

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 14A
(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934 (Amendment No.)

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

Check the appropriate box:

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

1) Title of each class of securities to which transaction applies:

2) Aggregate number of securities to which transaction applies:

3) Per unit price or other underlying value of transaction computed pursuant
to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is
calculated and state how it was determined):

4) Proposed maximum aggregate value of transaction:

5) Total fee paid:

 [] Fee paid previously with preliminary materials:

 [] Check box if any part of the fee is offset as provided by Exchange Act Rule
0-11(a) (2) and identify the filing for which the offsetting fee was paid
previously. Identify the previous filing by registration statement number, or
the form or schedule and the date of its filing.

- 1) Amount previously paid: -----
2) Form, Schedule or Registration Statement No.: -----
3) Filing Party: -----
4) Date Filed: -----

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

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON FEBRUARY 26, 1999

To Our Shareholders:

The 1999 Annual Meeting of Shareholders of AMTECH SYSTEMS, INC., an Arizona
corporation (the "Company"), will be held at the Wyndham Garden Hotel, 427 N.
44th Street, Phoenix, Arizona, on February 26, 1999, at 3:00 p.m., Mountain

Standard time, for the following purposes:

1. To elect five (5) directors to serve for one year terms;
2. To consider and act upon a proposal to amend the Company's Articles of Incorporation to effect a reverse stock split of one share of Common Stock of the Company for every two shares of Common Stock that are issued and outstanding.
3. To transact such other business as may properly come before the meeting or any postponement(s) or adjournment(s) thereof. Management is presently aware of no other business to come before the meeting.

The Board of Directors has fixed the close of business on January 29, 1999, 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. Shares of Common Stock can be voted at the meeting only if the holder is present at the meeting in person or by valid proxy. A copy of the Company's 1998 Annual Report, which includes 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

Robert T. Hass, Secretary

Tempe, Arizona
January 31, 1999

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 1999 Annual Meeting of Shareholders of the Company to be held on February 26, 1999, at 3:00 p.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 Card are being mailed on or about January 31, 1999.

SOLICITATION AND VOTING OF PROXIES

Only shareholders of record at the close of business on January 29, 1999 (the "Record Date") are entitled to notice of and to vote at the Annual Meeting or any adjournment or postponement thereof. On the Record Date, 4,232,632 shares of Common Stock, \$.01 par value (the "Common Stock"), were issued and outstanding. Each holder of Common Stock is entitled to one vote, exercisable in person or by proxy, for each share of the Company's Common Stock held of record on the Record Date.

At the Annual Meeting, five (5) directors are to be elected to serve for a term of one year or until their respective successors are elected and qualified. 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 each 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.

All valid proxies received before the Annual Meeting and not revoked will

be exercised. All shares represented by proxy will be voted, and where a shareholder specifies by means of his or her proxy a choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specifications so made. If the signed proxy is returned without instructions and authority to vote is not specifically withheld, the persons named in the proxy solicited by the Board of Directors intend to vote for the election of the nominees for director listed below and for the proposal to amend the Company's Articles of Incorporation. Abstentions and broker non-votes will be included in the determination of the number of shares represented for a quorum, and have the same effect as "no" votes in determining whether the proposals are approved. Proxies may be revoked at any time prior to the time they are voted by: (a) delivering to the Secretary of the Company a written instrument of revocation bearing a date later than the date of the proxy; or (b) duly executing and delivering to the Secretary a subsequent proxy relating to the same shares; or (c) attending the meeting and voting in person, 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. In order to vote their shares in person at the meeting, shareholders who own their shares in "street name" must obtain a special proxy card from their broker.

The cost of soliciting proxies, including the cost of preparing and mailing the Notice and Proxy Statement, will be paid by the Company. Solicitation will be primarily by mailing this Proxy Statement to all shareholders entitled to vote at the meeting. Proxies may be solicited by officers and directors of the Company personally or by telephone or facsimile, without additional compensation. The Company may reimburse brokers, banks and others holding shares in their names for others for the cost of forwarding proxy materials and obtaining proxies from beneficial owners.

The Board of Directors does not know of any matters other than the election of directors and the proposal to amend the Company's Articles of Incorporation that are expected to be presented for consideration at the Annual Meeting. However, if other matters properly come before the meeting, the persons named in the accompanying proxy intend to vote thereon in accordance with their judgment.

ELECTION OF DIRECTORS
(PROPOSAL ONE)

GENERAL INFORMATION

The present terms of the Company's current directors, Jong S. Whang, Robert T. Hass, Donald F. Johnston, Alvin Katz and Bruce R. Thaw, expire upon the election and qualification of their successors at the Company's 1999 Annual Meeting of Shareholders. The Board of Directors has nominated each of the current directors as nominees for election as directors in the election to be held at the Annual Meeting.

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, NOMINEES AND OFFICERS

The following table sets forth information regarding the officers, directors and director nominees of the Company, including biographical data for at least the last five years.

NAME ----	AGE ---	POSITIONS WITH THE COMPANY -----
Jong S. Whang	53	President, Chief Executive Officer and Director
Robert T. Hass	48	Vice President-Finance, Chief Financial Officer, Treasurer, Secretary and Director
Donald F. Johnston	73	Director
Alvin Katz	69	Director
Bruce R. Thaw	46	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-five 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 (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, a sole proprietorship. From 1985 to 1991, Mr. Hass served as Director of Accounting Services and then Controller for Lifeshares Group, Inc., a holding company which owned and operated real estate development and insurance subsidiaries, and from 1988 to 1991 served as Controller and Chief Accounting Officer of some of those subsidiaries. From 1984 to 1985, he served as Vice President-Finance and Treasurer of The Victorio

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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, wirebound 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 Director of the Company since April 9, 1994, and also served as a Director from March 1983 to December 1992. He is not otherwise employed by the Company. 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 was President of Process Control, Inc. of Tempe, Arizona. He has held senior management positions with Montgomery Ward & Co. and the Hotpoint Division of the General Electric Company. He has also served as the Vice-President of B.F. Goodrich and the Philco Ford Division of the Ford Motor Company. Mr. Johnston also served as President of Mirco, 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 was employed by United Parcel Service holding various managerial positions, including District Manager and Corporate Manager of Operations Planning, Research and Development. He is also a Director of Blimpie International, a fast food franchisor, Nastech Pharmaceutical Company, Inc., a company engaged in research, development and marketing of nasally delivered pharmaceuticals, BCT International, Inc., a franchisor of wholesale thermography printing plants, OZO Diversified Technology, Inc., a manufacturer of depaneling equipment for the semiconductor industry, and Micron Instruments, Inc., a manufacturer of infrared temperature measurement devices, 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., a publicly traded company engaged in the research, marketing and development of pharmaceutical products. Mr. Thaw does not render legal services to the Company.

BOARD AND COMMITTEE MEETINGS

During the 1998 fiscal year, there were five (5) meetings of the Board of Directors. No director attended less than 75% of the Board meetings while serving as such director or less than 75% of all committee meetings on which he served as a committee member.

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
----	-----	-----
B.R. Thaw	D.F. Johnson	A. Katz
D.F. Johnston	A. Katz	B.R. Thaw

The Audit Committee held two (2) meetings during the 1998 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 Compensation and Option Committee held one (1) meeting during the 1998 fiscal year. The Compensation and Option Committee makes recommendations concerning officer compensation, employee benefit programs and retirement plans.

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The Finance Committee held one (1) meeting during the 1998 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.

COMPENSATION OF DIRECTORS

Directors who are full-time employees of the Company receive no additional compensation for serving as directors. Non-employee directors receive 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 6,000 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 the 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.

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.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

SECURITY OWNERSHIP OF MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of the Company's Common Stock as of January 20, 1999, by (i) each director and each nominee for director of the Company, (ii) certain of the Company's executive officers (the "Named Executive Officers"), and (iii) all executive officers and directors as a group. 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 13(d)-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	186,410 (4)	4.3%
Bruce R. Thaw	41,000 (5)	1%
Donald F. Johnston	15,250 (6)	*
Robert T. Hass	14,000 (7)	*
Alvin Katz	139,000 (8)	3.3%
Directors and Executive Officers of the Company as a group (5 persons)	395,660 (9)	9.3%

* 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.

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(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 shares and percentages shown include the shares of Common Stock

actually owned as of January 20, 1999, 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 20, 1999 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) 18,976 shares held jointly with Mr. Whang's spouse and (ii) 83,034 shares issuable upon the exercise of presently exercisable options with an exercise price of \$.56 per share.
- (5) Includes 12,000 shares issuable upon exercise of presently exercisable options with an exercise price of \$.56 per share, and warrants to purchase 4,000 shares of Common Stock at an exercise price of \$2.25 per share.
- (6) Includes 14,000 shares issuable upon the exercise of presently exercisable options with an exercise price of \$.56 per share.
- (7) Includes 1,000 shares issuable upon the exercise of presently exercisable options with an exercise price of \$.56 per share.
- (8) Includes 14,000 shares issuable upon the exercise of presently exercisable options with an exercise price of \$.56 per share.
- (9) Includes 126,034 shares issuable upon exercise of presently exercisable options and 4,000 shares issuable upon exercise of outstanding warrants.

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, 1997 and September 30, 1998 all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with, except that one report was not timely filed to reflect the automatic option grant to Mr. Katz arising under the Company's Non-employee Directors Stock Option Plan.

EXECUTIVE COMPENSATION

The following table sets forth annual and long-term compensation for services in all capacities to the Company for the fiscal years ended September 30, 1998, 1997 and 1996, of 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 (the "Named Executive Officers").

SUMMARY COMPENSATION TABLE

<TABLE>
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NAME AND PRINCIPAL POSITION	FISCAL YEAR	ANNUAL COMPENSATION			LONG-TERM COMPENSATION	
		SALARY	BONUS (1)	OTHER ANNUAL COMPENSATION (2)	RESTRICTED STOCK AWARDS	ALL OTHER COMPENSATION (3)
Jong S. Whang President and Chief Executive Officer	1998	\$167,147	\$ 0	--	--	\$ 3,037
	1997	139,615	33,994(1)	--	--	3,693
	1996	100,000	59,870	--	--	3,106
Robert T. Hass Vice President-Finance	1998	\$ 96,105	\$7,245	--	--	2,123
	1997	89,838	10,771	--	--	1,935

</TABLE>

- (1) On February 24, 1989, the Board of Directors approved an incentive compensation plan for Mr. Whang, which provides for an annual cash bonus equal to 2% of the annual profits of the Company before taxes and extraordinary items; plus 2% of the amount by which the revenues of the Company's semiconductor equipment business in each year exceed such revenues for the previous year. It is a condition to the payment of any bonus that Mr. Whang have been continually employed by the Company and that the Company have realized a profit after the payment of the bonus. On February 28, 1997, Mr. Whang entered into an employment contract with the Company, which contract incorporated Mr. Whang's incentive compensation

plan and added additional bonus eligibility criteria. See "Employment Contracts with Executive Officers," below. Effective October 4, 1998, Mr. Whang voluntarily initiated a 20% reduction in his salary to \$130,200.

- (2) Other compensation to Messrs. Whang and Hass, consisting of the use of a Company car, vacation pay and other perquisites, did not exceed \$50,000 or 10% of base compensation during any fiscal year covered by this table.
- (3) Amounts for Mr. Whang include annual insurance premiums paid on whole-life insurance for the benefit of Mr. Whang's spouse of \$225 and \$3,106 in fiscal 1997 and 1996, respectively, and Company matching contributions in the Amtech Systems, Inc. 401(k) Plan (the "Amtech 401(k) Plan") for Mr. Whang of \$3,037 and \$3,438 in 1998 and 1997, respectively. Amounts for Mr. Hass represent Company matching contributions in the Amtech 401(k) Plan. Effective October 4, 1998, Mr. Hass' annual salary was reduced to \$85,500.

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OPTION GRANTS

There were no grants of stock options during the 1998 fiscal year to the Named Executive Officers.

OPTION EXERCISES

The following table shows the stock options exercised by the Named Executive Officers during fiscal year 1998 and the value of stock options held by him, as of the end of fiscal year 1998.

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

<TABLE>

<CAPTION>

NAME	SHARES ACQUIRED ON EXERCISE (#)	VALUE REALIZED	NUMBER OF UNEXERCISED OPTIONS AT SEPTEMBER 30, 1998		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT SEPTEMBER 30, 1998	
			EXERCISABLE	UNEXERCISEABLE	EXERCISABLE	UNEXERCISEABLE
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Jong S. Whang	--	--	41,517	166,067	\$ --	\$ --
Robert T. Hass	8,000	\$9,504	1,000	1,500	\$ --	\$ --

</TABLE>

AMENDMENT OR REPRICING OF OPTIONS

During the 1998 fiscal year, the Company did not amend or reprice any of its stock options held by executive officers of the Company.

EMPLOYMENT CONTRACTS WITH EXECUTIVE OFFICERS

On February 28, 1997, the Company entered into a five (5) year employment agreement with its President, Jong S. Whang. Under the terms of the agreement, Mr. Whang is entitled to an annual salary of \$162,750, with annual increases of at least 5% to be determined by the Board of Directors at the end of each year of the agreement. Effective October 4, 1998, Mr. Whang voluntarily initiated a 20% reduction in his salary to \$130,200. He is entitled to receive the following additional annual incentive cash compensation of up to 50% of his base salary, to be calculated as follows: (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's semiconductor equipment business in each year exceeds such revenues for the previous year. During fiscal year 1998, Mr. Whang did not earn a cash bonus pursuant to the foregoing formula. It is a condition to the payment of any cash bonus that Mr. Whang shall have been continuously employed by the Company and that the total of all cash and stock bonuses is limited to 10% of the Company's pre-tax earnings for that year. Profits are determined without taking into account the first \$3,200,000 expended or invested by the Company in the development of the proposed photo-assisted CVD product. In addition, Mr. Whang was granted 207,584 stock options pursuant to the agreement. These options were granted on February 28, 1997 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. If Mr. Whang is terminated other than for "cause," he is entitled to receive as severance pay salary, incentive compensation and vacation accrued through the date of termination plus the greater of \$155,000 or the balance of his compensation to the end of the term of the employment agreement computed using the latest applicable salary rate without consideration of any reductions in base pay below \$155,000. Mr. Whang is also entitled to participate in any benefit plans generally available to

employees of the Company.

COMPENSATION AND OPTION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

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 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

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and to growth in shareholder value. The Company's executive compensation package consists of three main components: (1) base salary, (2) incentive cash bonuses, and (3) 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.

1998 CEO COMPENSATION

The base salary for the CEO for the fiscal year 1998 was increased from \$155,000 in fiscal 1997 to \$162,750 in fiscal 1998, pursuant to the terms of the February 28, 1997 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). Effective October 4, 1998, Mr. Whang voluntarily initiated a 20% reduction in his base salary to \$130,200.

On February 24, 1989, 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 profits of the Company before taxes and extraordinary items; plus 2% of the amount by which the revenues of the Company's semiconductor equipment business in each year exceed such revenues for the previous year. It is a condition to the payment of any bonus that the CEO have been continually employed by the Company and that the total of such cash bonuses is limited to 10% of the Company's pre-tax earnings for that year. The CEO did not earn a bonus in 1998 pursuant to such incentive compensation plan. The CEO's employment agreement with the Company incorporates the incentive compensation plan described above. See "Employment Contracts With Executive Officers," above.

COMPENSATION AND OPTION COMMITTEE

Donald F. Johnston
Alvin Katz

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The Company did not have any transactions during fiscal 1998 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.

COMPARISON OF STOCK PERFORMANCE

The following graph assumes that \$100 was invested on October 1, 1992 in each of the following: the Company's Common Stock, the Nasdaq Composite Index and the Nasdaq Industrial Index.

<TABLE>

<CAPTION>

CRSP TOTAL RETURNS INDEX FOR:	9/30/93	9/30/94	9/29/95	9/30/96	9/30/97	9/30/98
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Amtech Systems, Inc.	100.0	93.33	243.33	253.33	143.33	40.00
Nasdaq Composite Index	100.0	100.2	136.81	160.85	220.99	222.06
Nasdaq Industrial Index	100.0	99.66	125.83	134.71	176.28	132.25

</TABLE>

AMENDMENT TO THE COMPANY'S ARTICLES OF INCORPORATION TO EFFECT REVERSE STOCK SPLIT (PROPOSAL TWO)

The Company's Board of Directors has unanimously approved and determined to submit to the Company's shareholders an amendment (the "Reverse Split Amendment") to the Company's Articles of Incorporation as currently amended (the "Articles of Incorporation"), to effect a reverse stock split (the "Reverse Split") of one share of the Company's Common Stock for every two shares of Common Stock that are currently issued and outstanding. The Board of Directors has unanimously approved and recommends a vote FOR Proposal Two in order to improve the likelihood of regaining and maintaining a bid price of at least \$1.00 for the Company's Common Stock and thereby improving the Company's ability to maintain its listing on the Nasdaq SmallCap Market. See below discussion.

If the shareholders approve Proposal Two, the Company's Articles of Incorporation will be amended to replace the existing provision relating to the Company's authorized capital with the following provision relating thereto. Accordingly, Article 5 of the Articles of Incorporation shall be amended to read as follows:

The authorized capital stock of the corporation is 200,000,000 shares divided into 100,000,000 shares of common stock, without par value, and 100,000,000 shares of preferred stock. Each two (2) shares of the Corporation's Common Stock issued as of the date on which Articles of Amendment are filed (the "Split Effective Date"), shall be automatically changed and reclassified, as of the Split Effective Date and without further action, into one (1) fully paid and nonassessable share of the Corporation's Common Stock; provided, however, that any fractional interest resulting from such change and classification shall be rounded upward to the nearest whole share.

If the shareholders approve Proposal Two, the Reverse Split Amendment shall become effective upon the filing of an amendment to the Articles of Incorporation with the Arizona Corporation Commission. The Reverse Split Amendment will amend the Company's Articles of Incorporation to give effect to the amendment made pursuant to Proposal Two. The Reverse Split Amendment, as it will appear if Proposal Two is approved by the shareholders, is attached as Exhibit A. If Proposal Two is not approved by the shareholders, the Articles of Incorporation will not be amended.

The proposed Reverse Split Amendment will not affect any shareholder's proportionate equity interest in the Company or the rights, preferences, privileges or priorities of any shareholder, other than an adjustment which may occur due to the rounding up of fractional shares. Likewise, the Reverse Split Amendment will not affect the total shareholders' equity of the Company or any components of shareholders' equity as reflected on the financial statements of the Company except (i) to change the numbers of the issued and outstanding

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shares of capital stock and (ii) for an adjustment which will occur due to the costs incurred by the Company in connection with this Proxy Statement and the implementation of the Proposal as approved by the shareholders. However, because the number of shares of capital stock that the Company is authorized to issue will not be decreased in proportion to the one for every two share decrease in the number of issued shares, the number of shares which are authorized but unissued, and the percentage of ownership of the Company represented by such shares if they are issued in the future in the discretion of the Board of Directors, effectively will be increased.

The following table illustrates the principal effects on the Company's capital stock of the Reverse Split, assuming a one-for-two reverse split:

NUMBER OF SHARES OF CAPITAL STOCK

	PRIOR TO REVERSE SPLIT	AFTER REVERSE SPLIT
	-----	-----
COMMON		
Authorized	100,000,000	100,000,000
Issued and outstanding (1)	4,232,632	2,116,316
Available for future issuance	95,767,368	97,883,684
PREFERRED		
Authorized	100,000,000	100,000,000
Issued and outstanding	-0-	-0-
Available for future issuance	100,000,000	100,000,000

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(1) Excludes (i) 384,584 shares issuable upon exercise of outstanding options (192,292 shares after the Reverse Split), and (ii) 2,625,000 shares issuable upon exercise of outstanding warrants (1,312,500 shares after the Reverse Split), each as of January 28, 1999.

NASDAQ MINIMUM BID PRICE

As amended effective August 22, 1997, Rule 4450 of the NASDAQ Marketplace Rules provides that issuers listed on the NASDAQ SmallCap Market maintain a minimum bid price of \$1.00 per share for the listed stock. The Company's shares of Common Stock have continuously traded below \$1.00 since November 11, 1998, and will be delisted from the NASDAQ SmallCap Market unless such shares achieve a minimum bid price of \$1.00 or more for ten consecutive trading days between _____, 1998 and _____, 1999. The Board of Directors believes that such a delisting could adversely affect the ability of the Company to attract new investors, may result in decreased liquidity of the outstanding shares of Common Stock and, consequently, could reduce the price at which such shares trade and the transaction costs inherent to trading such shares. The Company believes that, if the Reverse Split Amendment is approved, there is a greater likelihood that the minimum bid price of the Common Stock will be maintained at a level over \$1.00 per share.

Even though a Reverse Stock split, by itself, does not impact a corporation's assets or prospects, reverse splits can result in a decrease in the aggregate market value of a corporation's equity capital. The Board of Directors, however, believes that this risk is off-set by the prospect that the Reverse Stock Split will improve the likelihood that the Company will be able to maintain its NASDAQ SmallCap Market listing and may, by increasing the per share price, make an investment in the Common Stock more attractive for certain investors. There can be no assurance, however, that approval of the Reverse Split Amendment will succeed in raising the bid price of the Company's Common Stock above \$1.00 per share, that such minimum price, if achieved, would be maintained, or that even if the NASDAQ's minimum bid price requirements were satisfied, the Company's Common Stock would not be delisted by the NASDAQ for failure to meet the minimum net tangible assets requirement, or for other reasons.

THERE CAN BE NO ASSURANCE THAT THE MARKET PRICE OF THE COMMON STOCK AFTER THE PROPOSED REVERSE SPLIT WILL BE EQUAL TO THE MARKET PRICE BEFORE THE PROPOSED REVERSE SPLIT MULTIPLIED BY THE SPLIT NUMBER, OR THAT THE MARKET PRICE FOLLOWING THE REVERSE SPLIT WILL EITHER EXCEED OR REMAIN IN EXCESS OF THE CURRENT MARKET PRICE.

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NO EXCHANGE OF SHARES; NO FRACTIONAL SHARES

Pursuant to the proposed Amendment, every two shares of issued and outstanding Common Stock would be converted and reclassified into one share of post-split Common Stock, and any fractional interests resulting from such reclassification would be rounded upward to the nearest whole share. For example, a holder of 100 shares prior to the Split Effective Date would be the holder of 50 shares at the Split Effective Date. The proposed Reverse Split would become effective upon the Split Effective Date. Shareholders will be notified after the Split Effective Date that the Reverse Split has been effected.

Shareholders will not receive certificates for shares of post-split Common Stock. Accordingly, shareholders should not forward their certificates to the Company or its transfer agent. Beginning on the Split Effective Date, each certificate representing shares of the Company's pre-split Common Stock will be deemed for all corporate purposes to evidence ownership of the appropriate number of shares of post-split Common Stock.

No service charge will be payable by shareholders in connection with the exchange of certificates, all costs of which will be borne and paid by the Company.

If the shareholders approve Proposal Two, shareholders have no right under Arizona law to dissent from the Reverse Split or to dissent from the rounding up of fractional interests resulting from the Reverse Split.

PURPOSES OF THE REVERSE SPLIT AND EFFECTIVE INCREASE IN AUTHORIZED SHARES

The primary objectives of the Reverse Split are to increase the market value per share of the Company's Common Stock. The Company's Common Stock is currently listed on the NASDAQ SmallCap Market under the symbol "ASYS." However, the Company has received notice from The NASDAQ Stock Market ("NASDAQ") of its intent to delist the Common Stock for failure to maintain the minimum bid requirement of \$1.00 per share for continued inclusion of such stock on the NASDAQ SmallCap Market. The Company anticipates that the Reverse Split will have the effect of increasing the minimum bid price of its Common Stock sufficient to permit it to satisfy the applicable minimum bid price criteria.

Additionally, the Board of Directors believes that the current price per share of the Company's Common Stock may reduce the effective marketability of the Common Stock because of the reluctance of certain brokerage firms to recommend the purchase of lower-priced stocks to their clients. Certain institutional investors have internal policies preventing the purchase of lower-priced stocks and many brokerage houses do not permit lower-priced stocks to be used as collateral for margin accounts. Further, a number of brokerage houses have policies and practices that tend to discourage individual brokers within those firms from dealing in lower-priced stocks. Some of those policies and practices pertain to the payment of brokers' commissions and to time-consuming procedures that function to make the handling of lower-priced stocks unattractive to brokers from an economic standpoint. In addition, the structure of trading commissions tends to have an adverse impact upon holders of lower-priced stocks because the brokerage commission on a sale of lower-priced stocks generally represents a higher percentage of the sale price than the commission on a relatively higher-priced stock.

The Board of Directors believes that the recent low per share market price of the Common Stock impairs the marketability of the Common Stock to institutional investors and members of the investing public and creates a negative impression with respect to the Company. Many investors and market makers look upon lower priced stocks as unduly speculative in nature and, as a matter of policy, avoid investment and trading in such stocks. The foregoing factors adversely affect both the pricing and the liquidity of the Common Stock. Thus, the potential increase in trading price is expected to be attractive to the financial community and the investing public and in the best interest of the shareholders.

The Board of Directors is hopeful that the decrease in the number of shares of Common Stock outstanding as a consequence of the proposed Reverse Split, and the resulting anticipated increased price level, will stimulate additional interest in the Company's Common Stock and possibly promote greater liquidity for the Company's shareholders. There can be no assurance, however, that there will be any greater liquidity, and it is possible that the liquidity could even be adversely affected by the reduced number of shares of Common Stock which would be outstanding after the proposed Reverse Split is effected.

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If the Reverse Split becomes effective, management expects the quoted market price of the Company's Common Stock to increase as a result of decreasing the number of shares outstanding without altering the aggregate economic interest in the Company represented by such shares. The Board believes that the increased market price may serve to mitigate the present reluctance, policies and practices on the part of brokerage firms referred to above and diminish the adverse impact of trading commissions on the potential market for the Company's shares of Common Stock. There can be no assurance, however, that the Reverse Split will achieve these desired results, that any such increase would be in proportion to the one-for-two Reverse Split Ratio or that the per share price level of the Common Stock immediately after the proposed Reverse Split can be maintained for any period of time.

The Reverse Split may result in some shareholders owning "odd lots" of less than 100 shares. The costs, including brokerage commissions, of transactions in odd lots are generally higher than the costs in transactions in "round lots" of even multiples of 100.

The secondary result of the effective increase in the number of authorized but unissued shares of Common Stock is for the Company to have additional shares of Common Stock authorized and available for issuance as the need arises. Such share issuances may be made for possible future financing transactions, stock acquisitions, asset purchases, stock dividends or splits, issuances under any stock option plan that may be adopted in the future, and other general corporate purposes. If Proposal Two is approved, shareholders will have no preemptive rights with respect to the additional authorized shares of Common Stock. Such shares of Common Stock may be issued on such terms, at such times and on such conditions as the Board may determine in its discretion.

The Board of Directors is not aware of any present efforts by any person to accumulate the Company's capital stock or to obtain control of the Company through a tender offer, merger or other business combination, proxy contest or otherwise. The Board has not formulated any program, nor entered into any agreement or understanding, and has no current intention, to issue any unissued

and unreserved shares of Common Stock for the purpose of impeding or preventing any proposed takeover.

CERTAIN FEDERAL INCOME TAX CONSEQUENCES

The Company has not sought and will not seek a ruling from the Internal Revenue Service or an opinion of counsel regarding the federal income tax consequences of the Reverse Split Amendment. A summary of the federal income tax consequences of the Reverse Split as contemplated in Proposal Two is set forth below. The discussion is based on the present federal income tax law. The discussion is not intended to be, nor should it be relied on as, a comprehensive analysis of the tax issues arising from or relating to the proposed Reverse Split Amendment. Income tax consequences to shareholders may vary from the federal tax consequences described generally below. STOCKHOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE EFFECT OF THE CONTEMPLATED REVERSE SPLIT UNDER APPLICABLE FEDERAL, STATE AND LOCAL INCOME TAX LAWS.

The proposed Reverse Split constitutes a "recapitalization" to the Company and its shareholders to the extent that issued shares of Common Stock are exchanged for a reduced number of shares of Common Stock. Therefore, neither the Company nor its shareholders will recognize any gain or loss for federal income tax purposes as a result thereof.

The shares of Common Stock to be issued to each shareholder will have an aggregate basis, for computing gain or loss, equal to the aggregate basis of the shares of such stock held by such shareholder immediately prior to the Split Effective Date. A shareholder's holding period for the shares of Common Stock to be issued will include the holding period for the shares of Common Stock held thereby immediately prior to the Split Effective Date provided that such shares of stock were held by the shareholder as capital assets on the Split Effective Date.

VOTING REQUIREMENTS

Each holder of Common Stock is entitled to one vote per share held. The holders of a majority of the shares of the Common Stock issued and outstanding constitutes a quorum. The affirmative vote of holders of a majority of the outstanding shares of Common Stock of the Company entitled to vote and present, in person or by proxy, at the Annual Meeting is required for approval of Proposal Two, provided that the number of shares present, in person or by proxy, constitutes a quorum. In the event that a quorum is not present or represented at the Annual Meeting, the shareholders entitled to vote at the meeting present, in person or by proxy, shall have the power to adjourn the Annual Meeting until a quorum shall be present or represented. Proxies solicited by the Board of Directors will be voted for approval of Proposal Two.

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A Shareholder voting through a proxy who abstains with respect to approval of Proposal Two shall be considered to have cast a negative vote with respect to Proposal Two.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL TWO.

OTHER MATTERS

INDEPENDENT AUDITORS

Arthur Andersen LLP, has been selected as the Company's independent auditors for the current fiscal year, which ends September 30, 1999. That firm has served as the Company's independent auditors since 1983. During the fiscal year ended September 30, 1998, Arthur Andersen LLP provided audit services to the Company. Representatives of that firm are expected to be present at the Annual Meeting with the opportunity to make a statement if they desire to do so and to be available to respond to appropriate questions.

ANNUAL REPORT

The Annual Report of the Company for the fiscal year ended September 30, 1998, 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.

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 2000, must be received by the Company's Secretary, at the Company's offices, not later than October 4, 1999, 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 2000 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 17, 1999, 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 2000 Annual Meeting will be voted by the persons named as 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

Robert T. Hass, Secretary

Tempe, Arizona
January 31, 1999

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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 January 31, 1999 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 Wyndham Garden Hotel, 427 N. 44th Street, Phoenix, Arizona on March 5, 1999 at 3:00 p.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 Articles of Incorporation to effect a reverse stock split of one share of Common Stock for every two shares of Common Stock that are issued and outstanding.

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 PROPOSAL NO. 2 AND AS SAID PROXIES DEEM ADVISABLE ON SUCH MATTERS AS MAY COME BEFORE THE MEETING.

Dated: _____, 1999

Please sign exactly as your name appears above. 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.

I Will Will not attend the Meeting.
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