1999 Combination Plan	155,666	\$ 15.54	
2000 Combination Plan	139,621	\$ 28.13	246
2002 Combination Plan	422,237	\$ 22.42	15,438
2003 Stock Plan for Non-Employee Directors	96,395	\$ 20.82	53,605
Equity compensation plans not approved by security holders:			
1996 Plan for Non-Employee Directors	21,000	\$ 10.30	
1997 Non-Qualified Option Plan	87,417	\$ 20.29	
1998 Non-Qualified Option Plan	68,129	\$ 20.01	18,654
Total	1,065,964	\$ 20.66	87,943

The Company has two common stock purchase plans. The Executive Equity Incentive Plan allows an executive officer of the Company to buy original issue Company common stock in any dollar amount up to the gross amount of the annual bonus granted to the officer. For every two shares purchased, the Company will grant one share of restricted stock which vests after three years. If the officer leaves the Company prior to three years, then the shares revert back to the Company. As of both March 31, 2005 and 2004, 2,251 shares have been reserved and restricted under this plan. The Reload Option Plan allows any eligible employee designated by the Board of Directors to receive new stock options (at an exercise price equal to the fair market value of the common stock on the date of sale of the stock by the employee) for every share of Company common stock sold or used to exercise stock options. There have been no issuances of stock options under the Reload Option Plan.

PROPOSAL NO. 2

APPROVAL OF THE 2005 EQUITY AND INCENTIVE PLAN

The Company's Board of Directors is seeking stockholder approval of the American Science and Engineering, Inc. 2005 Equity and Incentive Plan, referred to as the 2005 Plan, approved by the Board of Directors on July 20, 2005. The 2005 Plan is an important part of the Company's compensation program and the Board of Directors believes it is essential to the Company's ability to attract and retain highly qualified employees in an extremely competitive environment in which employees view equity incentives as an important component of their compensation. The 2005 Plan will provide the Company with flexibility to issue restricted stock, restricted stock units, incentive and nonstatutory options, cash awards and stock appreciation rights. Under existing plans, the Company can only issue stock options. With the implementation of the new accounting rules for expensing stock options and other equity awards, the Board believes it is important for the Company to have these additional types of equity incentives available so that we can be competitive in a changing market.

The Company currently maintains the 2003 Non-Employee Director Stock Plan (2003 Director Plan) as well as several other stock option plans (Prior Plans). As of March 31, 2005, 8,341,480 shares of Common Stock were outstanding, options to purchase 96,395 shares were outstanding under the 2003 Director Plan and options to purchase 969,569 shares were outstanding under the Prior Plans. The weighted average exercise price of outstanding options at March 31, 2005 was \$20.66. During the fiscal year ended March 31, 2005, the Company granted options to purchase 53,895 shares under the 2003 Director Plan and 453,900 shares under the Prior Plans. As of March 31, 2005, 53,605 shares of Common Stock remained available for grant under the 2003 Director Plan and 34,338 shares remained available for grant under the Prior Plans. If the 2005 Plan is approved by stockholders, the Company intends to continue to use the 2003 Director Plan until all remaining shares have been issued but will cease granting awards under the Prior Plans. As of June 30, 2005, the closing price of the Company's Common Stock as reported on the Nasdaq National Market was \$44.36 per share.

The Company is also asking its stockholders to approve the material terms of the 2005 Plan and the performance goal criteria thereunder for the purpose of allowing certain awards under the 2005 Plan to qualify as performance-based compensation under Internal Revenue Code Section 162(m) and thereby preserving the Company's tax deduction associated with such awards.

Principal Features of the 2005 Plan

A copy of the 2005 Plan is included as *Appendix A* to this proxy statement. The following summary is qualified in its entirety by reference to the full text of the 2005 Equity and Incentive Plan.

Purpose

The purpose of the 2005 Plan is to (1) provide long-term incentives and rewards to employees, officers, directors and consultants of the Company and its affiliates who are in a position to contribute to the long-term success and growth of the Company and its affiliates, (2) assist the Company and its affiliates in attracting and retaining persons with the requisite experience and ability and (3) more closely align the interests of the participants in the 2005 Plan with the interests of the Company's stockholders.

Administration

Awards are made by the Compensation Committee, which has been designated by the Company's Board of Directors to administer the 2005 Plan. The Compensation Committee determines which eligible persons shall receive an award and the terms and conditions of each award, including, if relevant, the exercise price, the form of payment of the exercise price, the number of shares, cash or other consideration

subject to the award, the vesting schedule and the term. The Compensation Committee will also make all other determinations and interpretations under the 2005 Plan. Subject to certain limitations, the Compensation Committee may delegate to one or more of the Company's executive officers the power to make awards to participants who are not subject to Section 16 of the Securities Exchange Act of 1934.

Eligibility

While incentive stock options may only be granted to employees of the Company or a subsidiary, all other awards may be granted to employees, officers, directors, and consultants of the Company or any affiliate. As of March 31, 2005, the Company had approximately 280 employees, five officers, and eight directors that would be eligible to receive awards under the 2005 Plan.

Shares Issuable under the 2005 Plan, Share Counting and Individual Limitations

An aggregate of 750,000 shares of Common Stock will be available for grants of awards under the 2005 Plan. Shares subject to awards of options or stock appreciation rights shall count against this limit as one share for every share subject to the award, but shares subject to all other types of awards under the 2005 Plan shall count against this limit as 1.5 shares for every share subject to the award. Shares subject to awards that are canceled, terminated, expired, forfeited, lapsed, or settled in cash, shall again be available for issuance under the 2005 Plan. Shares tendered as payment of exercise or withheld to satisfy tax withholding obligations or repurchased by the Company using proceeds from options shall not be available for future issuance. Equitable adjustments will be made to the number of shares available for issuance under the 2005 Plan in the event of stock dividends, recapitalization, stock split, and the like.

All of the shares available under the 2005 Plan will be available for issuance upon exercise of incentive stock option awards. No single participant may receive in any fiscal year awards for more than 250,000 shares of Common Stock, except that in the first year of employment awards for an additional 250,000 shares of Common Stock may be granted. As to awards settled in cash intended to qualify as performance-based compensation no more than \$2,500,000 per year may be paid to any single participant.

Description of Available Awards

The 2005 Plan provides for the following basic types of awards:

Stock Options. The Compensation Committee may grant options to purchase shares of Common Stock that are either incentive stock options (ISOs) eligible for the special tax treatment described below, or nonstatutory stock options (NSOs). No option may have an exercise price that is less than the fair market value of the Common Stock on the date of grant. The Compensation Committee may establish exercise periods in the option agreement, provided that no options may be exercised after the expiration of ten years from the grant date. If no specific periods are specified, an option shall remain exercisable for three months following the date the participant ceases to be a service provider, but in no event after the expiration of the term of the option. In the event of death or disability, then, in the absence of specified periods in the option agreement, the option will be exercisable for twelve months from the date the participant ceases to be a service provider, but in no event after the expiration of the term. The Compensation Committee may not provide exercise periods longer than three years following the termination of service.

Reload features which provide for automatic grants of additional or replacement options upon exercise are prohibited.

An option may be exercised by the payment of the option price in cash, by actual delivery or attestation of ownership of shares of Common Stock owned by the participant, by retaining shares of

Common Stock otherwise issuable upon exercise of the option, for consideration received by the Company under a broker-assisted cashless exercise program, or for such other lawful consideration as the Compensation Committee may determine.

Additional restrictions apply to the granting of ISOs. ISOs may only be granted to employees. The aggregate fair market value of all shares subject to ISO awards exercisable for the first time by a participant during any calendar year may not exceed \$100,000. Ten percent holders of the Company's stock may not receive ISOs unless the exercise price is at least 110% of the fair market value on the date of grant and the option expires no later than five years from grant.

Stock Appreciation Rights. The Compensation Committee may grant Stock Appreciation Rights (SARs), where the participant receives cash or shares of Common Stock equal in value to the difference between the exercise price of the SAR and the fair market value of the Common Stock on the date of exercise multiplied by the number of options with respect to which the SAR is being exercised. SARs may be granted in tandem with options (at or after award of the option) or alone and unrelated to an option. SARs in tandem with an option terminate to the extent that the related option is exercised, and the related option terminates to the extent that the tandem SAR is exercised. The exercise price of an SAR may not be less than the fair market value of the Common Stock on the date of grant or, in the case of a tandem SAR, the exercise price of the related option. The discussion above of exercise periods applicable to options is also applicable to SARs.

Restricted Stock. The Compensation Committee may grant shares of Common Stock that may be subject to certain terms, conditions and restrictions, such as the requirement to pay a purchase price for the shares and restrictions on transfer during a period of time specified by the Compensation Committee.

Restricted Stock Units. The Compensation Committee may grant the right to receive shares of Common Stock (or the equivalent value in cash or other property) in the future that may be subject to certain terms, conditions and restrictions, such as the requirement to pay a purchase price for the units and forfeiture provisions. These awards are to be made in the form of units, each representing the equivalent of one share of Common Stock, although they may be settled in either cash or stock. Restricted stock unit awards represent an unfunded and unsecured obligation of the Company.

General Provisions Applicable to Awards

In setting the terms of each award, except as noted above, the Compensation Committee has full discretion to determine the number of shares or units subject to the award, the exercise price or other consideration, if any, to be paid by the participant, the term and exercise period of each option granted, the conditions under which and the time or times at which an option becomes exercisable or under which the option, shares or units may be forfeited to the Company, and the other terms and conditions of the award. The Compensation Committee may also grant awards subject to performance conditions, awards that come with dividends or dividend equivalents or cash awards that may be subject to certain terms, conditions and restrictions. Upon a change in control of the Company as defined by the Compensation Committee, the Compensation Committee may (1) provide for acceleration of time periods for exercise or payment of an award, (2) provide for payment to the participant of cash or other property equal to the amount that would have been received upon exercise or payment of the award had the award been exercised or paid upon the change in control, (3) adjust the terms of the award to reflect the change in control, (4) cause the award to be assumed, or new rights substituted for such award, by another entity, or (5) make such other provision as the Compensation Committee deems equitable to participants and in the best interests of the Company. The terms and conditions of awards need not be the same for each participant.

Additional Restrictions

The Compensation Committee may not authorize the making of loans to participants in connection with the grant or exercise of awards. The Company may not reprice options or SARs without stockholder approval. The 2005 Plan requires a vesting period for all restricted stock or restricted stock unit awards of at least three years, except for awards granted in lieu of cash; awards that satisfy a performance-based vesting schedule; and except in the cases of death, disability, retirement, change in control, termination by the Company. The 2005 Plan allows for restricted stock or restricted stock unit awards to consultants, directors or newly-hired employees and awards to vest up to 1,000 shares per year to have a shorter vesting schedule, provided that these awards shall not exceed 75,000 shares in the aggregate.

Amendment and Term of the 2005 Plan

The Board may amend, suspend or terminate the 2005 Plan subject to any stockholder approval that the Board determines to be necessary or advisable to comply with any tax or regulatory requirement. Stockholder approval is required, however, if the Board materially amends the 2005 Plan to materially increase the number of shares that may be issued under the 2005 Plan, materially increase benefits to participants, materially expand the class of participants eligible to participate in the 2005 Plan, or expand the types of awards provided under the 2005 Plan. Subject to the special limitations on the repricing of stock options or SARs, the Compensation Committee has authority to amend outstanding awards, including changing the date of exercise and converting an ISO to an NSO, if the Compensation Committee determines that such action would not materially and adversely affect the participant or the action is specifically permitted by the 2005 Plan.

Unless terminated earlier by the Board or extended by subsequent approval of the Company's stockholders, the term of the 2005 Plan will expire on September 15, 2015.

U.S. Federal Income Tax Consequences Relating to Awards

Incentive Stock Options. An optionee does not realize taxable income for regular tax purposes upon the grant or exercise of an ISO under the 2005 Plan. If no disposition of shares issued to an optionee pursuant to the exercise of an ISO is made by the optionee within two years from the date of grant or within one year from the date of exercise, then (a) upon sale of such shares, any amount realized in excess of the option price (the amount paid for the shares) is taxed to the optionee as long-term capital gain and any loss sustained will be a long-term capital loss, and (b) no deduction is allowed to the Company for federal income tax purposes. The exercise of ISOs gives rise to an adjustment in computing alternative minimum taxable income that may result in alternative minimum tax liability for the optionee in the year of option exercise. Under current tax laws, the optionee would pay the greater of the regular tax liability or the alternative minimum tax liability. In certain circumstances, optionees may recover all or substantially all of the alternative minimum tax liability created due to the exercise of an ISO in later tax years, including the year of sale of the shares. If shares of Common Stock acquired upon the exercise of an ISO are disposed of before the expiration of the two-year and one-year holding periods described above (a disqualifying disposition), then (a) the optionee realizes ordinary income in the year of disposition in an amount equal to the excess (if any) of the fair market value of the shares at exercise (or, if less, the amount realized on a sale of such shares) over the option price thereof, and (b) the Company is entitled to deduct such amount. Any further gain realized is taxed as a short- or long-term capital gain and does not result in any deduction to the Company. A disqualifying disposition in the year of exercise will generally avoid the alternative minimum tax consequences of the exercise of an ISO.

Nonstatutory Stock Options. No income is realized by the optionee at the time an NSO is granted. Upon exercise, (a) ordinary income is realized by the optionee in an amount equal to the difference between the option price and the fair market value of the shares on the date of exercise, and (b) the

Company receives a tax deduction for the same amount. Upon disposition of the shares, appreciation or depreciation after the date of exercise is treated as a short- or long-term capital gain or loss and will not result in any further deduction by the Company.

Restricted Stock. Generally, a participant will be taxed at the time the conditions to earning the award are met. The excess of the fair market value of the shares at that time over the amount paid, if any, by the participant for the shares will be treated as ordinary income. The participant may instead elect at the time of grant to be taxed (as ordinary income) on the excess of the then fair market value of the shares over the amount paid, if any, for the shares. In either case, the Company receives a tax deduction for the amount reported as ordinary income to the participant. Upon disposition of the shares, any appreciation or depreciation after the taxable event is treated as a short- or long-term capital gain or loss and will not result in any further deduction by the Company.

Restricted Stock Units. A participant does not realize taxable income upon the grant or vesting of a restricted stock unit as long as proper elections are made, or the units only become payable upon an allowable distribution event or on a specified date. Otherwise, the participant will realize taxable income upon vesting of a restricted stock unit, and may be subject to interest and additional penalties that are applicable to certain forms of nonqualified deferred compensation under Section 409A of the Internal Revenue Code enacted under the American Jobs Creation Act of 2004. Assuming that proper elections are made or that the allowable distribution provisions are followed, when an award is settled the participant will include as ordinary income an amount equal to the fair market value of the shares (or the amount of cash) distributed to settle the award. The Company receives a corresponding tax deduction at the time of settlement. If the award is settled in shares, then any subsequent appreciation or depreciation is treated as short- or long-term capital gain or loss and will not result in any further deduction by the Company.

Internal Revenue Code Section 162(m). United States tax laws generally do not allow publicly held companies to obtain tax deductions for compensation of more than \$1 million paid in any year to any of the chief executive officer and the next four highest paid executive officers (each, a covered employee) unless the compensation is performance-based as defined in the Section 162(m) of the Internal Revenue Code. Stock options and SARs granted under an equity compensation plan are performance-based compensation if (i) stockholders approve a maximum aggregate per person limit on the number of shares that may be granted each year, (ii) any stock options or SARs are granted by a committee consisting solely of outside directors, and (iii) the stock options or SARs have an exercise price that is not less than the fair value of Common Stock on the date of grant.

The Compensation Committee has designed the 2005 Plan with the intention of satisfying Section 162(m) with respect to stock options and SARs granted to covered employees.

In the case of restricted stock and restricted stock units, Section 162(m) requires that the general business criteria of any performance goals that are established by the Compensation Committee be approved and periodically reapproved by stockholders (generally, every five years) in order for such awards to be considered performance-based and deductible by the employer. Generally, the performance goals must be established before the beginning of the relevant performance period. Furthermore, satisfaction of any performance goals during the relevant performance period must be certified by the Compensation Committee.

The Compensation Committee has approved the following list of business criteria upon which it may establish performance goals for deductible performance-based awards made to covered persons: (1) increases in the price of the Common Stock, (2) market share, (3) sales, (4) revenue, (5) return on equity, assets, or capital, (6) economic profit (economic value added), (7) total shareholder return, (8) costs, (9) expenses, (10) margins, (11) earnings (including EBITDA) or earnings per share, (12) cash flow (including adjusted operating cash flow), (13) customer satisfaction, (14) operating profit, (15) net income, (16) research and development, (17) product releases, (18) manufacturing, or (19) any

combination of the foregoing, including without limitation goals based on any of such measures relative to appropriate peer groups or market indices. Performance goals may be particular to a participant or may be based, in whole or in part, on the performance of the division, department, line of business, subsidiary, or other business unit in which the participant works, or on the Company's performance generally. The Compensation Committee has the authority to reduce (but not to increase) the amount payable at any given level of performance to take into account factors that the Compensation Committee may deem relevant.

In connection with the approval of the 2005 Plan, the Company is seeking stockholder approval of the Compensation Committee's right to develop performance goals based upon the above business criteria for future awards to covered employees. Stockholder approval of these business criteria will enable the Company to realize a full income tax deduction for awards under the 2005 Plan where the deduction would otherwise be restricted by Section 162(m) of the Internal Revenue Code.

Tax Withholding. Participants shall be responsible for paying to the Company any taxes required by law to be withheld in respect of awards under the 2005 Plan. The Compensation Committee may permit the payment to be made in shares of Common Stock, including shares retained from the award creating the tax obligation.

New Plan Benefits

No awards will be granted under the 2005 Plan prior to its approval by the Company's stockholders. Awards under the 2005 Plan will be granted at the discretion of the Compensation Committee, and, accordingly, are not yet determinable. In addition, benefits under the 2005 Plan, will depend on a number of factors, including the fair market value of the Company's Common Stock on future dates, the Company's actual performance against performance goals that may be established with respect to performance awards and decisions made by the participants. Consequently, it is not possible to determine the benefits that might be received by participants under the 2005 Plan.

Vote Required

Approval of the 2005 Plan will require the affirmative vote of a majority of the shares of Common Stock present or represented and entitled to vote at the Meeting. Brokers do not have discretion to vote on this proposal without stockholder instruction. Broker non-votes, if any, will have no effect on the outcome of the vote on this proposal. Abstentions will be counted as present and entitled to vote and accordingly will have the effect of negative votes. If the 2005 Plan is not approved, the 2005 Plan will not be adopted.

The Board of Directors Recommends a Vote FOR this Proposal No. 2.

PROPOSAL NO. 3

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

The Board of Directors has selected PricewaterhouseCoopers, LLP, independent registered public accountants, to serve as independent registered public accountants for the Company for fiscal year 2006. During fiscal year 2005, PricewaterhouseCoopers, LLP served as our independent registered public accountants and also provided certain tax and other audit-related services. Notwithstanding its selection, the Board of Directors, in its discretion, may appoint another independent registered public accounting firm at any time during the year if the Board of Directors believes that such a change would be in the best interests of the Company and its stockholders.

Vote Required

Ratification of the appointment of PricewaterhouseCoopers, LLP as our independent registered public accountant for fiscal year 2006 required the affirmative vote of a majority of the votes of the shares of our Common Stock present at the Meeting in person or by proxy and entitled to vote. Unless marked to the contrary, proxies received will be voted **FOR** ratification of the appointment of PricewaterhouseCoopers, LLP. The ratification of this selection is not required under the By-laws of the Company, but the results of this vote will be considered by the Board when making any future determination regarding PricewaterhouseCoopers, LLP.

The Board of Directors recommends a vote FOR this Proposal No. 3.

REPORT OF THE AUDIT COMMITTEE

The following Report of the Audit Committee does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates this Report.

The Audit Committee members are Dr. Hamilton Helmer (Chairman), Dr. Donald McCarren and Mr. Denis Brown. The Audit Committee assists the Board of Directors in monitoring the integrity of the Company's financial statements, the Company's compliance with legal requirements and the Company's independent registered public accountants. The Company's management has primary responsibility for the Company's financial statements as well as maintaining and monitoring a system of appropriate internal controls.

The Audit Committee has reviewed the Company's audited financial statements for the year ended March 31, 2005 and has discussed these financial statements with the Company's management and with PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm. The Audit Committee has also reviewed and discussed with the Company's independent registered public accounting firm various communications that the Company's registered public accounting firm is required to provide to the Audit Committee, including the matters required by Statement on Auditing Standards 61 (Communication with Audit Committees). SAS 61 (as codified in AU Section 380 of the Codification of Statements on Auditing Standards) requires the Company's registered public accounting firm to discuss with the Company's Audit Committee, among other things, the following:

- auditors responsibility under generally accepted auditing standards;
- methods to account for significant unusual transactions;
- audit adjustments that could either individually or in the aggregate, have a significant effect on the entity's financial reporting process
- 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 whether or not satisfactorily resolved, about matters that individually or in the aggregate could be significant to the entity's financial statements or the auditor's report.

The Company's independent registered public accounting firm 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. The Audit Committee has discussed with the Company's independent registered public accounting firm the matters disclosed in this letter and their independence from the Company.

Based on its discussions with management and the Company's independent registered public accounting firm, and its review of the representations and information provided by management and the independent registered public accounting firm, the Audit Committee recommended to the Company's Board that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended March 31, 2005.

Report Submitted By: Hamilton W. Helmer (Chairman), Donald J. McCarren and Denis Brown

AUDIT COMMITTEE CHARTER; AUDIT COMMITTEE INDEPENDENCE

The Audit Committee is governed by a charter approved by the Board of Directors on July 18, 2000, and amended and restated on July 14, 2003. All Audit Committee members are independent pursuant to Section 4200(A)(15) of the NASDAQ's listing standards and the Sarbanes-Oxley Act of 2002.

INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

The Audit Committee of the Board of Directors has selected PricewaterhouseCoopers, LLC as the Company's independent registered public accounting firm for the fiscal year ending March 31, 2006. During fiscal year 2005, PricewaterhouseCoopers, LLP served as our independent registered public accountants and also provided certain tax and other audit-related services. Representatives of PricewaterhouseCoopers, LLC are expected to be present at the annual meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Principal Accountants Fees and Services

Audit Fees

PwC billed us an aggregate of approximately \$469,000 and \$304,000 in fees for professional services rendered in connection with the audit of our financial statements for the fiscal years ended March 31, 2005 and March 31, 2004, respectively, and for the reviews of the financial statements included in each of our quarterly reports on Form 10-Q during the fiscal years ended March 31, 2005 and March 21, 2004, respectively.

Audit-Related Fees

PwC billed us an aggregate of approximately \$42,000 in fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements during the fiscal year ended March 31, 2004, and not reported in Audit Fees above. There were no such assurance and related services performed during the fiscal year ended March 31, 2005. These fees relate to the professional services received in conjunction with an SEC comment review letter received by the Company.

Tax Fees

PwC billed us an aggregate of approximately \$50,000 and \$25,000 for tax compliance, tax advice and tax planning for the fiscal years ended March 31, 2005 and March 31, 2004, respectively.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee has established a policy for the pre-approval of audit and non-audit services performed for the Company by the independent registered public accountants. The policy provides for general pre-approval of services and specific case-by-case approval of certain services, such as non-audit services (except for certain de minimus services as defined by applicable SEC regulations). The services that are pre-approved include audit services and audit-related services, such as employee benefit plan audit services, and may also include other services, such as tax related services. The Audit Committee does not delegate its responsibilities concerning pre-approval of services to management. The independent registered public accountants and management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accountants in accordance with this pre-approval, and the fees for services performed to date.

During the fiscal year ending March 31, 2005, no pre-approval requirements were waived for services included in the Audit-Related Fees and Tax Fees captions above pursuant to the limited waiver provisions in applicable rules of the SEC.

STOCK PERFORMANCE CHART

The following chart graphs the performance of the cumulative total return to shareholders (stock price appreciation plus dividends, if applicable) during the previous five years in comparison to the returns of the Standard & Poor's 500 Composite Stock Price Index and the Standard & Poor's 500 Information Technology Composite Stock Price Index.

**Total Return to Shareholders
(Dividends reinvested monthly)**

Note: Assumes \$100 invested at the close of trading on the last trading day preceding the first day of the fifth preceding fiscal year (and reinvestment of dividends) in the Company's Common Stock, Standard & Poor's 500 Composite Stock Price Index and the Standard & Poor's 500 Information Technology Composite Stock Price Index.

OTHER MATTERS

Stockholder Proposals for 2006 Annual Meeting

Proposals which stockholders intend to present at the Company's 2006 Annual Meeting of Stockholders and wish to have included in the Company's proxy materials pursuant to Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended, must be received by the Company no later than April 13, 2006. To submit a non-Rule 14a-8 proposal for the Company's 2006 Annual Meeting of Stockholders, the proposal must be received at the principal executive offices of the Company, to the attention of the Clerk of the Company, between May 12, 2006 and June 12, 2006. Alternatively, if such meeting is called for a date not within 30 days before or after September 18, 2006, then the proposal must be received on the 10th day following the earlier of (a) the day on which notice of the date of such meeting was mailed and (b) the date the Company publicly disclosed the date of such meeting. If a proponent fails to notify the Company by July 5, 2006 of a non-Rule 14a-8 stockholder proposal that it intends to submit at the Company's 2006 Annual Meeting of Stockholders, the proxy solicited by the Board of Directors with respect to such meeting may grant discretionary authority to the proxies named therein to vote with respect to such matter. The Company suggests that proposals be submitted by Certified Mail, Return Receipt Requested.

The proxy solicited by the Board of Directors with respect to such meeting may grant discretionary authority to the proxies named therein to vote with respect to such matter. The Company suggests that proposals be submitted by Certified Mail, Return Receipt Requested. For each matter proposed for the Annual Meeting, the proponent should provide (a) a brief description of the proposal and the reasons for addressing that proposal at the meeting, (b) the proponent's name and record address, (c) the class and number of shares of stock held by the proponent as of the record date for the meeting, (d) any material interest of the proponent in the proposal and (e) all other information that the proponent would have to include in a proxy statement if the proponent were to solicit proxies for the proposal under Regulation 14A of the Exchange Act of 1934.

Stockholder nominations for directors may be made only after giving timely notice in writing to the Clerk of the Company. In order to be timely given, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the Company between May 12, 2006 and June 12, 2006. Alternatively, if such meeting is called for a date not within 30 days before or after September 14, 2006, then the notice must be received on the 10th day following the earlier of (a) the day on which notice of the date of such meeting was mailed and (b) the date the Company publicly disclosed the date of such meeting. This stockholder's notice to the Clerk of the Company must state, as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation, if any, which are beneficially owned by the person, (iv) any other information regarding the nominee as would be required to be included in a proxy statement or other filings required to be filed pursuant to Regulation 14A of the Exchange Act of 1934, and (v) the consent of each nominee to serve as a director of the corporation if so elected.

The stockholder's notice to the Clerk of the Company must also state, as to the stockholder giving the notice, (i) the name and record address of the stockholder, (ii) the class and number of shares of capital stock of the corporation which are beneficially owned by the stockholder as of the record date for the meeting (if such date shall then have been made publicly available) and as of the date of such notice, (iii) a representation that the stockholder intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice, (iv) a representation that the stockholder (and any party on whose behalf such stockholder is acting) is qualified at the time of giving such notice to have such individual serve as the nominee of such stockholder (and any party on whose behalf such stockholder is acting) if such individual is elected, accompanied by copies of any notifications or filings with, or orders or

other actions by, and governmental authority which are required in order for such stockholder (and any party on whose behalf such stockholder is acting) to be so qualified, (v) a description of all arrangements or understandings between such stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by such stockholder, and (vi) such other information regarding such stockholder as would be required to be included in a proxy statement or other filings required to be filed pursuant to the Regulation 14A of the Exchange Act of 1934.

The Company may require any proposed nominee to furnish such other information as may reasonably be required by the Company to determine the eligibility of such proposed nominee to serve as director. No person shall be eligible for election as a director unless nominated in accordance with the provisions set forth herein. The Chairman of the Board of Directors or other presiding officer of such meeting may, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the foregoing procedures, and if such officer should so determine, such officer shall so declare to the meeting and the defective nomination shall be disregarded.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires certain persons, including the Company's directors, executive officers and beneficial holders of more than 10% of the Company's Common Stock to file initial reports of beneficial ownership of the Company's securities and reports of changes in beneficial ownership with the Securities and Exchange Commission. For fiscal year 2005, to the Company's knowledge, all Section 16(a) filing requirements applicable to its officers, directors and greater than 10% beneficial owners were complied with, except that the initial filings for Mr. Brown and one report for General Odom were filed late.

Certain Relationships and Related Party Transactions

There were no related party transactions during fiscal 2005 required to be reported pursuant to this item.

Incorporation by Reference

To the extent that this Proxy Statement has been or will be specifically incorporated by reference into any filing by the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, the sections of the Proxy Statement entitled Compensation Committee Report on Executive Compensation, Report of the Audit Committee and Stock Performance Chart shall not be deemed to be so incorporated, unless specifically otherwise provided in any such filing.

Annual Report on Form 10-K

The Company's Annual Report on Form 10-K for the fiscal year ended March 31, 2005 filed with the SEC, which provides additional information about the Company, is available on the Internet at www.as-e.com and to beneficial owners of the Common Stock without charge upon written request to the Investor Relations Department, American Science and Engineering, Inc., 829 Middlesex Turnpike, Billerica, MA 01821.

Other Proposed Action

The Board of Directors knows of no other matters that are to be presented at the Meeting. If however, any other business should properly come before the Meeting, the persons named in the enclosed proxy intend to vote such proxy upon such matters in accordance with their best judgment.

By Order of the Board of Directors

Kennet J. Galaznik
Assistant Clerk

Appendix A: Audit Committee of the Board of Directors Charter

Appendix B: 2005 Equity and Incentive Plan

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Appendix A

AMERICAN SCIENCE AND ENGINEERING, INC.

AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

CHARTER

Amended and Restated April 24, 2003

I. MISSION OF COMMITTEE

The primary mission of the Audit Committee (the "Committee") of the Board of Directors ("Board") of American Science and Engineering, Inc. (the "Company") is to provide oversight of the accounting functions, internal controls and audit processes of the Company and its subsidiaries and the Company's financial statements. The Committee and the Board have the ultimate authority and responsibility to select, evaluate and, where appropriate, replace the Company's independent auditors.

II. MEMBERSHIP AND INDEPENDENCE OF COMMITTEE

The Committee shall consist of not less than three independent members, who shall be appointed by the Board. The Board shall select one member of the Committee to serve as the Chairman. Each member of the Committee shall be a person who qualifies for membership under the then-current listing requirements of the self-regulatory agency on which the Company's Common Stock is traded as well as the rules of the Securities and Exchange Commission (the "Commission"). Currently, these requirements provide that members of the Committee must be able to read and understand fundamental financial statements or will become able to do so within a reasonable period of time after his or her appointment to the Committee and at least one member of the Committee shall have accounting or related financial management experience. No member of the Committee shall be employed or otherwise affiliated with the Company's independent auditors. In addition, at least one member must have accounting or related financial management expertise. The Company will disclose in its periodic reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act whether or not (and if not, why not) the Audit Committee is comprised of at least one member who is a financial expert as defined by the rules of the Commission promulgated under the Sarbanes-Oxley Act of 2002.

If a Committee member faces a potential or actual conflict of interest with respect to a matter before the Committee, that Committee member shall be responsible for alerting the Committee Chairman, and in the case where the Committee Chairman faces a potential or actual conflict of interest, the Committee Chairman shall advise the Chairman of the Board. In the event that the Committee Chairman, or the Chairman of the Board, concurs that a potential or actual conflict of interest exists, an independent substitute Director shall be appointed as a Committee member until the matter raising the conflict is resolved.

III. GENERAL RESPONSIBILITIES OF COMMITTEE

A. The Committee will meet at least quarterly each year, or more frequently as circumstances dictate or as necessary to meet its responsibilities. The Committee chairman is authorized to convene a Committee meeting whenever he or she deems it necessary. A Committee member should not vote on any matter in which he or she is not independent. The Committee may ask members of management or others to attend the meeting and is authorized to obtain all pertinent information from management.

B. The Committee will report Committee actions to the Board.

C. The Committee will provide an open avenue of communication between the independent auditor and the Board.

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- D. The Committee will review and evaluate the Company's risk management policies in light of the Company's business strategy, capital strength, and overall risk tolerance.
- E. The Committee will comply with all applicable laws, the Company's charter and its bylaws.
- F. The Committee will review this Charter annually and assess its adequacy.
- G. The Committee shall have the authority and the Company shall provide the necessary funding for the Committee to retain special legal, accounting or other consultants to advise the Committee.
- H. The Committee may request any officer or employee of the Company or the Company's outside counsel or independent accountant to attend a meeting of the Committee or to meet with any members of, or consultants to, the Committee without consent of management or the Board.
- I. The Committee's function is one of oversight and review, and it is not expected to audit the Company, to define the scope of the audit, to control the Company's accounting practices, or to define the standards to be used in preparation of the Company's financial statements.

IV. RESPONSIBILITY FOR ENGAGING INDEPENDENT AUDITORS; INDEPENDENCE OF AUDITORS

- A. The Committee shall be directly responsible for the appointment, compensation, oversight of the work, evaluation and termination of the Company's independent auditors (including resolving all disagreements between management and the auditor regarding financial reporting) for the purpose of preparing and issuing an audit report and related work.
- B. The Committee will preapprove all non-audit services to be provided to the Company by the independent auditors, except for certain de minimus services as defined by the Sarbanes-Oxley Act of 2002.
- C. The Committee will confirm that the Company's independent auditors are accountable to the Board and the Committee.
- D. The Committee will ensure that the independent auditors deliver to the Committee a formal written statement delineating all relationships between the independent auditors and the company, as required by Independence Standards Board Standard No. 1. The Committee also will actively discuss with the auditors any disclosed relationships or services that may impact the objectivity and independence of the independent auditors and in response to the independent auditor's disclosure take, or recommend that the Board take, appropriate action to ensure/oversee the independent auditor's independence.

V. RESPONSIBILITIES FOR REVIEWING THE ANNUAL EXTERNAL AUDIT PLAN, THE RESULTS OF THE AUDIT AND THE QUARTERLY AND ANNUAL FINANCIAL STATEMENTS.

- A. The Committee will review with the independent auditors the plan and scope of their audit, its status during the year, the results when completed, the required communications under Statements of Auditing Standards No. 61, their report opinion and any recommendations they may have for improving or changing the audit and the control environment, as well as management's response thereto.
- B. The Committee will review the following with the independent auditor:
 - 1. The adequacy of the Company's internal controls, including information system controls and security including management's internal control report prepared in accordance with rules promulgated by the Commission pursuant to Section 404 of the Sarbanes-Oxley Act.
 - 2. Significant findings and recommendations made by the independent auditor, together with management's responses.

3. Significant changes in accounting principles and financial statements proposed by the independent auditors.

C. Shortly after the annual audit of the Company's financial statements is complete, the Committee will review the following with management and the independent auditor:

1. The Company's annual financial statements and footnotes.

2. The independent auditor's audit of and report on the financial statements.

3. The auditor's qualitative judgments about the appropriateness of Company's methods of accounting and financial disclosures and the level of conservatism of the accounting methods.

4. Any significant disputes with management during the course of the audit.

D. The Committee will review, prior to publication, the Company's filing on Form 10-K.

E. The Committee will review the Company's interim financial statements with management and the independent auditor before such reports are released to the public or filed with the Securities and Exchange Commission or other regulators.

VI. COMPLAINTS

A. The Committee shall establish procedures to facilitate:

1. the receipt, retention and treatment of complaints received by the Company from third parties regarding accounting, internal accounting controls, or auditing matters; and

2. the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

VII. COMMITTEE REPORT TO STOCKHOLDERS

The Committee will report to stockholders in Company's proxy statement for its annual meeting whether the Committee has satisfied its responsibilities under this Charter, which report shall be in compliance with Rule 306 of Regulation S-K, as amended from time to time.

AMERICAN SCIENCE AND ENGINEERING, INC.

2005 EQUITY AND INCENTIVE PLAN

1. *Purposes of the Plan*

The purposes of the American Science and Engineering, Inc. 2005 Equity and Incentive Plan (the *Plan*) are (i) to provide long-term incentives and rewards to those employees, officers, directors, and consultants of American Science and Engineering, Inc. (the *Company*) and its Affiliates (as defined below) who are in a position to contribute to the long-term success and growth of the Company and its Affiliates, (ii) to assist the Company and its Affiliates in attracting and retaining persons with the requisite experience and ability, and (iii) to more closely align the interests of such employees, officers, directors, and consultants with the interests of the Company's stockholders.

2. *Definitions*

Affiliate means any business entity in which the Company holds, directly or indirectly, an equity, profits, or voting interest of 30% or more, and includes any Subsidiary.

Applicable Law means the applicable requirements relating to the administration of equity compensation plans under Massachusetts state corporate law, federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted, employment laws, and the applicable laws of any foreign jurisdiction where Awards are or will be granted.

Award means any Option, Stock Appreciation Right, Restricted Stock, Restricted Stock Unit, Cash Award, or Foreign National Award granted under the Plan. Awards may be granted for services to be rendered or for past services already rendered to the Company or any Affiliate.

Cash Award means an Award granted to a Participant pursuant to Section 10(d) of the Plan that is payable in cash, and that may be subject to certain terms, conditions, and restrictions.

Board means the Board of Directors of the Company.

Code means the Internal Revenue Code of 1986, as amended from time to time, or any successor law.

Committee means one or more committees each comprised of not less than two members of the Board appointed by the Board to administer the Plan or a specified portion thereof. To the extent that the Board determines it is desirable to qualify Awards granted to Covered Employees under the Plan as performance-based compensation within the meaning of Section 162(m) of the Code, then each member of the Committee shall be an outside director within the meaning of Section 162(m) of the Code. To the extent that the Board determines it desirable to qualify Awards granted by the Committee to a Reporting Person under the Plan as exempt under Rule 16b-3(d)(1) of the Exchange Act, then each member of the Committee shall be a non-employee director within the meaning of Rule 16b-3.

Common Stock or **Stock** means the common stock of the Company.

Company means American Science and Engineering, Inc., or any successor corporation.

Covered Employee means a covered employee within the meaning of Section 162(m) of the Code.

Designated Beneficiary means the beneficiary designated by a Participant, in a manner determined by the Committee, to receive amounts due or exercise rights of the Participant in the event of the

Participant's death. In the absence of an effective designation by a Participant, Designated Beneficiary means the Participant's estate.

Disability means a total and permanent disability as provided in the long-term disability plan or policy maintained by the Company or if applicable, most recently maintained, by the Company or if applicable, an Affiliate, for the Participant, whether or not such Participant actually receives disability benefits under such plan or policy. If no long-term disability plan or policy was ever maintained on behalf of the Participant or if the determination of disability relates to an Incentive Stock Option or SAR issued in tandem with an Incentive Stock Option, Disability means permanent and total disability as defined in Section 22(e)(3) of the Code. In the event of a dispute, the determination whether a Participant is disabled will be made by the Committee and may be supported by the advice of a physician competent in the area to which such disability relates.

Exchange Act means the Securities Exchange Act of 1934, as amended from time to time, or any successor law.

Fair Market Value means, with respect to Common Stock or any other property, the fair market value of such property as determined by the Committee in good faith or in the manner established by the Committee from time to time.

Foreign National Award means an Award granted pursuant to Section 10(f) to a Participant who is a foreign national or employed or performing services outside of the United States.

Grant Date means the first date on which all necessary corporate action has been taken to approve the grant of the Award as provided in the Plan, or such later date as is determined and specified as part of that authorization process. Notice of the grant shall be provided to the Participant within a reasonable time after the grant.

Grant Agreement means the documentation evidencing an Award as provided in Section 10(b).

Incentive Stock Option means an Option intended to qualify as an incentive stock option and which meets the requirements of Section 422 of the Code.

Nonstatutory Stock Option means an Option that is not an Incentive Stock Option.

Option means a right to acquire shares of Company Stock upon the payment of an exercise price that is granted in accordance with Section 6 of the Plan. An Option may be either an Incentive Stock Option or a Nonstatutory Stock Option.

Participant means a person selected by the Committee to receive an Award under the Plan.

Performance Goals means with respect to any Performance Period, one or more performance goals based on one or more of the following objective criteria established by the Committee prior to the beginning of such Performance Period or within such period after the beginning of the Performance Period as shall meet the requirements to be considered pre-established objective performance goals for purposes of the regulations issued under Section 162(m) of the Code: (i) increases in the price of the Common Stock, (ii) market share, (iii) sales, (iv) revenue, (v) return on equity, assets, or capital, (vi) economic profit (economic value added), (vii) total shareholder return, (viii) costs, (ix) expenses, (x) margins, (xi) earnings (including EBITDA) or earnings per share, (xii) cash flow (including adjusted operating cash flow), (xiii) customer satisfaction, (xiv) operating profit, (xv) net income, (xvi) research and development, (xvii) product releases, (xviii) manufacturing, or (xix) any combination of the foregoing, including without limitation, goals based on any of such measures relative to appropriate peer groups or market indices. Such Performance Goals may be particular to a Participant or may be based, in whole or in part, on the performance of the division, department, line of business, subsidiary, or other business unit,

whether or not legally constituted, in which the Participant works or on the performance of the Company generally.

Performance Period means the period of service designated by the Committee applicable to an Award subject to Section 10(l) during which the Performance Goals will be measured.

Reporting Person means a person subject to Section 16 of the Exchange Act.

Restricted Stock means shares of Common Stock granted to a Participant pursuant to Section 8 of the Plan that may be subject to certain terms, conditions, and restrictions.

Restricted Stock Unit means the right granted to a Participant pursuant to Section 9 of the Plan to receive shares of Common Stock (or the equivalent value in cash or other property if the Committee so provides) in the future that may be subject to certain terms, conditions, and restrictions.

Service Provider means an employee, officer, director or consultant of the Company or any of its Affiliates.

Stock Appreciation Right or **SAR** means a right to acquire cash or shares of Common Stock granted in accordance with Section 7 of the Plan having a value equal to the difference between the Fair Market Value on the date of exercise over the exercise price set forth in the Grant Agreement multiplied by the number of shares of Common Stock with respect to which the SAR is being exercised.

Subsidiary means any subsidiary corporation as defined in Section 424(f) of the Code.

Termination Date means (i) in the case of an employee, the date that the Committee determines that the employee-employer relationship between the Company or Affiliate and such person ceased for any reason, (ii) in the case of a consultant or non-employee officer, the date that the Committee determines that the service relationship between the Company or Affiliate and such person ceased for any reason, and (iii) in the case of a director, the date that the Committee determines that such person's service on the Board ceased for any reason.

3. Administration

The Plan shall be administered by the Committee. Subject to and consistent with the provisions of the Plan, the Committee shall have the authority and discretion to: (i) determine which eligible employees, officers, directors, and consultants will receive Awards, (ii) determine the number of shares of Common Stock, cash, or other consideration to be covered by each Award, (iii) determine the terms and conditions of any Award (including Fair Market Value, the exercise price, the vesting schedule, the term of the Award, and the period following termination from employment or service during which an Award may be exercised), (iv) approve forms of Award agreements and other documentation for use under the Plan, (v) adopt, alter, and repeal administrative rules, guidelines, and practices governing the operation of the Plan and the Committee, (vi) interpret the provisions of the Plan and any Award documentation and remedy any ambiguities, omissions, or inconsistencies therein, (vii) to modify or amend Awards, or grant waivers of Plan or Award conditions, and (viii) make all other determinations necessary or advisable for the administration of the Plan. A majority of the members of the Committee shall constitute a quorum. The Committee's decisions, determinations, and interpretations shall be final and binding on all persons having an interest in any Award. To the extent permitted by Applicable Law, the Committee may delegate to one or more executive officers of the Company the power to make Awards to Participants who are not Reporting Persons and all determinations under the Plan with respect thereto, provided that the Committee shall fix the maximum amount of such Awards for all such Participants and a maximum for any one Participant, and such other features of the Awards as required by Applicable Law.

4. Eligibility

Incentive Stock Options may be granted only to employees (including officers and directors who are also employees) of the Company or a Subsidiary. All other Awards may be granted to employees, officers, directors, and consultants of the Company or any Affiliate.

5. Stock Available for Awards

(a) **Amount.** Subject to adjustment under Section 5(c), the aggregate number of shares of Common Stock that may be issued pursuant to Awards granted under the Plan shall be 750,000 shares. Subject to adjustment under Section 5(c), up to 750,000 shares of Common Stock may be issued upon exercise of Incentive Stock Options granted under the Plan. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares, or treasury shares, or shares purchased on the open market. At all times the Company will reserve and keep available a sufficient number of shares to satisfy the number of shares available for issuance under the Plan.

(b) **Share Counting.** If an Award granted under the Plan is canceled, terminates, expires, is forfeited, lapses, or is settled in cash, then the shares subject to such Award (to the extent of such cancellation, termination, expiration, forfeiture, lapse, or settlement) shall again be available for issuance pursuant to Awards granted under the Plan. For purposes of Section 5(a), any shares granted as Options or Stock Appreciation Rights under the Plan shall be counted against this limit as one share for every share subject to the Award. Any shares granted as Awards other than Options or Stock Appreciation Rights shall be counted against the limit set forth in Section 5(a) as 1.5 shares for every one share subject to the Award. Any shares tendered in payment of an Option's exercise price (whether by attestation or actual delivery), any shares tendered or withheld to satisfy a tax withholding on an Award, and any shares repurchased by the Company using Option proceeds shall not be added back, replenish, or increase the aggregate Plan share limit set forth in Section 5(a).

(c) **Adjustment.** In the event that the Committee determines that any stock dividend, extraordinary cash dividend, recapitalization, reorganization, merger, consolidation, split-up, spin-off, combination, exchange of shares, or other transaction affects the Common Stock such that an adjustment is required in order to preserve the benefits intended to be provided by the Plan, then the Committee (subject in the case of Incentive Stock Options to any limitation required under the Code) shall equitably adjust any or all of (i) the number and class of shares that may be issued in respect of Awards under the Plan, (ii) the number and class of shares subject to outstanding Awards, (iii) the number and class of shares subject to the limit on individual grants under Section 5(d) of the Plan, and (iv) the exercise price with respect to any of the foregoing, and if considered appropriate, the Committee may make provision for a cash payment with respect to an outstanding Award, provided that the number of shares subject to any Award shall always be a whole number.

(d) **Limit on Individual Grants.** The maximum number of shares of Common Stock subject to all Awards that may be granted under this Plan to any Participant in the aggregate in any fiscal year of the Company shall not exceed 250,000 shares, subject to adjustment under Section 5(b). Notwithstanding the foregoing, during the fiscal year in which a Participant first becomes an employee of the Company or an Affiliate, the Participant may be granted Awards covering an additional 250,000 shares of Common Stock, subject to adjustment under Section 5(b). With respect to any Award settled in cash that is intended to satisfy the requirements for performance-based compensation (within the meaning of Section 162(m)(4)(C) of the Code), no more than \$2,500,000 may be paid to any one individual with respect to each year of a Performance Period.

6. Stock Options

(a) Grant of Options. Subject to the provisions of the Plan, the Committee may grant Incentive Stock Options or Nonstatutory Stock Options to a Participant.

(b) Terms and Conditions. The Committee shall determine the number of shares of Common Stock subject to each Option and the exercise price therefor, which shall not be less than 100% of the Fair Market Value of the Common Stock on the Grant Date. Each Option shall be exercisable at such times and subject to such terms and conditions as the Committee may specify in the Grant Agreement or thereafter; provided that (i) no Option shall be exercisable after the expiration of ten years from the Option's Grant Date, and (ii) no Option may be granted with a reload feature which provides for an automatic grant of additional or replacement options upon the exercise of an Option. A Participant may exercise an Option by following such procedures as the Committee or its designees may specify from time to time. The Committee may impose such conditions with respect to the exercise of Options, including conditions relating to Applicable Laws, as it considers necessary or advisable.

(c) Payment. No shares shall be delivered pursuant to any exercise of an Option until payment in full of the exercise price therefor is received by the Company. Except as otherwise provided by the Committee, such payment may be made in whole or in part in or pursuant to any of the following methods: (i) cash, (ii) by actual delivery or attestation of ownership of shares of Common Stock owned by the Participant, including vested Restricted Stock, (iii) by retaining shares of Common Stock otherwise issuable pursuant to the Option, (iv) for consideration received by the Company under a broker-assisted cashless exercise program acceptable to the Company, or (v) for such other lawful consideration as the Committee may determine.

(d) Exercise Period. When a Participant's status as a Service Provider terminates, the Participant's Option may be exercised within the period of time specified in the Grant Agreement to the extent that the Option is vested on the Participant's Termination Date. In the absence of a specific period of time set forth in the Grant Agreement, an Option shall remain exercisable for three (3) months following the date the Participant ceases to be a Service Provider, but in no event shall the Option be exercisable after the expiration of the term of such Option. If a Participant's status as a Service Provider terminates from death or Disability or the Participant dies within three (3) months after his Termination Date, then (unless provided otherwise in the Grant Agreement) the Option shall remain exercisable for twelve (12) months following the date the Participant ceases to be a Service Provider, but in no event shall the Option be exercisable after the expiration of the term of such Option. In no event may the Committee provide in a Grant Agreement that the period of time for exercising an Option following a Participant's Termination Date shall exceed three (3) years.

(e) Incentive Stock Option Rules. In addition to the limitations and conditions that apply generally to Options, the following provisions shall apply to any Incentive Stock Option. The Committee may grant Incentive Stock Options only to persons who are employees of the Company or a Subsidiary as of the Grant Date. The aggregate Fair Market Value (determined as of the Grant Date) of all shares with respect to which Incentive Stock Options are exercisable for the first time by a Participant during any calendar year (under the Plan or any other incentive stock option plan of the Company or any Subsidiary) shall not exceed \$100,000. If the Fair Market Value of shares on the Grant Date with respect to which Incentive Stock Options are exercisable for the first time by a Participant during any calendar year exceeds \$100,000, the Options for the first \$100,000 worth of shares to become exercisable in that calendar year will be Incentive Stock Options, and the Options for the shares with a Fair Market Value in excess of \$100,000 that become exercisable in that calendar year will be Nonstatutory Stock Options. No Incentive Stock Option shall be granted to any individual who, at the Grant Date, owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Subsidiary unless the exercise price per share of such Option is at least 110% of the Fair Market Value per share at

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the Grant Date and the Option expires no later than five (5) years after the Grant Date. If a Participant sells or otherwise disposes of any shares acquired pursuant to the exercise of an Incentive Stock Option on or before the later of (i) the date two (2) years after the Grant Date, and (ii) the date one year after the exercise of the Incentive Stock Option, the Company may require the Participant to immediately notify the Company in writing of such disposition.

7. Stock Appreciation Rights

(a) Grant of SARs. Subject to the provisions of the Plan, the Committee may grant SARs to a Participant in tandem with an Option (at or after the award of the Option), or alone and unrelated to an Option. SARs granted in tandem with an Option shall terminate to the extent that the related Option is exercised, and the related Option shall terminate to the extent that the tandem SARs are exercised.

(b) Terms and Conditions. The Committee shall determine the number of shares of Common Stock subject to each SAR and the exercise price therefore. A SAR granted in tandem with an Option shall have an exercise price not less than the exercise price of the related Option. A SAR granted alone and unrelated to an Option may not have an exercise price less than 100% of the Fair Market Value of the Common Stock on of the Grant Date. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Committee may specify in the Grant Agreement or thereafter; provided that no SAR shall be exercisable after the expiration of ten years from the SAR's Grant Date. A Participant may exercise a SAR by following such procedures as the Committee or its designees may specify from time to time. The Committee may impose such conditions with respect to the exercise of SARs, including conditions relating to Applicable Laws, as it considers necessary or advisable.

(c) Exercise Period. When a Participant's status as a Service Provider terminates, the Participant's SAR may be exercised within the period of time specified in the Grant Agreement to the extent that the SAR is vested on the Participant's Termination Date. In the absence of a specific period of time set forth in the Grant Agreement, a SAR shall remain exercisable for three (3) months following the date the Participant ceases to be a Service Provider, but in no event shall the SAR be exercisable after the expiration of the term of such SAR. If a Participant's status as a Service Provider terminates from death or Disability or the Participant dies within three (3) months after his Termination Date, then (unless provided otherwise in the Grant Agreement) the SAR shall remain exercisable for twelve (12) months following the date the Participant ceases to be a Service Provider, but in no event shall the SAR be exercisable after the expiration of the term of such SAR. In no event may the Committee provide in the Grant Agreement that the period of time for exercising a SAR following a Participant's Termination Date shall exceed three (3) years.

8. Restricted Stock

(a) Grant of Restricted Stock. Subject to the provisions of the Plan, the Committee may grant Restricted Stock to a Participant.

(b) Terms and Conditions. The Committee shall determine the number of shares of Common Stock subject to each Restricted Stock Award and the purchase price (if any) for each share. Shares of Restricted Stock may be issued for no cash consideration, or such minimum consideration as may be required by Applicable Law. The Committee may grant shares of Common Stock subject to such other terms, conditions, and restrictions (including forfeiture provisions and conditions relating to Applicable Laws) as it considers necessary or advisable.

(c) Restrictions. Shares of Restricted Stock may not be sold, assigned, transferred, pledged or otherwise encumbered, except as permitted by the Committee, during the restricted period. Shares of Restricted Stock shall be evidenced in such manner as the Committee may determine, including book-entry registration. Any physical certificates issued in respect of shares of Restricted Stock shall be

registered in the name of the Participant bearing an appropriate legend referring to the terms, conditions, and restrictions applicable to such Restricted Stock and unless otherwise determined by the Committee, deposited by the Participant, together with a stock power endorsed in blank, with the Company or a designated custodian or escrow agent. At the expiration of the restricted period, the Company shall deliver any such certificates to the Participant or if the Participant has died, to the Participant's Designated Beneficiary.

9. Restricted Stock Units

(a) Restricted Stock Units. Subject to the provisions of the Plan, the Committee may grant Restricted Stock Units to a Participant.

(b) Terms and Conditions. The Committee shall determine the number of shares of Common Stock subject to each Restricted Stock Unit Award and the purchase price (if any) for each unit. Restricted Stock Units may be issued for no cash consideration, or such minimum consideration as may be required by Applicable Law. The Committee may grant Restricted Stock Units subject to such other terms, conditions, and restrictions (including forfeiture provisions and conditions relating to Applicable Laws) as it considers necessary or advisable.

(c) Unfunded Obligation. A Restricted Stock Unit Award shall constitute an unfunded and unsecured obligation of the Company, and shall be settled in shares of Common Stock or cash, as determined by the Committee at the time of grant or thereafter. Each unit shall represent the equivalent of one share of Common Stock.

10. General Provisions Applicable to Awards

(a) Transferability. Except as otherwise provided in this Section 10(a), an Award (i) shall not be transferable other than as designated by the Participant by will or by the laws of descent and distribution, and (ii) may be exercised during the Participant's lifetime only by the Participant or by the Participant's guardian or legal representative. In the discretion of the Committee, any Award may be transferable upon such terms and conditions and to such extent as the Committee determines at or after grant, provided that Incentive Stock Options may be transferable only to the extent permitted by the Code.

(b) Grant Agreement. Each Award under the Plan shall be evidenced by a written or electronic grant agreement delivered to the Participant specifying the terms and conditions thereof and containing such other terms and conditions not inconsistent with the provisions of the Plan or Applicable Laws as the Committee considers necessary or advisable to achieve the purposes of the Plan.

(c) Committee Discretion. Each type of Award may be made alone, in addition to or in relation to any other Award. The terms of each type of Award need not be identical, and the Committee need not treat Participants uniformly. In addition to the authority granted to the Committee in Section 10(l) to make Awards to Covered Employees which qualify as performance-based compensation for purposes of Section 162(m) of the Code, the Company may grant Awards subject to such performance conditions (including performance-based vesting) as it shall determine in its discretion. Except as otherwise provided by the Plan or a particular Award, any determination with respect to an Award may be made by the Committee at the time of grant or at any time thereafter.

(d) Dividends and Cash Awards. In the discretion of the Committee, any Award under the Plan may provide the Participant with dividends or dividend equivalents payable currently or deferred, with or without interest. The Committee may also make cash payments under the Plan in lieu of or in addition to an Award. Such Cash Awards may be made subject to such terms, conditions, and restrictions as the Committee considers necessary or advisable.

(e) Termination of Employment or Service. Whether military service, government service, or other leave of absence shall constitute a termination of employment or service, and whether the vesting of an Award shall cease, be suspended, or continue during such leave of absence, shall be determined in each case by the Committee in its direction. Except as otherwise provided by the Committee, a Participant's employment or service shall not be deemed to terminate upon the transfer of employment or service between the Company and an Affiliate. Except as otherwise provided by the Committee, a Participant's employment or service shall be deemed to terminate, and further vesting of any Award shall cease, in the case of any sale, spin-off, or other disposition of the Participant's employer or substantially all of its assets. To the extent that this Section 10(e) or action by the Committee results in an Incentive Stock Option being exercised beyond the date that a Participant is deemed to be an employee of the Company or a Subsidiary for purposes of Section 424 of the Code, the Option shall be deemed to be a Nonstatutory Stock Option.

(f) Change in Control. In order to preserve a Participant's rights under an Award in the event of a change in control of the Company as defined by the Committee (a "Change in Control"), the Committee in its discretion may, at the time an Award is made or at any time thereafter, take one or more of the following actions: (i) provide for the acceleration of any time period relating to the exercise or payment of the Award, (ii) provide for payment to the Participant of cash or other property with a Fair Market Value equal to the amount that would have been received upon the exercise or payment of the Award had the Award been exercised or paid upon the Change in Control, (iii) adjust the terms of the Award in a manner determined by the Committee to reflect the Change in Control, (iv) cause the Award to be assumed, or new rights substituted therefor, by another entity, or (v) make such other provision as the Committee may consider equitable to Participants and in the best interests of the Company.

(g) Loans. The Committee may not authorize the making of loans to Participants in connection with the grant or exercise of any Award under the Plan.

(h) Withholding Taxes. A Participant shall pay to the Company, or make provision satisfactory to the Committee for payment of, any taxes required by law to be withheld in respect of Awards under the Plan no later than the date of the event creating the tax liability. In the Committee's discretion, such tax obligations may be paid in whole or in part in shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value on the date of delivery. The Company and its Affiliates may, to the extent permitted by Applicable Law, deduct any such tax obligations from any payment of any kind otherwise due to the Participant.

(i) Foreign National Awards. Notwithstanding anything to the contrary contained in this Plan, Foreign National Awards may be made to Participants on such terms and conditions different from those specified in the Plan as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with Applicable Law.

(j) Amendment of Award. Except as provided in Section 10(k), the Committee may amend, modify, or terminate any outstanding Award, including substituting therefor another Award of the same or a different type, changing the date of exercise or realization and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Participant's consent to such action shall be required unless (i) the Committee determines that the action, taking into account any related action, would not materially and adversely affect the Participant, or (ii) the action is permitted by the terms of the Plan.

(k) No Repricing of Options. Notwithstanding anything to the contrary in the Plan, the Company shall not engage in any repricing of Options or SARs granted under this Plan without further stockholder approval. For this purpose, the term "repricing" shall mean any of the following or other action that has the same effect: (i) lowering the exercise price of an Option or a SAR after it is granted, (ii) any other action that is treated as a repricing under generally accepted accounting principles, or (iii) canceling an Option or a SAR at a time when its exercise price exceeds the fair market value of the underlying stock in exchange for another Option, SAR, Restricted Stock, or other equity of the Company, unless the

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cancellation and exchange occurs in connection with a merger, acquisition, spin-off, or similar corporate transaction (including any adjustment described in Section 5(c)).

(l) Code Section 162(m) Provisions. If the Committee determines at the time an Award is granted to a Participant that such Participant is, or may be as of the end of the tax year for which the Company would claim a tax deduction in connection with such Award, a Covered Employee, then the Committee may provide that the Participant's right to receive cash, shares, or other property pursuant to such Award shall be subject to the satisfaction of Performance Goals during a Performance Period. Prior to the payment of any Award subject to this Section 10(l), the Committee shall certify in writing that the Performance Goals and other material terms applicable to such Award were satisfied. Notwithstanding the attainment of Performance Goals by a Covered Employee, the Committee shall have the right to reduce (but not to increase) the amount payable at a given level of performance to take into account additional factors that the Committee may deem relevant. The Committee shall have the power to impose such other restrictions on Awards subject to this Section 10(l) as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements for performance-based compensation within the meaning of Section 162(m) of the Code.

(m) Minimum Vesting Requirements for Full Value Awards. Each Restricted Stock or Restricted Stock Unit Award granted under the Plan (each, a *Full Value Award*) shall vest in accordance with a schedule that does not permit such Full Value Award to vest in full prior to the third anniversary of the Grant Date of the Award. This minimum vesting requirement shall not, however, preclude the Committee from exercising its discretion to (i) accelerate the vesting of any Full Value Award upon retirement, termination of employment by the Company, death or Disability, (ii) accelerate the vesting of any Full Value Award in accordance with Section 10(f), (iii) establish a shorter vesting schedule for any Full Value Award granted to a consultant, director, or newly-hired employee, (iv) establish a shorter vesting schedule for any Full Value Award that is granted in exchange for or in lieu of the right to receive the payment of an equivalent amount of salary, bonus, directors' fees, or other cash compensation, (v) establish a shorter performance-based vesting schedule in accordance with Section 10(c) or Section 10(l) (but in each case of not less than one year), or (vi) vest up to 1,000 shares per year for each Participant; provided, however, the total number of Full Value Awards granted under clauses (iii) and (vi) above shall not exceed 75,000 shares in the aggregate (subject to adjustment in accordance with Section 5(c)).

(n) Limitation Following a Hardship Distribution. To the extent required to comply with Treasury Regulation Section 1.401(k)-1(d)(2)(iv)(B)(4), or any amendment or successor thereto, a Participant's elective and employee contributions (within the meaning of such Treasury Regulation) under the Plan shall be suspended for a period of twelve months following such Participant's receipt of a hardship distribution made in reliance on such Treasury Regulation from any plan containing a cash or deferred arrangement under Section 401(k) of the Code maintained by the Company or a related party within the provisions of Section 414 of the Code.

11. Miscellaneous

(a) No Right To Employment. No person shall have any claim or right to be granted an Award. Neither the Plan nor any Award hereunder shall be deemed to give any employee the right to continued employment or service or to limit the right of the Company to discharge any Participant at any time.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed under the Plan until he or she becomes the holder thereof. A Participant to whom Common Stock is awarded shall be considered the holder of the Stock at the time of the Award except as otherwise provided in the Grant Agreement.

(c) **Effective Date.** Subject to the approval of the stockholders of the Company, the Plan shall be effective on September 15, 2005.

(d) **Amendment and Term of Plan.** The Board may amend, suspend, or terminate the Plan or any portion thereof at any time, subject to such stockholder approval as the Board determines to be necessary or advisable to comply with any tax or regulatory requirement, provided, however, that the Board may not without stockholder approval materially amend the Plan (within the meaning of applicable exchange listing requirements) to materially increase the number of shares of Common Stock that may be issued under the Plan, materially increase benefits to Participants, materially expand the class of Participants eligible to participate in the Plan, or expand the types of Awards provided under the Plan. Unless terminated earlier by the Board, or extended by subsequent approval of the Company's stockholders, the term of the Plan shall expire on September 15, 2015, and no further Awards shall be made thereafter. The termination of the Plan on such date shall not affect the validity of any Award outstanding on the date of termination.

(e) **Governing Law.** The provisions of the Plan shall be governed by and interpreted in accordance with the laws of Massachusetts.

(f) **Indemnification.** Neither the Board nor the Committee, nor any members of either, nor any employees or officers of the Company or any Affiliate, shall be liable for any act, omission, interpretation, construction, or determination made in good faith in connection with their responsibilities under the Plan, and the Company hereby agrees to indemnify the members of the Board, the members of the Committee, and the employees and officers of the Company or any Affiliate administering the Plan, in respect of any claim, loss, damage, or expense (including reasonable fees of legal counsel) arising from any such act, omission, interpretation, construction, or determination to the fullest extent permitted by Applicable Law.

This Plan was approved by the Board of Directors on July 20, 2005.

This Plan was approved by the Company's stockholders on September 15, 2005.

AMERICAN SCIENCE AND ENGINEERING, INC.

ANNUAL MEETING OF STOCKHOLDERS

September 15, 2005

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Anthony R. Fabiano and Kenneth J. Galaznik, or either of them, with full power of substitution, attorneys and proxies to represent the undersigned at the Annual Meeting of Stockholders (Meeting) of American Science and Engineering, Inc. (Company) to be held Thursday, September 15, 2005 at the Renaissance Bedford Hotel, 44 Middlesex Turnpike, Bedford, Massachusetts at 10:30 a.m. and at any adjournments thereof, to vote in the name and place of the undersigned as designated below, with all powers which the undersigned would possess if personally present, all of the stock of the Company standing in the name of the undersigned on the books of the Company, on all matters set forth in the Notice of the Meeting and Proxy Statement, receipt of which is acknowledged, and upon such other and further business as may properly come before the Meeting. All proxies previously given by the undersigned in respect of the Meeting are hereby revoked.

WHEN PROPERLY EXECUTED, THIS PROXY WILL BE VOTED AS INSTRUCTED BY THE UNDERSIGNED. IF NO CHOICE IS SPECIFIED, THIS PROXY WILL BE VOTED **FOR** THE ELECTION OF ALL NOMINEES FOR DIRECTORS LISTED ON THE REVERSE SIDE, **FOR** THE RATIFICATION OF THE SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS AND IN THE DISCRETION OF THE NAMED PROXIES ON ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE MEETING AND ANY ADJOURNMENTS OF THE MEETING.

(Continued and to be signed on the reverse side)

ANNUAL MEETING OF STOCKHOLDERS

AMERICAN SCIENCE AND ENGINEERING, INC.

September 15, 2005

Please date, sign and mail your proxy card in the envelope provided as soon as possible.

V Please detach along perforated line and mail in the envelope provided V

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE ELECTION OF DIRECTORS, FOR THE PROPOSAL TO ADOPT THE 2005 EQUITY AND INCENTIVE PLAN AND FOR THE RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS.

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE X

1. ELECTION OF DIRECTORS:

To elect	NOMINEES:
<input type="radio"/> FOR ALL NOMINEES	• Anthony R. Fabiano
<input type="radio"/> WITHHOLD AUTHORITY	• Denis R. Brown
<input type="radio"/> FOR ALL EXCEPT (See instructions below)	• Roger P. Heinisch
	• Hamilton W. Helmer
	• Ernest J. Moniz
	• William E. Odom
	• Carl W. Vogt

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:

2. APPROVAL OF THE 2005 EQUITY AND INCENTIVE PLAN	FOR	AGAINST	ABSTAIN
To consider and approve the Company's 2005 Equity and Incentive Plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS	FOR	AGAINST	ABSTAIN
To ratify the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accountants for the fiscal year ending March 31, 2006.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The undersigned hereby acknowledges receipt of the Notice of Annual Meeting of Stockholders, the Proxy Statement for the Meeting and the 2005 Annual Report of the Company.

PLEASE SIGN, DATE AND RETURN YOUR PROXY PROMPTLY IN THE ENCLOSED ENVELOPE.

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

Signature of Stockholder Date: Signature of Stockholder Date:

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Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder 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 duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.
