

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 [X]
Filed by a Party other than the Registrant []

Check the appropriate box:

- [] Preliminary Proxy Statement [] Confidential, For Use of the
 [X] Definitive Proxy Statement Commission Only (as permitted
 [] Definitive Additional Materials by Rule 14a-6(e)(2))
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Rule 14a-11(c) or Rule 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.

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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
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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 29, 2002

Dear Shareholder:

The 2002 Annual Meeting of Shareholders of AMTECH SYSTEMS, INC., an Arizona corporation (the "Company"), will be held at the Hilton Phoenix Airport Hotel, 2435 South 47th Street, Phoenix, Arizona, on March 29, 2002, at 10:00 a.m., Mountain Standard Time, for the following purposes:

1. To elect five (5) directors to serve for one-year terms;
2. To approve an amendment to the Company's 1998 Stock Option Plan to increase the aggregate number of shares available for issuance thereunder from 300,000 to 500,000;

3. To transact any 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 31, 2002, as the record date (the "Record Date") for the determination of shareholders entitled to notice of and to vote at the meeting or any postponement or adjournment thereof. Shareholders are reminded that their shares of Company common stock can be voted at the meeting only if they are present at the meeting in person or by valid proxy. A copy of the Company's 2001 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 proposals and the reasons why the Board of Directors encourages you to vote for approval of such proposals.

By Order of the Board of Directors

/s/ Robert T. Hass

Robert T. Hass, Secretary

Tempe, Arizona
February 1, 2002

IMPORTANT: IT IS IMPORTANT THAT YOUR SHAREHOLDINGS 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

This Proxy Statement is being furnished to shareholders of Amtech Systems, Inc., an Arizona corporation (the "Company"), in connection with the solicitation of proxies by the Board of Directors for use at the 2002 Annual Meeting of Shareholders of the Company to be held on March 29, 2002, at 10:00 a.m., Mountain Standard 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 were mailed to shareholders entitled to vote at the Annual Meeting on or about February 1, 2002.

STOCKHOLDERS ENTITLED TO VOTE

Only shareholders of record at the close of business on January 31, 2002 (the "Record Date"), are entitled to notice of and to vote at the Annual Meeting and at any and all adjournments or postponements of the meeting. On the Record Date, 2,650,921 shares of common stock, \$.01 par value (the "Common Stock"), were issued and outstanding. Except as set forth below with respect to the ability to cumulate votes for directors, each share of Common Stock entitles its owner to one vote. The holders of a majority of shares entitled to vote at the meeting must be present in person or represented by proxy in order to constitute a quorum for all matters to come before the 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 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 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 the 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 stockholders may vote in person at the meeting (unless they are street name holders without a legal proxy). If your shares are held in a street name, you will receive instructions from the holder of record that you must follow in

order for your shares to be 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 the Proxy Statement are properly presented at the meeting, the Proxies will use their own judgment to determine how to vote your shares. If the 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 instructions prior to that time.

VOTING CHOICES

For each of the proposals you may vote one of the following ways:

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

Proxies that are signed and returned with no instructions will be voted FOR election of all Director nominees and FOR the proposal to approve an amendment to the Company's 1998 Stock Option Plan to increase the aggregate number of shares available for issuance under the Plan from 300,000 to 500,000.

CHANGING YOUR VOTE

You may change your vote at any time before the proxy is exercised. A shareholder can revoke a proxy by:

- * Delivering to our corporate Secretary a written instrument of revocation bearing a date later than the date of the proxy.
- * Duly executing and delivering to our corporate Secretary a proxy relating to the same shares bearing a later date.
- * Voting by ballot at the meeting, provided that the shareholder notifies the Secretary of the 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 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 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.

COST OF THIS PROXY SOLICITATION

We will pay the cost 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. Proxies may also be solicited by officers and directors of the Company 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 these services is estimated to be \$1,600.

ANNUAL REPORT

The Company's Annual Report to Shareholders for the fiscal year ended September 30, 2001 ("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. This Annual Report is not incorporated into this Proxy Statement and is not considered Proxy soliciting material.

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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 2: | Amendment to 1998 Stock Option Plan | The affirmative vote of a majority of the shares of Common Stock present, in person or by proxy, at the Annual Meeting will be required to approve the proposal to amend |

PROPOSALS

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, the Board will 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 of the Company 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 the Board of Directors.

NOMINEES OF THE BOARD

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

Jong S. Whang
Robert T. Hass
Donald F. Johnston
Alvin Katz
Bruce R. Thaw

All of these nominees are currently serving on the Board. Each of the nominees has agreed to be named in this Proxy Statement and to serve if elected. See below for information regarding each of the nominees listed above.

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

If any nominee should become unavailable for any reason, which the Board of Directors does not anticipate, the proxy will be voted for any substitute nominee or nominees who may be selected by the Board of Directors prior to or at the Annual Meeting, or, if no substitute is selected by the Board of Directors prior to or at the Annual Meeting, for a motion to reduce the present membership of the Board to the number of nominees available and to create an additional vacancy to be filled by the Board of Directors. 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, including biographical data for at least the last five years.

NAME	AGE	POSITION WITH THE COMPANY
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Jong S. Whang	55	President, Chief Executive Officer and Director Vice President-Finance, Chief Financial Officer,
Robert T. Hass	51	Treasurer, Secretary and Director
Donald F. Johnston	73	Director
Alvin Katz	71	Director
Bruce R. Thaw	48	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 development of new products and business opportunities in that industry. He has twenty-eight 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 Siltronic, Inc., initially as a technician working with chemical vapor deposition (CVD) 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 found the Company.

ROBERT T. HASS has been Vice President-Finance, Chief Financial Officer, Treasurer and Secretary of the Company since June 3, 1992. Mr. Hass has served as a Director of the Company since February 29, 1996. From 1991 until May 1992, he operated a financial consulting practice under the name of Hass Financial Consulting Services. From 1985 to 1991, Mr. Hass served as Director of Accounting Services and then Controller for Lifeshares Group, Inc., a holding company that owned and operated real estate development and insurance subsidiaries, and from 1988 to 1991 served as Controller and Chief Accounting Officer of some of Lifeshares Group's subsidiaries. From 1984 to 1985, he served as Vice President-Finance and Treasurer of The Victorio Company, a privately owned holding company which owned and operated agriculture, chemical, commercial real estate brokerage, marketing research and commodities futures brokerage businesses. From 1977 to 1984, he was employed in various capacities including Vice President, Chief Financial Officer and Treasurer by Altamil Corporation, then a public company, which manufactures truck equipment, wire-bound containers, and precision aluminum forgings. From 1972 to 1977, he was employed as an auditor with Ernst & Ernst, now known as Ernst & Young. He is a Certified Public Accountant.

DONALD F. JOHNSTON has been a non-employee Director of the Company since April 9, 1994, and also served as a Director from March 1983 to December 1992. From 1985 to March 1993, he served as President and Chief Executive Officer of JAI, Inc., a management-consulting firm. From 1985 to March 1993, when he retired, he acted as marketing and management consultant to companies in the electronics industry. From November 1983 until October 1985, he served as President of Process Control, Inc. of Tempe, Arizona. He has held senior

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management positions with Montgomery Ward & Co. and the Hotpoint Division of the General Electric Company. He has also served as a Vice-President of B.F. Goodrich, Vice-President of Marketing of the Philco Ford Division of the Ford Motor Company and Executive Vice-President of CTV. Mr. Johnston also served as President and Chief Executive Officer of Mirco Electronics, Amstar Electronics and Hera Investment Co.

ALVIN KATZ has been a Director of the Company since May 1, 1995. Since 1981, he has been 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 company engaged in the manufacture of pollution monitoring equipment. From 1957 to 1976, Mr. Katz held various managerial position with United Parcel Service, including District Manager and Corporate Manager of Operations Planning, Research and Development. He is also a Director of Blimpie International, a fast food franchiser, Nastech Pharmaceutical Company, Inc., a company engaged in research, development and marketing of nasally delivered pharmaceuticals, and President of BMAC, a biomedical automation company, all of which are publicly held corporations.

BRUCE R. THAW has been a Director of the Company since May 1, 1995. Mr. Thaw has been a practicing attorney since 1978. Since 1995, Mr. Thaw has been a self-employed attorney, and from 1984 to 1995, he was a partner in the law firm of Abrams & Thaw. Mr. Thaw is also a Director of Information Resource Engineering, Inc., a publicly traded company that designs, manufactures and markets computer network security systems and products, and Nastech Pharmaceutical Company, Inc. Mr. Thaw does not render legal services to the Company.

PROPOSAL NO. 2 --- APPROVAL OF AMENDMENT TO
AMTECH SYSTEMS, INC. 1998 STOCK OPTION PLAN

GENERAL

At the Annual Meeting, the Company will seek shareholder approval of an amendment to the Company's Stock Option 1998 Plan (the "Plan") to increase the number of shares authorized for issuance under the Plan from 300,000 to 500,000. The Board of Directors has approved the amendment to the Plan and has directed that the amendment be submitted as a proposal for shareholder approval at the Annual Meeting. The Plan was originally adopted in January 1998. As of the date of this Proxy Statement, an aggregate of 283,750 options have been granted under the Plan.

AMENDMENT TO THE PLAN

In December 2001, the Board of Directors reviewed the options remaining in the option pool for the Plan and determined it was appropriate to increase the number of shares authorized for issuance thereunder. Therefore, the Board adopted an amendment to the Plan that would increase the number of shares authorized for issuance under the Plan from 300,000 to 500,000. The Board believes that such increase is required to give the Company the ability to grant additional options to new and existing employees. The Plan is designed to induce persons of outstanding ability and potential to join and remain with the

Company, by encouraging, motivating and enabling employees to acquire stock ownership in the Company, and by providing the participating employees with an additional incentive to promote the success of the Company through the grant of options to purchase shares of the Company's Common Stock.

SUMMARY OF THE PLAN

The following summary of the Plan does not purport to be complete, and is subject to and qualified in its entirety by reference to the text of the Plan.

ADMINISTRATION. The Plan is administered by the Board of Directors of the Company or a Committee appointed by the Board of Directors (hereinafter referred to as the "Board"). The Board has full authority, subject to the provisions of the Plan, to award incentive stock options and nonstatutory stock options ("Options"). Subject to the provisions of the 1998 Plan, the Board determines in its sole discretion, among other things, the persons to whom from time to time Options may be granted ("Participants"), the number of shares subject to each

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Option, exercise prices under the Options, any restrictions or limitations on such Option including vesting, exchange, deferral, surrender, cancellation, acceleration, termination, or forfeiture provisions related to such Options. The interpretation and construction by the Board of any provisions of, or the determination of any questions arising under, the 1998 Plan or any rule or regulation established by the Board pursuant to the 1998 Plan, shall be final, conclusive and binding on all persons interested in the Plan.

SHARES SUBJECT TO THE PLAN. The Plan currently authorizes the granting of Options the exercise of which would allow up to a maximum of 300,000 shares of the Common Stock to be acquired by the Participants of said Options. In order to prevent the dilution or enlargement of the rights of the Participants under the Plan, the number of shares of Common Stock authorized by the Plan and the number of shares subject to outstanding options are subject to adjustment in the event of any increase or decrease in the number of shares of outstanding Common Stock resulting from a stock dividend, stock split, combination of shares, merger, reorganization, consolidation, recapitalization or other change in the corporate structure affecting the Company's capital stock. If any Option granted under the Plan is forfeited or terminated, the shares of Common Stock that were underlying such Option shall again be available for distribution in connection with Options subsequently granted under the Plan.

ELIGIBILITY. Subject to the provisions of the Plan, Options may be granted to full-time employees of the Company or its subsidiaries.

EFFECTIVE DATE AND TERM OF PLAN. The Plan was approved by the Company's shareholders on March 20, 1998, and was deemed effective January 31, 1998, the date on which it was adopted by the Board of Directors. No option may be granted after January 30, 2008. The Plan will terminate ten (10) years after the effective date of the Plan, subject to earlier termination by the Board. No Option may be granted under the Plan after the termination date, but Options previously granted may extend beyond such date.

NATURE OF OPTIONS. The Plan provides for the grant of options, which may be non-qualified options, incentive stock options, or any combination of the foregoing. In general, options granted under the Plan are not transferable and expire eleven years after the date of grant (ten years in the case of incentive stock options). The per share exercise price of an incentive stock option granted the Plan may not be less than the fair market value of the Common Stock on the date of grant. Incentive stock options granted to persons who have voting control over 10% or more of the Company's capital stock are granted at 110% of the fair market value of the underlying shares on the date of grant and expire five years after the date of grant.

EXERCISE OF OPTIONS. The Plan provides the Board with the discretion to determine when options granted thereunder will become exercisable. Generally, such options may be exercised after a period of time specified by the Board at any time prior to expiration, so long as the optionee remains employed by the Company. No option granted under the Plan is transferable by the optionee other than by will or the laws of descent and distribution, and each option is exercisable during the lifetime of the optionee only by the optionee.

AGREEMENTS. Options granted under the Plan will be evidenced by agreements consistent with the Plan in such form as the Board may prescribe. Neither the Plan nor agreements thereunder confer any right to continued employment upon any Participant.

AMENDMENTS TO THE PLAN. The Board may at any time, and from time to time, amend, modify or terminate any of the provisions of the Plan, but no amendment, modification or termination shall be made which would impair the rights of a Participant under any agreement theretofore entered into pursuant to an Option grant, without the Participant's consent.

FEDERAL INCOME TAX CONSIDERATIONS. The discussion that follows is a summary, based upon current law, of some of the significant federal income tax considerations relating to awards under the Plan. The following discussion does

not address state, local or foreign tax consequences.

A Participant in the Plan will not recognize taxable income upon the grant or exercise of an incentive stock option except under certain circumstances when the exercise price is paid with already-owned shares of Common Stock that were acquired through the previous exercise of an incentive stock option. However, upon the exercise of an incentive stock option, the excess of the fair market

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value of the shares received on the date of exercise over the exercise price of the shares will be treated as a tax preference item for purposes of the alternative minimum tax. In order for the exercise of an incentive stock option to qualify for the foregoing tax treatment, the Participant generally must be an employee of the Company from the date the incentive stock option is granted through the date three months before the date of exercise, except in the case of death or disability, where special rules apply. The Company will not be entitled to any deduction with respect to the grant or exercise of an incentive stock option.

If shares acquired upon exercise of an incentive stock option are not disposed of by the Participant within two years from the date of grant or within one year after the transfer of such shares to the Participant (the "ISO Holding Period"), then (i) no amount will be reportable as ordinary income with respect to such shares by the Participant or recipient and (ii) the Company will not be allowed a deduction in connection with such incentive stock option or the Common Stock acquired pursuant to the exercise of the incentive stock option. If a sale of such Common Stock occurs after the ISO Holding Period has expired, then any amount recognized in excess of the exercise price will be reportable as a long-term capital gain, and any amount recognized below the exercise price will be reportable as a long-term capital loss. The exact amount of tax payable on a long-term capital gain will depend upon the tax rates in effect at the time of the sale. The ability of a Participant to utilize a long-term capital loss will depend upon the Participant's other tax attributes and the statutory limitations on capital loss deductions not discussed herein. To the extent that alternative minimum taxable income was recognized on exercise of the incentive stock option, the basis in the Common Stock acquired may be higher for determining a long-term capital gain or loss for alternative minimum tax purposes.

A "disqualifying disposition" will result if Common Stock acquired upon the exercise of an incentive stock option (except in the circumstances of a decedent's incentive stock option as described below) is sold before the ISO Holding Period has expired. In such case, at the time of a disqualifying disposition (except in the case if a Participant subject to Section 16 restrictions of the 1934 Act, as noted below), the Participant will recognize ordinary income in the amount of the difference between the exercise price and the lesser of (i) the fair market value on the date of exercise or (ii) the amount realized on disposition. If the amount realized on the sale is less than the exercise price, then the Participant will recognize no ordinary income, and the recognized loss will be reportable as a short-term capital loss. The Participant will report as a short-term capital gain, as applicable, any amount recognized in excess of the fair market value on the date of exercise, and the Company will be allowed a deduction on its federal income tax return in the year of the disqualifying disposition equal to the ordinary income recognized by the Participant. To the extent that alternative minimum taxable income was recognized on exercise of the incentive stock option, the basis in the Common Stock acquired may be higher for determining a short-term capital gain or loss for alternative minimum tax purposes.

The general rules discussed above are different if the Participant disposes of the shares of Common Stock in a disqualifying disposition in which a loss, if actually sustained, would not be recognized by the Participant. Examples of these dispositions include gifts or sales to related parties such as members of the Participant's family and corporations or entities in which the Participant owns a majority equity interest. In such circumstances, the Participant would recognize ordinary income equal to the difference between the exercise price of the Common stock and the fair market value of the Common Stock on the date of exercise. The amount of ordinary income could not be limited by the price at which the Common Stock was actually sold by the Participant.

If the Participant retires or otherwise terminates employment with the Company, other than by reason of death or permanent and total disability, an incentive stock option must be exercised within three months of such termination in order to be eligible for the tax treatment of the incentive stock options described above, provided the ISO Holding Period requirements are met. If a Participant terminates employment because of a permanent and total disability, the incentive stock option will be eligible for such treatment if it is exercised within one year of the date of termination of employment, provided the ISO Holding Period requirements are met. In the event of a Participant's death, the incentive stock option will be eligible for such treatment if exercised by the Participant's legatees, personal representatives or distributees within one year from the date of death, provided that the death occurred while the Participant was employed, within three months of the date of termination of employment or within one year following the date of termination of employment because of permanent and total disability.

In general, a Participant to whom a nonqualified option is granted will recognize no taxable income at the time of the grant. Upon exercise of a nonqualified option, the Participant will recognize ordinary income in an amount equal to the amount by which the fair market value of the Common Stock on the

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date of exercise exceeds the exercise price of the nonqualified option, and the Company will generally be entitled to a deduction equal to the ordinary income recognized by the Participant in the year the participant recognizes ordinary income, subject to the limitations of Section 162(m) of the Code.

For purposes of the "alternative minimum tax" applicable to individuals, the exercise of an incentive stock option is treated in the same manner as the exercise of a nonqualified option. Thus, a Participant must, in the year of option exercise, include the difference between the exercise price and the fair market value of the stock on the date of exercise in alternative minimum taxable income. The alternative minimum tax is imposed upon an individual's alternative minimum taxable income currently, but only to the extent that such tax exceeds the taxpayer's regular income tax liability for the taxable year.

The Company is required to withhold certain income taxes from Participants upon exercises of nonqualified options. The Company will be entitled to a business expense deduction for both financial statement and federal income tax purposes equal to the ordinary income recognized by the Participant in the year the Participant recognizes ordinary income from the exercise of nonqualified options.

In addition to the foregoing federal tax consequences, the exercise, ultimate sale or other disposition of options by Participants will in most cases be subject to state income taxation.

VOTE REQUIRED

Assuming a quorum is present at the Annual Meeting, the affirmative vote of the holders of a majority of the shares present, in person or by proxy, at the Annual Meeting, is required to approve the proposed amendment to the Plan.

THE BOARD OF DIRECTORS RECOMMENDS AND ENCOURAGES YOU TO VOTE "FOR" THE APPROVAL OF THE AMENDMENT TO THE PLAN.

INFORMATION ABOUT BOARD AND COMMITTEE MEETINGS AND DIRECTOR COMPENSATION

The Board of Directors held four (4) meetings during fiscal 2001. Overall attendance at Board and committee meetings was 100%, with the exception of Mr. Katz who attended 50% of the Audit Committee meetings held while he was a member of such committee. In the interim between Annual Meetings, the Board has the authority under the Company's Bylaws to increase or decrease the size of the Board and fill vacancies.

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

AUDIT	COMPENSATION AND OPTION	FINANCE
-----	-----	-----
A. Katz	D.F. Johnston	A. Katz
B. R. Thaw	A. Katz	B. R. Thaw
D.F. Johnston		

The Audit Committee held five (5) meetings during the 2001 fiscal year. The Audit Committee is responsible for maintaining communication between the Board, the Company's 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 Company's internal accounting controls and systems and the retention and termination of the independent auditors.

The Audit Committee is composed of outside directors who are not officers or employees of the Company or its subsidiaries. In the opinion of the Board and as "independent" is defined under the standards of the New York Stock Exchange, these directors are independent of management and free of any relationship that

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would interfere with their exercise of independent judgment as members of this committee.

The Compensation and Option Committee held three (3) meetings during the 2001 fiscal year. The Compensation and Option Committee makes recommendations concerning officer compensation, employee benefit programs and retirement plans.

The Finance Committee held two (2) meetings during the 2001 fiscal year. The Finance Committee is responsible for communication between the Board, the Company's lender or prospective lender(s) and other financial sources and members of financial management.

All current committee members are expected to be nominated for re-election at a Board meeting to be held following the Annual Meeting of Shareholders.

DIRECTORS' COMPENSATION

Directors who are full-time employees of the Company receive no additional compensation for serving as directors. Directors who are not employees of the Company 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 the fair market value of Common Stock on the date of grant and each option has a term of ten years and becomes 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 option was exercisable on the date the director ceased to be a director. In addition, Mr. Katz and Mr. Thaw earned \$16,500 and \$1,000, respectively, in consulting fees related to projects performed on behalf of the Finance Committee.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation and Option Committee is composed of Messrs. Johnston and Katz, neither of whom is an officer or employee 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, 2001, 2000 and 1999 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

<TABLE>
<CAPTION>

NAME AND PRINCIPAL POSITION	FISCAL YEAR	ANNUAL COMPENSATION (1)		LONG-TERM COMPENSATION	ALL OTHER STOCK AWARDS	COMPENSATION (4)
		SALARY (2)	OTHER ANNUAL BONUS (3)	RESTRICTED COMPENSATION		
Jong S. Whang President and Chief Executive Officer	2001 2000 1999	\$168,044 175,817 139,200	\$ 69,397 122,622 12,292	-- -- --	-- -- --	\$ 16,656 \$ 1,242 --
Robert T. Hass Vice President- Finance	2001 2000 1999	111,059 99,750 85,500	\$ 1,468 9,500 --	-- -- --	-- -- --	\$ 2,911 615 --

</TABLE>

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- (1) Neither executive officer named in the Summary Compensation Table received personal benefit prerequisite in excess of the lesser of \$50,000 or 10% of their aggregate salary and bonus.
- (2) For fiscal 1999, Mr. Whang voluntarily reduced his salary by 20% to \$130,200. Effective October 4, 1999, Mr. Whang's base salary was restored to that specified in his February 1997 employment agreement. Effective March 15, 2001, Mr. Whang entered into a new five year employment agreement with the Company and received an increase in his annual base salary to \$188,402. For fiscal 2000, this column includes an accrued retrospective salary increase of \$14,250. As of April 1, 2001, Mr. Whang voluntarily reduced his salary by 20% to \$150,722 per year and Mr. Hass voluntarily reduced his salary by 15% to \$102,000 per year.
- (3) See "Employment Agreements" below for a description of how Mr. Whang's incentive compensation is determined. The amount reflected in this column in fiscal 2000 for Mr. Whang includes a discretionary bonus of \$32,550, in addition to the \$89,716 in incentive compensation earned by Mr. Whang under his February 1997 employment agreement.
- (4) Amounts for Mr. Whang and Mr. Hass consist of Company matching contributions in the Amtech Systems, Inc. 401(k) Plan. The amount for Mr. Whang includes a payment made in lieu of vacation.

OPTION GRANTS

The following table contains information regarding stock option grants during the 2001 fiscal year to the Named Executive Officers.

OPTIONS GRANTS IN LAST FISCAL YEAR

<TABLE>
<CAPTION>

NAME	INDIVIDUAL GRANTS					POTENTIAL REALIZABLE		
	SECURITIES	% OF TOTAL		STOCK		AT ASSUMED ANNUAL RATES OF		
	UNDERLYING	OPTIONS		PRICE ON		0%	5%	10%
	OPTIONS GRANTED (#)	GRANTED TO EMPLOYEES IN FISCAL 2001	EXERCISE PRICE (\$/SHARE)	DATE OF GRANT (\$/SHARE)	EXPIRATION DATE		PRICE APPRECIATION FOR OPTION TERM (4)	
Jong S. Whang	150,000 (1)	61.5%	\$6.53 (3)	\$6.53	3/14/11	-0-	\$616,002	\$
Robert T. Hass	25,000 (2)	10.3%	\$5.88 (3)	\$5.88	3/15/11	-0-	\$ 92,448	\$

- (1) All options were granted to Mr. Whang on March 15, 2001 under the Company's 1998 Stock Option Plan. The options were granted concurrently with the execution of a new employment agreement with Mr. Whang in March 2001. The options granted become exercisable as follows: 20% on March 15, 2002, and an additional 20% on each on-year anniversary thereafter. 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 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.
- (2) All options were granted to Mr. Hass on March 16, 2001 under the applicable Stock Option Plan. The options granted become exercisable as follows: 20% on March 16, 2001 and an additional 20% on each one-year anniversary thereafter.
- (3) The exercise price was set at 100% of closing price of the Company's Common Stock on grant day (March 15, 2001 for options granted to Mr. Whang and March 16, 2001 for options granted to Mr. Hass), as reported on the NASDAQ National Market.
- (4) Reflects the value of the stock option on the date of grant assuming (i) for the 0% column, no appreciation in the Company's stock price from the date of grant over the term of the option, (ii) for the 5% column, a five percent annual rate of appreciation in the Company's stock price over the term of the option, and (iii) for the 10% column, a ten percent annual rate of appreciation in the Company's stock price over the term of the option, in each case without any discounting to present value. The actual gains, if

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any, on stock option exercises are dependent upon the future performance of the Company's Common Stock. Accordingly, the amounts reflected in this table may not necessarily be indicative of the actual results obtained.

OPTION EXERCISES

There were no exercises of stock options during fiscal 2001 by any of the Named Executive Officers.

EMPLOYMENT AND SEVERANCE AGREEMENTS

On March 15, 2001, the Company entered into a five (5) year employment agreement with its President, Jong S. Whang, which agreement replaced an earlier agreement entered into in February 1997. Under the terms of the agreement, Mr. Whang is entitled to an annual base salary of \$188,402, and base salary increases of at least 5% to be determined by the Board of Directors at the end of each year of the agreement. Mr. Whang is also entitled to receive annual incentive cash compensation of up to 50% of his base salary, based on the following 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 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. 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 requirement.

SEVERANCE AND CHANGE OF CONTROL PROVISIONS

If Mr. Whang 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 which 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, we 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 which he could earn for the fiscal year in which the termination date occurs. In addition, all stock options held by him but not vested would vest immediately.

REPORT OF COMPENSATION 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 intent 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

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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 its base salary 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 Company's 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.

2001 CEO COMPENSATION

The CEO's annual base salary increased in March of fiscal 2001 to \$188,402 from \$179,400 in fiscal 2000, pursuant to the terms of the March 15, 2001 employment agreement entered into by the Company and the CEO. The CEO's increased 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 new employment agreement, the Board of Directors approved an incentive compensation plan for the CEO, which provides for an annual cash bonus equal to 2% of the annual earning 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 50% of Mr. Whang's base salary for the applicable fiscal year. The CEO earned a bonus of \$69,397 in 2001 pursuant to such incentive compensation plan. The CEO's employment agreement with the Company incorporates the incentive compensation plan described above. See "Employment and Severance Agreements," above.

RESPECTFULLY SUBMITTED,

Donald F. Johnston
Alvin Katz

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AUDIT COMMITTEE REPORT

In accordance with its written charter adopted by the Board of Directors on June 1, 2000, a copy of which was attached as an exhibit to the Company's 2001 Annual Meeting 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 the Board of Directors that the Company include the audited financials in its Annual Report on Form 10-K and overseeing compliance with the Securities and Exchange Commission requirements for disclosure of auditors' services and activities.

REVIEW OF AUDITED FINANCIAL STATEMENTS

The Audit Committee has reviewed the Company's audited financial statements for the fiscal year ended September 30, 2001, as prepared by Arthur Andersen LLP, the Company's independent auditors, and has discussed these financial statements with management. In addition, the Audit Committee has discussed with Arthur Andersen the matters required to be discussed by Statement of Auditing Standard 61 regarding the codification of statements on auditing standards. Furthermore, the Audit Committee has received the written disclosures and the letter from Arthur Andersen required by the Independence Standards Board Standard No. 1 and has discussed with Arthur Andersen its independence.

RECOMMENDATION

Based upon the foregoing review and discussion, the Audit Committee recommended to the Board of Directors that the audited financial statements for the fiscal year ended September 30, 2001 be filed with the Company's annual report on Form 10-K.

RESPECTFULLY SUBMITTED,

Alvin Katz
Bruce R. Thaw
Donald F. Johnston

DISCLOSURE OF AUDIT AND NON-AUDIT FEES

AUDIT FEES

The aggregate fees billed by Arthur Andersen LLP for professional services rendered for the audit of the Company's annual financial statements for the fiscal year ended September 30, 2001 and for the review of the financial statements included in the Company's Quarterly Reports on Form 10-Q for the fiscal year were \$182,000.

FINANCIAL INFORMATION SYSTEMS DESIGN AND IMPLEMENTATION FEES

During fiscal 2001, the Company did not engage its independent public accountants to perform financial information systems design and implementation.

ALL OTHER FEES OF INDEPENDENT PUBLIC ACCOUNTANTS

During fiscal 2001, all other fees of the Company's independent public accountants amounted to \$11,385, which primarily consisted of accounting and tax consultation services.

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

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of the Company's Common Stock as of January 21, 2002, by (i) each director of the Company, (ii) each executive officer of the Company, including the Named Executive Officers, and (iii) all executive officers and directors of the Company as a group. To the Company's knowledge, there are no persons known to the Company who beneficially own five percent (5%) or more of the Company's outstanding 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.

NAME AND ADDRESS (1) (2)	NUMBER OF SHARES BENEFICIALLY HELD (3)	PERCENT OF OWNERSHIP (3)
Jong S. Whang	156,722 (4)	5.8%
Robert T. Hass	9,375 (5)	*
Donald F. Johnston	7,292 (6)	*
Alvin Katz	81,667 (7)	3.1%
Bruce R. Thaw	17,667 (7)	*
Directors and Executive Officers of the Company as a group (5 persons)	272,723 (8)	10.3%
Robert Sussman	202,500 (9)	7.6%

* Less than 1%.

- (1) The address for each person listed in this table is c/o Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281.
- (2) 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. Johnston, Katz and Thaw are presently directors.
- (3) The share amounts and percentages shown include the shares of Common Stock actually owned as of January 21, 2002, and the 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 21, 2002, 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. The amounts and percentages are based upon 2,650,921 shares of Common Stock outstanding as of January 21, 2002.
- (4) Includes (i) 9,488 shares held jointly with Mr. Whang's spouse and (ii) 72,267 shares issuable upon the exercise of presently exercisable options; 41,517 shares issuable at an exercise price of \$1.126 per share; 750 shares issuable at an exercise price of \$1.50 per share; and the balance of 30,000 shares issuable at \$6.53 per share.
- (5) Includes 9,250 shares issuable upon exercise of presently exercisable options; 4,250 shares issuable at an exercise price of \$1.126 per share; and the balance of 5,000 shares issuable at an exercise price of \$5.88 per share.
- (6) Includes 6,667 shares issuable upon exercise of presently exercisable options; 3,000 shares issuable at an exercise price of \$1.126 per share; 2,000 shares issuable at an exercise price of \$6.813 per share; and the balance of 1,667 shares issuable at an exercise price of \$5.88 per share.

- (7) Includes 17,667 shares issuable upon exercise of presently exercisable options; 11,000 shares issuable at an exercise price of \$1.126 per share; 3,000 shares issuable at an exercise price of \$1.50 per share; 2,000 shares issuable at an exercise price of \$6.813 per share; and the balance of 1,667

shares issuable at an exercise price of \$5.88 per share.

(8) Includes 123,518 shares issuable upon exercise of presently exercisable options; 70,767 shares issuable at an exercise price of \$1.126 per share; 6,750 shares issuable at an exercise price of \$1.50 per share; 6,000 shares issuable at an exercise price of \$6.813 per share; 30,000 shares issuable at an exercise price of \$6.53 per share; and the balance of 10,001 shares issuable at an exercise price of \$5.88 per share.

(9) Includes 2,500 shares jointly owned with Mr. Sussman's spouse.

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 the Company's outstanding Common Stock, to file certain reports of ownership with the Securities and Exchange Commission (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 its review of such forms received by it, or written representations from certain reporting persons, the Company believes that between October 1, 1999 and September 30, 2000 all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with, except that reports were not timely filed with respect to the automatic option grant to directors arising under the Company's Non-employee Directors Stock Option Plan and the options grants reflected in this Proxy Statement.

COMPARISON OF STOCK PERFORMANCE

The following graph assumes that \$100 was invested on October 1, 1996 in each of the following: the Company's Common Stock, the NASDAQ Composite Index and the NASDAQ Industrial Index.

VALUE OVER TIME, ASSUMING \$100 INVESTED

	Amtech Stock	NASDAQ Composite	NASDAQ Industrial
9/30/96	\$ 100.00	\$ 100.00	\$ 100.00
9/30/97	\$ 56.58	\$ 137.39	\$ 130.86
9/30/98	\$ 15.79	\$ 138.06	\$ 98.17
9/30/99	\$ 21.05	\$ 223.83	\$ 153.14
9/30/00	\$ 157.89	\$ 299.36	\$ 194.94
9/30/01	\$ 52.11	\$ 122.16	\$ 103.77

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company did not have any transactions during fiscal 2001 with any director, director nominee, executive officer, security holder known to the Company to own of record or beneficially more than 5% of the Company's Common Stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded \$60,000.

15 OTHER MATTERS

ANNUAL REPORT

The Annual Report of the Company for the fiscal year ended September 30, 2001, 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 giving notice of revocation to the Company in writing or by executing and delivering to the Company a later dated proxy.

INDEPENDENT AUDITORS

The Board of Directors has selected Arthur Andersen LLP ("Andersen") as the Company's independent public accountants for the fiscal year ending September 30, 2002. Andersen has audited the Company's financial statements since 1983. A representative of Andersen is expected to be present at the Annual Meeting with the opportunity to make a statement if he or she so desires and to be available to respond to appropriate questions.

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 2003, must be received by the Company's Secretary, at the Company's offices, not later than September 30, 2002, 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 2003 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 December 13, 2002, 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 2002 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.

By Order of the Board of Directors

/s/ Robert T. Hass

Robert T. Hass, Secretary

Tempe, Arizona
February 1, 2002

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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 1, 2002, and hereby appoints Jong S. Whang or Robert T. Hass and each 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 Hilton Phoenix Airport Hotel, 2435 South 47th Street, Phoenix, Arizona on March 29, 2002, at 10:00 a.m., Mountain Standard 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 below.

1. ELECTION OF DIRECTORS FOR all nominees listed below (except as marked to the contrary below): Jong S. Whang Robert T. Hass Donald F. Johnston Alvin Katz Bruce R. Thaw

WITHHOLD AUTHORITY to vote for all nominees listed above

INSTRUCTIONS: To withhold authority to vote for any individual nominee, write that nominee's name in the space provided below:

The undersigned agrees that the proxy holder is authorized to cumulate votes in the election of directors and to vote for less than all of the nominees.

2. TO APPROVE AN AMENDMENT TO THE COMPANY'S 1998 STOCK OPTION PLAN TO INCREASE THE NUMBER OF SHARES AVAILABLE FOR ISSUANCE THEREUNDER FROM 300,000 TO 500,000.

FOR

AGAINST

ABSTAIN

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 ABOVE, FOR THE PROPOSAL TO INCREASE THE NUMBER OF SHARES AVAILABLE FOR ISSUANCE UNDER THE COMPANY'S 1998 STOCK OPTION PLAN AND AS SAID PROXIES DEEM ADVISABLE ON SUCH MATTERS AS MAY COME BEFORE THE MEETING.

Dated: _____, 2002

Please sign exactly as your name appears on the front of this proxy card. When shares are held in common or in joint tenancy, both should sign. When signing as attorney, as executor, administrator, trustee or guardian, please give full title as such. If a corporation, sign in full corporate name by President or other authorized officer. If a partnership, please sign in partnership name by an authorized person.

SIGNATURES:

Please return in the enclosed, postage-paid envelope.