SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant ⊠ Filed by a Party other than the Registrant □ Check the appropriate box: Preliminary Proxy Statement Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) X Definitive Proxy Statement Definitive Additional Materials Soliciting Material Pursuant to § 240.14a-12 AMTECH SYSTEMS, INC. (Name of Registrant as Specified in Its Charter) (Name of Person(s) Filing Proxy Statement, if other than the registrant) Payment of Filing Fee (Check the appropriate box): X No fee required. Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11. Title of each class of securities to which transaction applies: 2) Aggregate number of securities to which transaction applies: 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): 4) Proposed maximum aggregate value of transaction: 5) Total fee paid: Fee paid previously with preliminary materials: Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing. 1) Amount previously paid: 2) Form, Schedule or Registration Statement No.: 3) Filing Party: 4) Date Filed:

AMTECH SYSTEMS, INC. 131 SOUTH CLARK DRIVE TEMPE, ARIZONA 85281

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS TO BE HELD ON MARCH 19, 2004

To Our Shareholders:

The 2004 Annual Meeting of Shareholders of AMTECH SYSTEMS, INC., an Arizona corporation (the "Company"), will be held at the Phoenix Airport Marriott, 1101 North 44th Street, Phoenix, Arizona, on Friday, March 19, 2004, at 10:00 a.m., Arizona time, for the following purposes:

- 1. To elect five (5) directors to serve for one-year terms or until their successors are elected and qualified;
- 2. To transact such other business as may properly come before the meeting.

The foregoing items of business are more fully described in the Proxy Statement accompanying this notice. The Company is presently aware of no other business to come before the Annual Meeting.

The Board of Directors has fixed the close of business on January 20, 2004, as the record date (the "Record Date") for the determination of shareholders entitled to notice of, and to vote at, the annual meeting or any postponement or adjournment thereof. Shareholders are reminded that their shares of the Company's common stock can be voted at the annual meeting only if they are present at the annual meeting in person or by valid proxy. A copy of the Company's 2003 Annual Report, which includes our audited financial statements, was mailed with this Notice and Proxy Statement to all shareholders of record on the Record Date.

Management of the Company cordially invites you to attend the Annual Meeting. Your attention is directed to the attached Proxy Statement for a discussion of the foregoing proposal and the reasons why the Board of Directors encourages you to vote **FOR** approval of such proposal.

By Order of the Board of Directors:

Robert T. Hass, Secretary

Tempe, Arizona February 17, 2004

IMPORTANT: IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED AT THIS MEETING. PLEASE COMPLETE, DATE, SIGN AND PROMPTLY MAIL THE ENCLOSED PROXY CARD IN THE ACCOMPANYING ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES.

AMTECH SYSTEMS, INC. 131 SOUTH CLARK DRIVE TEMPE, ARIZONA 85281

PROXY STATEMENT

The Board of Directors of Amtech Systems, Inc., an Arizona corporation (the "Company"), is soliciting proxies to be used at the 2004 Annual Meeting of Shareholders of the Company to be held on Friday, March 19, 2004, at 10:00 a.m., Arizona time, and any adjournment or postponement thereof (the "Annual Meeting"). A copy of the Notice of the Meeting accompanies this Proxy Statement. This Proxy Statement and the accompanying form of proxy will be mailed to all shareholders entitled to vote at the Annual Meeting beginning February 17, 2004.

Who Can Vote

Shareholders of record as of the close of business on January 20, 2004 (the "Record Date"), may vote at the Annual Meeting and at any and all adjournments or postponements of the meeting. On the Record Date, 2,700,671 shares of the Company's common stock, \$.01 par value ("Common Stock"), were issued and outstanding. Except as set forth below with respect to the ability to cumulate votes for directors, each shareholder has one vote for each share of Common Stock held on the Record Date. The holders of a majority of shares entitled to vote at the Annual Meeting must be present in person, or represented by proxy, in order to constitute a quorum for all matters to come before the Annual Meeting.

How to Attend the Meeting

If you are a shareholder of record, which means you hold your shares in your name, you may attend the meeting. If you own shares in the name of a bank, broker or other holder of record ("street name"), you will need to ask your broker or bank for a copy of the proxy they received from us. You will need to bring the proxy with you to the Annual Meeting.

How to Vote

If you are a shareholder of record, you may vote by mail or in person. To vote by mail, sign, date and return your proxy card in the enclosed postage-paid envelope. All valid proxies received before the Annual Meeting, and not properly revoked, will be exercised. If you sign and return your proxy card, but do not give voting instructions and authority to vote is not specifically withheld, the shares represented by that proxy will be voted as recommended by our Board of Directors. If you have specified a choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specifications so made.

All shareholders may vote in person at the Annual Meeting (unless they are street name holders without a legal proxy). If your shares are held in street name, you will receive instructions from the holder of record that you must follow in order for your shares to be validly voted.

We are not aware of any other matters to be presented at the Annual Meeting, except those described in this Proxy Statement. However, if any other matters not described in this Proxy Statement are properly presented at the Annual Meeting, the proxies will use their own judgment to determine how to vote your shares. If the Annual Meeting is adjourned, your Common Stock may be voted by the proxies on the new meeting date as well, unless you have revoked your proxy prior to that time.

Voting Choices

For each proposal presented, you may vote one of the following ways:

- For the proposal
- 2. Against the proposal
- 3. Abstain from voting

Proxies signed and returned without instructions will be voted FOR election of all director nominees.

Changing Your Vote

You may revoke your proxy at any time before it is exercised in one of three ways:

- By delivering to our offices, to the attention of our Corporate Secretary prior to the vote at the Annual Meeting, a written instrument of revocation bearing a date later than that of the proxy.
- By duly executing and delivering to our offices, to the attention of our Corporate Secretary prior to the vote at the Annual Meeting, a proxy for the same shares bearing a later date.
- By voting by ballot at the Annual Meeting, provided that the shareholder notifies our Corporate Secretary at the Annual Meeting of his or her intention to vote in person at any time prior to the voting of the proxy.

How Votes are Counted

Inspectors of election will be appointed for the Annual Meeting. The inspectors of election will determine whether or not a quorum is present and will tabulate votes cast by proxy or in person at the Annual Meeting. If you have returned valid proxy instructions or attend the Annual Meeting in person, your Common Stock will be counted for the purpose of determining whether there is a quorum. If a broker indicates on the proxy that it does not have discretionary authority as to certain shares to vote on a particular matter, those shares will not be considered as present and entitled to vote with respect to that matter. Abstentions and broker non-votes will be included in the determination of the number of shares represented for a quorum.

Costs of this Proxy Solicitation

We will pay the costs of preparing and mailing the Notice and Proxy Statement, including the charges and expenses of brokerage firms, banks and others who forward solicitation material to beneficial owners of the Common Stock. We will solicit proxies by mail. Officers and directors of the Company may also solicit proxies personally, or by telephone or facsimile, without additional compensation. Computershare will serve as our proxy solicitation agent. In such capacity, Computershare will coordinate the distribution of proxy materials to beneficial owners of Common Stock and oversee the return of proxy cards. The fee for all of these services is estimated to be \$5,000.

Annual Report

The Company's Annual Report to Shareholders for the fiscal year ended September 30, 2003 (the "Annual Report") has been mailed concurrently with the mailing of the Notice of Annual Meeting and Proxy Statement to all shareholders entitled to notice of, and to vote at, the Annual Meeting. The Annual Report is not incorporated into this Proxy Statement, and is not considered proxy-soliciting material.

The information contained in the "Report of Compensation and Option Committee," "Audit Committee Report" and "Comparison of Stock Performance" shall not be deemed "filed" with the Securities and Exchange Commission or subject to Regulations 14A or 14C or to the liabilities of Section 18 of the Securities Exchange Act of 1934, and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

WHAT VOTE IS REQUIRED TO APPROVE EACH PROPOSAL?

Proposal 1: Election of Five Directors

The five nominees for director who receive the most votes will be elected. Cumulative voting is allowed with respect to the election of directors.

PROPOSAL NO. 1 — ELECTION OF DIRECTORS

Number of Directors to be Elected

Our Board of Directors currently consists of five members. Each director elected will hold office for one year or until his successor is elected and qualified. If any director resigns, or otherwise is unable to complete his term in office, our Board may elect another director for the remainder of the resigning director's term.

Vote Required

The five nominees receiving the highest number of votes cast at the Annual Meeting will be elected. There is cumulative voting in the election of directors. This means that each shareholder present at the Annual Meeting, either in person or by proxy, will have an aggregate number of votes in the election of directors equal to five (the number of persons nominated for election as directors) multiplied by the number of shares of Common Stock held by such shareholder on the Record Date. The resulting aggregate number of votes may be cast by the shareholder for the election of any single nominee, or the shareholder may distribute such votes among any number or all of the nominees. The five nominees receiving the highest number of votes will be elected to our Board of Directors.

Nominees of the Board

Our Board of Directors is responsible for supervision of the overall affairs of the Company. Our Board has nominated the following individuals to serve on our Board of Directors for the following year:

Jong S. Whang Robert T. Hass Alvin L. Katz Robert F. King Bruce R. Thaw

Each of these nominees currently serves on our Board of Directors, and has agreed to be named in this Proxy Statement and to serve if elected. See below for information regarding each of the nominees.

Our Board of Directors recommends a vote FOR the election of the five nominees under Proposal No. 1. Our Board of Directors intends to vote its proxies for the election of the nominees, for a term to expire at the next Annual Meeting. In that regard, our Board of Directors solicits authority to cumulate such votes.

If any nominee should become unavailable for any reason, which our Board of Directors does not anticipate, the proxy will be voted "for" any substitute nominee, or nominees, who may be selected by our Board of Directors prior to, or at, the Annual Meeting, or, if no substitute is selected by the Board prior to or at the Annual Meeting, for a motion to reduce the present membership of the Board to the number of nominees available. The information concerning the nominees and their share holdings in the Company has been furnished by them to the Company.

Information Concerning Directors and Officers

The following table sets forth information regarding the officers and directors (who are also director nominees) of the Company. The subsequent paragraphs contain biographical data for each director.

Name	Age Position with the Company
	- -
Jong S. Whang	58 President, Chief Executive Officer and Director
Robert T. Hass	53 Vice President – Finance, Chief Financial Officer
	Treasurer, Secretary and Director
Alvin L.Katz	74 Director
Robert F. King	70 Director
Bruce R. Thaw	51 Director

Jong S. Whang has been President, Chief Executive Officer and a Director of the Company since its inception, and was one of its founders. Mr. Whang's responsibilities as President include the sales effort for the Company's semiconductor equipment business, and the development of new products and business opportunities in that industry. He has 29 years of experience in the semiconductor industry, including time spent in both processing and manufacturing of equipment components and systems. From 1973 until 1979, he was employed by Siltronics, Inc., initially as a technician working with chemical vapor deposition, and later as manager of the quartz fabrication plant with responsibility of providing technical marketing support. From 1979 until 1981, he was employed by U.S. Quartz, Inc. as manufacturing manager. In 1981, he left U.S. Quartz to form the Company.

Robert T. Hass has been Vice President – Finance, Chief Financial Officer, Treasurer and Secretary of the Company since June, 1992, and a Director of the Company since February, 1996. From 1991 until May, 1992, he operated a financial consulting practice. From 1985 to 1991, Mr. Hass was Director of Accounting Services and then Controller for Lifeshares Group, Inc., and from 1988 to 1991 was Controller and Chief Accounting Officer of some of Lifeshares' subsidiaries. From 1984 to 1985, he was Vice President – Finance and Treasurer of The Victorio Company. From 1977 to 1984, he served in various capacities including Vice President, Chief Financial Officer and Treasurer of Altamil Corporation, then a public diversified manufacturing company. From 1972 to 1977, he was an auditor with Ernst & Ernst, now known as Ernst & Young. He is a Certified Public Accountant.

Alvin L. Katz has been a Director of the Company since May, 1995. From 1981 to 1997, he was an adjunct professor of business management at the Florida Atlantic University in Boca Raton, Florida. From 1991 until the company was sold in September, 1992, he was Chief Executive Officer of Odessa Engineering Corp., a pollution monitoring equipment manufacturer. From 1957 to 1976, Mr. Katz held various managerial positions with United Parcel Service, including District Manager and Corporate Manager of Operations Planning, Research and Development. From 1994 to 2003, Mr. Katz was a Director of Nastech Pharmaceutical Company, Inc., a company engaged in the research, development and marketing of nasally delivered pharmaceuticals. From 1994 to 2002, he was also a Director of Blimpie International, a fast food franchiser. From 1999 to 2000, he was also President of BMAC, a biomedical automation company.

Robert F. King has been a Director of the Company since May, 2003. Since 1989, Mr. King has been President of King Associates, which provides consulting services to equipment companies serving the semiconductor and flat panel display industries. He currently serves on the advisory board of a privately-held company, which provides equipment to the flat panel display industry. From 1968 to 1988, Mr. King was employed at Varian Associates, where he served in various marketing positions, including Vice President of Marketing for the Semiconductor Equipment Division. Mr. King also served on the Board of Directors of Varian's joint venture semiconductor equipment companies located in Korea and Japan.

Bruce R. Thaw has been a Director of the Company since May, 1995. Mr. Thaw is currently the President and Chief Executive Officer of Bulbtronics, Inc., a national distributor of technical and specialty light sources and related products. Mr. Thaw is a practicing attorney and was admitted to the bar of the State of New York in 1978 and the California State Bar in 1983. Mr. Thaw is also a director of SafeNet, Inc., a publicly traded company that designs, manufactures and markets computer network security systems and products, and Nastech Pharmaceutical Company, Inc., a publicly traded company engaged in drug delivery technology. Mr. Thaw does not render legal services to the Company.

Information about Board and Committee Meetings and Director Compensation

Information concerning our Board of Directors and the three (3) committees maintained by our Board is set forth below. The Board Committees consist only of Directors who are not employees of the Company and who are "independent" within the meaning of the listing standards of the NASD.

Our Board of Directors held four (4) meetings during the 2003 fiscal year. No director attended less than 75% of all Board meetings while he served as such director, or less than 75% of all committee meetings on which he served as a committee member. Our Board has the authority under the Company's Bylaws to increase or decrease the size of our Board and fill vacancies, and the directors chosen to fill such vacancies will hold office until the Company's next annual meeting, or until their successors are elected and qualified.

The Audit Committee, the Compensation and Option Committee and the Nominating Committee are the standing committees of our Board of Directors. These committees are comprised as follows:

Audit - Bruce R. Thaw, Alvin L. Katz and Robert F. King

Compensation and Option - Alvin L. Katz and Bruce R. Thaw

Nominating - Alvin L. Katz and Bruce R. Thaw

The Audit Committee held five (5) meetings during the 2003 fiscal year. The Audit Committee is responsible for maintaining communication between the Board of Directors, the independent auditors and members of financial management with respect to the Company's financial affairs in general, including financial statements and audits, the adequacy and effectiveness of the internal accounting controls and systems and the retention and termination of the independent auditors. The Audit Committee also develops and recommends corporate governance guidelines to the Board and provides oversight with respect to corporate governance and ethical conduct.

The Audit Committee is composed of outside directors who are not officers or employees of the Company or its subsidiaries. In the opinion of our Board, and as "independent" is defined under the listing rules of the Nasdaq Stock Market, these directors are independent of management and free of any relationship that would interfere with their exercise of independent judgment as members of this committee.

The Compensation and Option Committee held one (1) meeting during the 2003 fiscal year. The Compensation and Option Committee makes recommendations concerning officer compensation, employee benefit programs and retirement plans.

The Nominating Committee held one (1) meeting during the 2003 fiscal year. The Nominating Committee identifies and approves individuals qualified to serve as members of our Board and also evaluates the Board's performance. The Nominating Committee approved the nomination of the candidates reflected in Proposal 1. The Nominating Committee will consider, but is not required to approve, director nominations made by shareholders for any annual meeting of the Company, provided a written recommendation is received by the Company no later than the date shareholder proposals must be submitted for consideration prior to such annual meeting.

Directors' Compensation

Directors who are full-time employees of the Company receive no additional compensation for serving as directors. Non-Employee Directors receive an annual retainer of \$6,000 and fees of \$700 per Board meeting attended and \$250 per committee meeting attended. In addition, under the Company's Non-Employee Directors Stock Option Plan, each outside director receives an annual grant of options to purchase 5,000 shares of Common Stock. The exercise price of the options is set at the fair market value of Common Stock on the date of grant. Each option has a term of ten years and is exercisable in three equal installments commencing on the first anniversary of the date of grant and continuing for the two successive anniversaries thereafter. In the event of disability (as defined in the plan) or death of an outside director, all options remain exercisable for a period of twelve months following the date such person ceased to be a director, but only to the extent such options were exercisable on the date the director ceased to be a director.

Compensation Committee Interlocks and Insider Participation

The Compensation and Option Committee is presently comprised of Mr. Katz and Mr. Thaw, who are not officers or employees of the Company.

EXECUTIVE COMPENSATION

The following table sets forth information regarding annual and long-term compensation for services rendered to the Company during the fiscal years ended September 30, 2003, 2002 and 2001 by the Company's Chief Executive Officer and the other most highly compensated executive officer of the Company who received annual compensation exceeding \$100,000 during such periods (collectively, the "Named Executive Officers").

SUMMARY COMPENSATION TABLE

			Annual Compensation (1)			
Name and Principal Position	Fiscal Year	Salary (2)	Bonus (3)	Other Annual Compensation	Restricted Stock Awards	ll Other pensation ⁽⁴⁾
Jong S. Whang	2003	\$ 150,722	\$ —	_	_	\$ _
President and Chief	2002	150,722	3,585	_	_	_
Executive Officer	2001	168,044	69,397	_	_	16,656
Robert T. Hass	2003	\$ 102,000	\$ —	_	_	\$ _
Vice President –	2002	102,000	18,000	_	_	_
Finance	2001	111,059	1,468	_	_	2,911

⁽¹⁾ Neither Messrs. Whang nor Hass received personal benefit perquisites in excess of the lesser of \$50,000 or 10% of their aggregate salary and bonus.

Option Grants in Last Fiscal Year

There were no stock option grants during the 2003 fiscal year to any of the Named Executive Officers.

Aggregated Option Exercises and Fiscal Year-End Option Values

The following table sets forth information (on an aggregated basis) concerning exercises of stock options during the 2003 fiscal year by each of the Named Executive Officers, and the year-end value of unexercised options.

Name	Shares	Shares Acquired On Value Exercise (#) Realized (\$)	Number of Securities Underlying Unexercised Options at Fiscal Year-End (#)		Money" Options at Fiscal Year-End(S) (1)		
			Exercisable	Unexercisable	Exercisable	Unexercisable	
Jong S. Whang		_	\$ —	102,517	90,250	\$ 172,841	\$ 925
Robert T. Hass		_	_	16,250	20,000	22,089	6,874

Options are "in-the-money" at the fiscal year-end if the fair market value (based on the closing price of the Company's Common Stock on the Nasdaq Stock Market on September 30, 2003 of \$5.20 per share, less the exercise price) of the underlying securities exceeds the exercise or base price of the option on such date.

Effective March 15, 2001, Mr. Whang entered into a five-year employment agreement with the Company. The agreement specifies an annual base salary of \$188,402. Effective April 1, 2001, Mr. Whang voluntarily reduced his annual salary by 20% to \$150,722 and Mr. Hass voluntarily reduced his annual salary by 15% to \$102,000.

⁽³⁾ See "Employment And Change In Control Arrangements" for a description of how Mr. Whang's incentive compensation is determined.

⁽⁴⁾ Amounts for Messrs. Whang and Hass consist of Company matching contributions in the Amtech Systems, Inc. 401(k) Plan. For fiscal 2001, the amount for Mr. Whang also includes a payment made in lieu of vacation.

EMPLOYMENT AND CHANGE IN CONTROL ARRANGEMENTS

On March 15, 2001, the Company entered into a five-year employment agreement with its President, Jong S. Whang. Under the terms of the agreement, Mr. Whang is entitled to an annual base salary of \$188,402, and annual base salary increases of at least 5% to be determined by our Board of Directors. Mr. Whang is also entitled to receive annual incentive cash compensation of up to the lesser of 50% of his base salary or 10% of the Company's earnings before taxes and extraordinary items (after deducting the sum of such bonuses), based on the follow criteria: (i) a bonus equal to 2% of the annual earnings of the Company before taxes and extraordinary items and (ii) a bonus equal to 2% of the amount by which the revenues of the Company for the applicable fiscal year exceeds such revenues for the previous fiscal year. In addition, Mr. Whang was granted an option to purchase 150,000 shares of Common Stock pursuant to the terms of his employment agreement. These options were granted on March 15, 2001, and vest at the rate of 20% per full year of service over a five-year period. To the extent not already exercisable, the options become immediately exercisable upon: (i) the dissolution or liquidation of the Company, or a reorganization, merger or consolidation in which all, or substantially all, prior shareholders do not continue to own more than 60% of the then outstanding shares of Common Stock and voting securities, (ii) the sale of all, or substantially all, of the assets of the Company or (iii) the occurrence of a change in control of the Company, as discussed in the agreement. The agreement also contains confidentiality and non-compete provisions with which Mr. Whang must comply. Mr. Whang is also entitled to participate in any benefit plans generally available to employees of the Company. Finally, the Company is required to purchase a \$250,000 life insurance policy on the life of Mr. Whang, with his spouse as the beneficiary of such policy. To-date, Mr. Whang has waived the Company's compliance with the latter requi

Under the terms of Mr. Whang's employment agreement, if he is terminated other than for "cause," or he terminates his employment for "good reason" (as such terms are defined in his employment agreement), he is entitled to receive, as severance pay, salary, incentive compensation and vacation accrued through the date of termination plus the following: (i) an amount equal to two years of Mr. Whang's base salary in effect on the termination date; (ii) a pro-rated portion of the amount of incentive compensation Mr. Whang would earn for the fiscal year in which the termination occurs if the results of operations of the Company for the period from the beginning of such fiscal year to the termination date were annualized; (iii) full vesting of all stock options issued under the employment agreement; and (iv) vesting of a pro-rated portion of the number of stock options that would have vested for the fiscal year in which the termination occurs.

Mr. Whang's employment agreement also provides for benefits should his employment with the Company be terminated following a change in control. If Mr. Whang's employment with the Company is terminated within one year following the occurrence of a change of control, either by the Company for any reason other than for cause, or by Mr. Whang for good reason, the Company would be required to pay him a lump sum payment equal to three years of his annual base salary in effect on the termination date and the maximum amount of incentive compensation that he could earn for the fiscal year in which the termination date occurs. In addition, all unvested stock options held by him would vest immediately.

The Company has also entered into a severance agreement with Robert T. Hass, its Vice President – Finance, which provides for severance benefits similar to those described above for Mr. Whang, with the exception that Mr. Hass is entitled to a lump sum severance payment equal to one year's base salary should his employment be terminated within one year following a change in control.

Certain Relationships and Related Transactions

The Company had no transactions during 2003 with any director, director nominee, executive officer, security holder known to the Company to own of record or beneficially more than 5% of the Common Stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded \$50,000.

REPORT OF COMPENSATION AND OPTION COMMITTEE

The Compensation and Option Committee of the Company's Board of Directors (the "Committee"), which is composed entirely of independent, outside directors, establishes the general compensation policies of the Company, and specific compensation for each executive officer of the Company, and administers the Company's stock option program. The Committee's objective is to make the compensation packages of the executive officers of the Company sufficient to attract and retain persons of exceptional quality, and to provide effective incentives to motivate and reward Company executives for achieving the financial and strategic goals of the Company essential to the Company's long-term success and growth in shareholder value. The Company's executive compensation package consists of three main components: base salary, incentive cash bonuses and stock options.

Base Compensation – The Committee's approach is to offer executives salaries competitive with those of other executives in the industry in which the Company operates. To that end, the Committee evaluates the competitiveness of base salaries based on information drawn from a variety of sources, including published and proprietary survey data and the Company's own experience recruiting and retaining executives, although complete information is not easily obtainable. The Company's base salary levels are intended to be consistent with competitive practice and level of responsibility, with salary increases reflecting competitive trends, the overall financial performance of the Company and the performance of the individual executive.

Bonuses – In addition to base salary, executives are eligible to receive a discretionary annual bonus. At the beginning of each year, the Committee and the Chief Executive Officer (the "CEO") review each individual executive's job responsibilities and goals for the upcoming year. The amount of the bonus and any performance criteria vary with the position and role of the executive within the Company. In addition, for all executives, the Committee reviews the Company's actual financial performance against its internally budgeted performance in determining year-end bonuses, if any. However, the Committee does not set objective performance targets for executives other than the CEO and sales and marketing personnel.

Stock Option and Restricted Stock Grants – The Company, from time to time, grants stock options and shares of restricted stock in order to provide certain executives with a competitive total compensation package, and to reward them for their contribution to the long-term price performance of the Common Stock. Grants of stock options and restricted stock are designed to align the executive's interest with that of the shareholders of the Company. In awarding option grants, the Committee will consider, among other things, the amount of stock and options presently held by the executive, the executive's past performance and contributions, and the executive's anticipated future contributions and responsibilities.

2003 CEO Compensation – Mr. Whang, the Company's CEO, is entitled to an annual base salary of \$188,402, with annual base salary increases of at least 5% to be determined by our Board of Directors, pursuant to the terms of his March 15, 2001 employment agreement with the Company. Effective April 1, 2001, Mr. Whang voluntarily reduced his annual base salary by 20% to \$150,722, and has forgone any salary increases since that date. Mr. Whang's base salary is based upon the compensation of executives in comparable positions in the semiconductor industry, adjusted for the size of the Company (total assets and revenues).

In connection with the execution of Mr. Whang's employment agreement, our Board of Directors approved an incentive compensation plan for the CEO, which provides for an annual cash bonus equal to 2% of the annual earnings of the Company before taxes and extraordinary items, plus 2% of the amount by which the revenues of the Company in an applicable fiscal year exceed such revenues for the previous fiscal year. The total of such cash bonuses is limited to the lesser of 50% of Mr. Whang's base salary for the applicable fiscal year or 10% of the Company's earnings before taxes and extraordinary items (after deducting the sum of such bonuses). Mr. Whang did not earn a bonus in 2003. Mr. Whang's employment agreement with the Company incorporates the incentive compensation plan described above. See "Employment And Change In Control Arrangements."

RESPECTFULLY SUBMITTED, Alvin L. Katz, Chairman Bruce R. Thaw

AUDIT COMMITTEE REPORT

In accordance with its written charter adopted by our Board of Directors on December 12, 2003, a copy of which is attached as an exhibit to this Proxy Statement, the Audit Committee is responsible for reviewing and discussing the audited financial statements with management, discussing with the Company's auditors information relating to the auditors' judgments about the quality of the Company's accounting principles, recommending to our Board of Directors that the Company include the audited financial statements in its Annual Report on Form 10-K and overseeing compliance with the Securities and Exchange Commission's requirements for disclosure of auditors' services and activities. The Audit Committee also develops and recommends corporate governance guidelines to the Board and provides oversight with respect to corporate governance and ethical conduct.

The Board of Directors annually reviews the independence of the Audit Committee members in view of the NASD's listing standards' and the Securities and Exchange Commission's ("SEC") definitions of independence for audit committee members. The Board has determined that each of the three members of the Audit Committee meets those definitions and standards. Additionally, each member of the Audit Committee is financially literate, and one of the Audit Committee members, Alvin L. Katz, has financial management expertise as required by Nasdaq's rules and meets the SEC's definition of an "audit committee financial expert."

Management is responsible for the preparation, presentation and integrity of the Company's financial statements, accounting and financial reporting principles, internal controls, and procedures designed to ensure compliance with accounting standards and applicable laws and regulations. The Company's independent auditors, KPMG LLP ("KPMG"), are responsible for performing an independent audit of the consolidated financial statements and expressing an opinion on the conformity of those financial statements with generally accepted accounting principles

The Audit Committee meets regularly with the independent accountants without management present and also meets in executive session without any others present. The Audit Committee has reviewed the Company's consolidated financial statements for the fiscal year ended September 30, 2003, as audited by KPMG, and has discussed these financial statements with management. In addition, the Audit Committee has discussed with KPMG the matters required to be discussed by Statement of Auditing Standards No. 61, "Communications with Audit Committees." Furthermore, the Audit Committee has received the written disclosures and the letter from KPMG required by the Independence Standards Board Standard No. 1, "Independence Discussions with Audit Committees," and has discussed with KPMG its independence.

Based upon the foregoing review and discussion, the Audit Committee recommended to our Board of Directors that the audited financial statements for the fiscal year ended September 30, 2003 be included in the Company's Annual Report on Form 10-K for filing with the SEC.

RESPECTFULLY SUBMITTED,

Bruce R. Thaw, Chairman Alvin L. Katz Robert F. King

PRE-APPROVAL POLICY

In May, 2003, the Audit Committee adopted a Pre-Approval Policy (the "Policy") governing the approval of all audit and non-audit services performed by the independent auditor in order to ensure that the performance of such services does not impair the auditor's independence.

According to the Policy, the Audit Committee will annually review and pre-approve the types of services, and will set a limit on the fees for such services, that may be provided by the independent auditor during the following year. The Policy specifically describes the annual audit services and fees, other services that are audit-related, the preparation of tax returns and tax related compliance services and all other services that have the general pre-approval of the Audit Committee. The term of any general pre-approval is twelve (12) months from the date of pre-approval, unless the Audit Committee specifically provides for a different period.

Any service to be provided by the independent auditor that has not received general pre-approval under the Policy is required to be submitted to the Audit Committee for approval prior to the commencement of a substantial portion of the engagement. Any proposed service exceeding pre-approved cost levels is also required to be submitted to the Audit Committee for specific approval.

The Audit Committee will revise the list of general pre-approved services from time to time based on subsequent determinations. The Audit Committee does not delegate its responsibilities to pre-approve services performed by the independent auditor to management.

CODE OF ETHICS

The Board of Directors has adopted a Code of Ethics for all employees of the Company, as recommended by the Audit Committee. A copy of this Code of Ethics may be viewed on our website (www.amtechsystems.com), or obtained at no charge by written request to the Company's Corporate Secretary.

DISCLOSURE OF AUDIT AND NON-AUDIT FEES

The following table sets forth the fees billed to us by our independent auditors during the years ended September 30, 2003 and 2002 for: (i) services rendered for the audit of our annual financial statements and the review of our quarterly financial statements, (ii) services by our auditor that are reasonably related to the performance of the audit or review of our financial statements and that are not reported as Audit Fees, (iii) services rendered in connection with tax compliance, tax advice and tax planning, and (iv) all other fees for services rendered.

	Year Ended Sept. 30, 2003	Year-Ended Sept. 30, 2002
Audit Fees	\$ 119,416	\$ 126,000
Audit-Related Fees	_	_
Tax Fees	_	_
All Other Fees		1,985
Total Fees	\$ 119,416	\$ 127,985

The amounts included under the caption "all other fees" in 2002 consisted of fees for accounting consultation services.

The Audit Committee of our Board of Directors considered whether the provision of non-audit services is consistent with maintaining the auditors' independence.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of our Common Stock as of January 15, 2004, by (i) each director and executive officer of the Company, including the Named Executive Officers, (ii) all executive officers and directors of the Company as a group, and (iii) each person known by the Company to be the beneficial owner of more than 5% of our Common Stock. This information was determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, and is based upon the information furnished by the persons listed below. Except as otherwise indicated, each shareholder listed possesses sole voting and investment power with respect to the shares indicated as being beneficially owned.

	Number of Shares	Percent of
Name and Address (1) (2)	Beneficially Held (3)	Ownership (3)
Jong S. Whang	217,222(4)	7.7%
Robert T. Hass	17,375(5)	*
Alvin L. Katz	87,667(6)	3.2%
Robert F. King	_	_
Bruce R. Thaw	23,667(6)	*
Directors and Executive Officers of the Company as a group (5 persons)	345,931(7)	12.8%
5% Shareholders:		
Robert Sussman	$202,500^{(8)}$	7.5%
520 Madison Avenue		
41st Floor		

* Less than 1%.

New York, NY 10022

- Mr. Whang is the Company's President, CEO and a director. Mr. Hass is the Vice President Finance, Chief Financial Officer, Treasurer, Secretary and a director. Messrs. Katz, King and Thaw are directors of the Company.
- (3) The share amounts and percentages shown include shares of Common Stock actually owned as of January 15, 2004, and shares of Common Stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date pursuant to options or warrants. All shares of Common Stock that the identified person had the right to acquire within 60 days of January 15, 2004, upon the exercise of options or warrants, are deemed to be outstanding when computing the percentage of the securities owned by such person, but are not deemed to be outstanding when computing the percentage of the securities owned by any other person.
- (4) Includes (i) 9,488 shares held jointly with Mr. Whang's spouse and (ii) 132,767 shares issuable upon exercise of options exercisable within 60 days of January 15, 2004.
- (5) Includes 17,250 shares issuable upon exercise of options exercisable within 60 days of January 15, 2004.
- (6) Includes 23,667 shares issuable upon exercise of options exercisable within 60 days of January 15, 2004.
- ⁽⁷⁾ Includes 197,351 shares issuable upon exercise of options exercisable within 60 days of January 15, 2004.
- (8) Includes 2,500 shares jointly owned with Mr. Sussman's spouse.

⁽¹⁾ Except as otherwise noted, the address for each person listed in this table is c/o Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281.

Compliance With Section 16(a) of the Securities Exchange Act of 1934

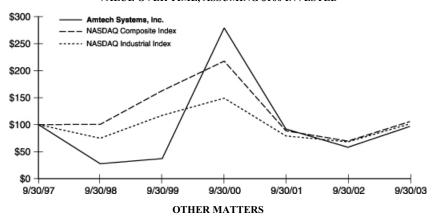
Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's directors and executive officers, as well as persons beneficially owning more than 10% of our outstanding Common Stock, to file certain reports of ownership with the SEC within specified time periods. Such officers, directors and shareholders are also required by SEC rules to furnish the Company with copies of all Section 16(a) forms they file.

Based solely on our review of such forms received by us during the fiscal year ended September 30, 2003, or written representations from certain reporting persons, we believe that between October 1, 2002 and September 30, 2003, all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with.

Comparison of Stock Performance

The following line graph compares cumulative total shareholder return, assuming reinvestment of dividends, for: the Company's Common Stock, the NASDAQ Composite Index and the NASDAQ Industrial Index. Because the Company did not pay dividends on its Common Stock during the measurement period, the calculation of the cumulative total shareholder return on the Company's Common Stock did not include dividends. The following graph assumes that \$100 was invested on October 1, 1997.

VALUE OVER TIME, ASSUMING \$100 INVESTED



Annual Report

The Annual Report of the Company for the fiscal year ended September 30, 2003, is enclosed herewith.

Voting By Proxy

In order to ensure that your shares will be represented at the Annual Meeting, please sign and return the enclosed proxy in the envelope provided for that purpose, whether or not you expect to attend. Any shareholder may, without affecting any vote previously taken, revoke a written proxy by delivering to our executive offices, to the attention of our corporate Secretary prior to the vote at the Annual Meeting, written notice of revocation or a duly executed proxy bearing a later date, or by attending the Annual Meeting and voting in person.

Independent Auditors

Our Board of Directors has selected KPMG as the Company's independent public accountants for the fiscal year ending September 30, 2004. KPMG has audited the Company's financial statements for the fiscal years ending September 30, 2003 and 2002. A representative of KPMG is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she so desires, and will also be available to respond to appropriate questions.

Deadline for Shareholder Proposals for Action at the Company's Next Annual Meeting

Any shareholder who wishes to present any proposal for shareholder action at the next Annual Meeting of Shareholders to be held in 2005, must be received by the Company's Secretary, at the Company's offices, not later than October 15, 2004, in order to be included in the Company's proxy statement and form of proxy for that meeting. Such proposals should be addressed to the Corporate Secretary, Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281. If a shareholder proposal is introduced at the 2005 Annual Meeting of Shareholders without any discussion of the proposal in the Company's proxy statement, and the shareholder does not notify the Company on or before January 3, 2005, as required by SEC Rule 14(a)-4(c)(1), of the intent to raise such proposal at the Annual Meeting of Shareholders, then proxies received by the Company for the 2005 Annual Meeting will be voted by the persons named in such proxies in their discretion with respect to such proposal. Notice of such proposal is to be sent to the above address.

HOUSEHOLDING OF PROXY MATERIALS

In December 2000, the Securities and Exchange Commission adopted new rules that permit companies and intermediaries (i.e., brokers) to satisfy the delivery requirements for proxy statements with respect to two or more security holders sharing the same address by delivering a single proxy statement addressed to those security holders. This process, which is commonly referred to as "householding," potentially means extra convenience for security holders and cost savings for companies.

If you are currently receiving multiple copies of the Company's Proxy Statement and Annual Report at your address and would like to request householding of your communications, please contact your broker. Once you have elected householding of your communications, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding, and would prefer to receive a separate Proxy Statement and Annual Report, please notify your broker if you own shares in street name, or direct your written request to Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281, Attn: Secretary if you are a shareholder of record.

By Order of the Board of Directors:

Robert T. Hass, Secretary

Tempe, Arizona February 17, 2004

Amtech Systems, Inc. Audit Committee Charter

- I. The Committee's Purpose. The Audit Committee (the "Committee") is appointed by the Board of Directors for the primary purposes of:
 - A. Assisting the Board in its oversight of the:
 - 1. Quality and integrity of the Company's financial statements.
 - 2. Company's compliance with legal and regulatory requirements.
 - 3. Company's overall risk management profile.
 - 4. Independent auditor's qualifications and independence.
 - 5. Performance of the Company's independent auditors.
 - B. Preparing the annual Audit Committee Report to be included in the Company's proxy statement.
- II. The Committee's Duties and Responsibilities. Company management is responsible for preparing financial statements; the Committee's primary responsibility is oversight. To carry out this responsibility, the Committee will undertake the following activities:

A. General

- 1. To develop and maintain free and open means of communication with the Board, the Company's independent auditors and the financial and general management of the Company.
- 2. To perform any other activities as the Committee deems appropriate, or as are requested by the Board, consistent with this charter, the Company's bylaws and applicable law.
- 3. To maintain and update, as appropriate, this charter, which will be published on the Company's website and disclosed in the Company's proxy at least once every three years as required by the SEC's proxy rules.
- 4. To review with the Board any significant issues that arise with respect to the items listed in I.A.1 through I.A.5 above.

B. The Company's Financial Statements and Published Information

- 1. At least annually, to review:
 - a. Major issues regarding accounting principles and financial statement presentations including any significant changes in the Company's selection or application of accounting principles, as well as the clarity and completeness of the Company's financial statements and items that impact the

- representational faithfulness, verifiability, and neutrality of accounting information.
- b. Analyses prepared by management and/or the independent auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of the application of alternative GAAP methods on the financial statements.
- c. The effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements of the Company.
- 2. To discuss the annual audited financial statements and quarterly financial statements (including matters outlined in SAS No. 61, "Communications with Audit Committees") with Company management and the independent auditors, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Company's SEC filings.
- 3. To discuss the Company's earnings press releases, as well as financial information and earnings guidance provided to analysts and ratings agencies. These discussions need not occur in advance of each release or each provision of guidance.

C. Performance and Independence of the Company's Independent Auditors

- 1. At least annually, to obtain and review a written report by the independent auditors describing:
 - The independent auditing firm's internal quality control procedures.
 - b. Any material issues raised by the most recent internal quality control review, or peer review, of the independent auditing firm.
 - c. Any material issues raised by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the independent auditing firm.
 - d. Any steps taken to deal with any issues raised in such internal quality control reviews, peer reviews, or governmental or professional authority inquiries or investigations.
 - e. All relationships between the independent auditor and the Company.

- 2. To annually evaluate the independent auditor's qualifications, performance, and independence, including a review and evaluation of the lead partner, taking into account the opinions of Company management, and to report its conclusions to the Board.
- 3. To assure regular rotation of the lead audit partner, as required by law.
- 4. To periodically meet with the independent auditors without Company personnel present.
- 5. To set clear hiring policies for employees or former employees of the independent auditors.

D. The Review of Services and Audit by Independent Auditor

- 1. To appoint, retain, compensate, evaluate, and terminate the Company's independent auditors, with sole authority to approve all audit engagement fees and terms, as well as all non-audit engagements with the independent auditors (these responsibilities may not be delegated to Company management).
- 2. At least annually, to pre-approve all audit and non-audit services to be provided to the Company by its independent auditors (this responsibility may not be delegated to Company management and, to the extent that this responsibility is delegated to one or more members of the Committee, such member(s) must report such pre-approvals at the next scheduled meeting of the Committee).
- 3. To ensure that the Company's independent auditors do not perform any non-audit services that are prohibited by law or regulation.
- 4. To review the scope of the annual audit to be performed by the Company's independent auditors.
- 5. To review with the independent auditor any audit problems or difficulties encountered in the course of the audit work, and Company management's responses thereto.
- 6. To review the audit report and recommendations submitted by the Company's independent auditors.
- 7. To review the report required by Section 10A(k) of the Securities Exchange Act of 1934 from the independent auditor concerning:
 - a. Critical accounting policies and practices to be used in the audit.
 - b. Alternative treatments of financial information within GAAP that have been discussed with Company management, ramifications of the use of such alternative disclosure and treatments, and the treatment preferred by the independent auditor.

c. Other material written communications between the independent auditor and Company management, such as any management letter or schedule of unadjusted differences.

E. Controls within the Company

- 1. To periodically meet separately with Company management, including senior finance and accounting management.
- 2. To annually review major issues as to the adequacy of the Company's internal controls and any special audit steps adopted in light of material control deficiencies
- 3. To review the results of the Company's annual assessment relating to compliance with the Company's Code of Ethics.
- 4. To receive quarterly a report from the Company's Chief Executive Officer and Chief Financial Officer describing:
 - All significant deficiencies in the design or operation of internal controls that could adversely affect the Company's ability to record, process, summarize and report financial data.
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls.
- 5. To establish procedures for the:
 - a. Receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters.
 - b. Confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

F. Review of Risk Management.

To discuss:

- 1. Guidelines and policies to govern risk assessment and risk management.
- 2. The Company's major risk exposures and the steps Company management has taken to monitor and control such exposures.
- 3. To review the status of corporate security, the security for the Company's electronic data processing information systems and the general security of the Company's people, assets and information systems.
- 4. To review the status of the Company's financial instruments.

- 5. To receive annual and as required reports from the Company's legal counsel regarding legal, regulatory and intellectual property issues.
- III. Authority to Retain Experts. The Committee has the authority to select, retain, direct, and, if appropriate, terminate such experts as it deems necessary in the performance of its duties
- IV. Annual Performance Evaluation of the Committee. At least annually, the Committee will evaluate how well it has fulfilled its purpose during the previous year, and will report its findings to the full Board.
- V. Audit Committee Financial Expert. At least one member of the Committee must have accounting or related financial management expertise as determined by the Board in accordance with applicable stock exchange listing standards. At least one member of the Committee must be an "audit committee financial expert" as defined by the Securities and Exchange Commission. The person with accounting or related financial management expertise and the "audit committee financial expert" can be one and the same.

Proxy - AMTECH SYSTEMS, INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF AMTECH SYSTEMS, INC. FOR THE ANNUAL MEETING OF SHAREHOLDERS

The undersigned shareholder of Amtech Systems, Inc., an Arizona corporation (the "Company"), hereby acknowledges receipt of the Notice of Annual Meeting of Shareholders dated February 17, 2004, and hereby appoints Jong S. Whang and Robert T. Hass, and each or either of them, proxies and attorneys-in-fact, with full power of substitution, on behalf and in the name of the undersigned, to represent the undersigned at the Annual Meeting of Shareholders of AMTECH SYSTEMS, INC. to be held at the Phoenix Airport Marriott, 1101 North 44th Street, Phoenix, Arizona on Friday, March 19, 2004, at 10:00 a.m., Arizona time, and at any adjournment(s) or postponement(s) thereof, and to vote all shares of Common Stock that the undersigned would be entitled to vote if then and there personally present, on the matters set forth on the reverse side.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED IN THE MANNER DIRECTED HEREIN BY THE UNDERSIGNED SHAREHOLDER. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES NAMED ON THE REVERSE SIDE AND AS SAID PROXIES DEEM ADVISABLE ON SUCH MATTERS AS MAY COME BEFORE THE MEETING.

AMTECH SYSTEMS, INC. MR. A. SAMPLE DESIGNATION (IF ANY) ADD1 ADD2 ADD3 ADD4 ADD5		000000 0000000000 0 0000 00000000.000 ext 000000000.000 ext 00000000.000 ext 000000000.000 ext 000000000.000 ext 000000000.000 ext	ext ext ext ext ext ext ext ext	
ADD6 [ADDRESS BAR CODE]		C 1234567890 JNT		
		[BAR CODE WITH ACCOUNT NO.]		
		☐ Mark this box with an X if you have manddress details above.	ade changes to your name or	
Annual Meeting Proxy Card				
[GRAPHIC] ELECTION OF DIRECTORS				
1. The Board of Directors recommends a vote FOR the listed in the above referenced account multiplied by five (5). Your				
01-Jong S. Whang 02-Robert T. Hass 03-Alvin L. Katz 04-Robert F. King 05-Bruce R. Thaw	For	Withhold	votes votes votes votes votes votes	
[GRAPHIC] Authorized Signatures – Sign Here – This se The undersigned agrees that the proxy holder is authorized to			nominees.	
Please sign exactly as your name appears above. When share trustee or guardian, please give full title as such. If a corporat name by an authorized person. Please return in the enclosed,	ion, sign in full corporate na			
Signature 1 - Please keep signature within the box	Signature 2	Please keep signature within the box	Date (mm/dd/yyyy)	
r 1	r	1	r / / 1	