

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
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement Soliciting Material Under Rule 14a-12
 Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
 Definitive Proxy Statement
 Definitive Additional Materials

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):

- No fee required.
 Fee computed on table below per Exchange Act Rules 14a-6(i)(4) 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:

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

1) Amount previously paid:

2) Form, Schedule or Registration Statement No.:

3) Filing Party:

4) Date Filed:

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

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON MARCH 12, 2009

To Our Shareholders:

The 2008 Annual Meeting of Shareholders of AMTECH SYSTEMS, INC., an Arizona corporation (the "Company"), will be held at the Phoenix Airport Marriott Hotel, 1101 North 44th Street, Phoenix, Arizona 85008 USA, on Thursday, March 12, 2009, at 9:00 a.m., Arizona time, for the following purposes:

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

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.

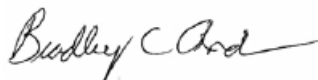
**Important Notice Regarding the Availability of
Proxy Materials for the Meeting**

The proxy statement and annual report to security holders are also available at www.mkr-group.com/asys/investors/proxy.html. The materials available on this website include this notice, the proxy statement, the proxy card and our annual report on Form 10-K.

The Board of Directors has fixed the close of business on January 21, 2009 as the record date (the "Record Date") for the determination of shareholders who hold the Company's common stock who are entitled to notice of, and to vote at, the Annual Meeting or any postponement or adjournment thereof. Shareholders are reminded that their shares of the Company's common stock can be voted at the annual meeting only if they are present at the Annual Meeting in person or by valid proxy. A copy of the Company's 2008 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:



Bradley C. Anderson, Secretary

Tempe, Arizona
February 9, 2009

IMPORTANT: IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED AT THIS MEETING. PLEASE COMPLETE, DATE, SIGN AND PROMPTLY MAIL THE ENCLOSED PROXY CARD IN THE ACCOMPANYING ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES.
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**AMTECH SYSTEMS, INC.
131 SOUTH CLARK DRIVE
TEMPE, ARIZONA 85281**

PROXY STATEMENT

The Board of Directors of Amtech Systems, Inc., an Arizona corporation (the "Company"), is soliciting proxies to be used at the 2008 Annual Meeting of Shareholders of the Company to be held on Thursday, March 12, 2009, at 9:00 a.m., Arizona time, and any adjournment or postponement thereof (the "Annual Meeting"). A copy of the Notice of the Meeting accompanies this Proxy Statement. This Proxy Statement and the accompanying form of proxy will be mailed to all shareholders entitled to vote at the Annual Meeting beginning February 4, 2009.

Who Can Vote

Shareholders of record as of the close of business on January 21, 2009 (the "Record Date"), may vote at the Annual Meeting and at any and all adjournments or postponements of the meeting. On the Record Date, 9,103,698 shares of the Company's common stock, \$.01 par value ("Common Stock") were issued and outstanding.

What Constitutes a Quorum

The presence, in person or by proxy, of the holders of a majority of the voting power of the outstanding shares of Common Stock entitled to vote is necessary to constitute a quorum at the Annual Meeting. Abstentions and broker non-votes are included in the number of shares present at the meeting for purposes of determining a quorum. A broker "non-vote" occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power for that particular item and has not received instructions from the beneficial owner.

How to Attend the Meeting

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

How to Vote

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

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

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

Except as set forth below with respect to the ability to cumulate votes for directors, the holders of Common Stock will be entitled to one vote per share of Common Stock.

What Vote is Required to Approve Each Item

If a quorum is present, the five nominees who receive a plurality of the votes cast at the Annual Meeting will be elected. Broker non-votes and votes that are withheld will have no effect on the results of the vote for the election of directors.

Changing Your Vote

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

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

How Votes are Counted

Inspectors of election will be appointed for the Annual Meeting. The inspectors of election will determine whether or not a quorum is present and will tabulate votes cast by proxy or in person at the Annual Meeting. If you have returned valid proxy instructions or attend the Annual Meeting in person, your Common Stock will be counted for the purpose of determining whether there is a quorum. Abstentions and broker non-votes will be included in the determination of the number of shares represented for a quorum.

Costs of this Proxy Solicitation

We will pay the costs of preparing and mailing the Notice and Proxy Statement, including the charges and expenses of brokerage firms, banks and others who forward solicitation material to beneficial owners of the Common Stock. We will solicit proxies by mail. Officers and directors of the Company may also solicit proxies personally, or by telephone or facsimile, without additional compensation. Computershare will serve as our proxy solicitation agent. In such capacity, Computershare will coordinate the distribution of proxy materials to beneficial owners of Common Stock and oversee the return of proxy cards. The fee for all of these services is estimated to be \$15,000.

Annual Report

The Company's Annual Report to Shareholders for the fiscal year ended September 30, 2008 (the "Annual Report") has been mailed concurrently with the mailing of the Notice of Annual Meeting and Proxy Statement to all shareholders entitled to notice of, and to vote at, the Annual Meeting. The Annual Report is not incorporated into this Proxy Statement, and is not considered proxy-soliciting material.

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

PROPOSAL NO. 1 --- ELECTION OF DIRECTORS

Number of Directors to be Elected

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

Vote Required

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

Nominees of the Board

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

Michael Garnreiter
Alfred W. Giese
Brian L. Hoekstra
Robert F. King
Jong S. Whang

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

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

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

Information Concerning Directors and Executive Officers

The following table sets forth information regarding the executive officers and directors of Amtech. The subsequent paragraphs contain biographical data for each executive officer and director.

Name	Age	Position with the Company
Jong S. Whang	63	President, Chief Executive Officer and Director
Bradley C. Anderson	47	Vice President – Finance, Chief Financial Officer, Treasurer and Secretary
Robert T. Hass	58	Chief Accounting Officer
Michael Garnreiter	56	Director
Alfred W. Giese	70	Director
Brian L. Hoekstra	49	Director
Robert F. King	75	Director

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Jong S. Whang has been our President, Chief Executive Officer and a Director since our inception in 1981, and was one of its founders. Mr. Whang’s responsibilities include the sales effort for our solar and semiconductor equipment business and the development of new products and business opportunities in that industry. He has 35 years of experience in the semiconductor industry, including time spent in both processing and manufacturing of equipment components and systems. From 1973 until 1979, he was employed by Siltronics, Inc., initially as a technician working with chemical vapor deposition, and later as manager of the quartz fabrication plant with responsibility of providing technical marketing support. From 1979 until 1981, he was employed by U.S. Quartz, Inc. as manufacturing manager. In 1981, he left U.S. Quartz to form Amtech.

Bradley C. Anderson joined us as Vice President-Finance, Chief Financial Officer, Treasurer and Secretary in April 2006. Prior to that, Mr. Anderson spent several years in a consulting role implementing the internal control requirements of the Sarbanes-Oxley Act for a broad range of publicly held companies. From 1996 to 2002, Mr. Anderson served as Vice President-Finance and then as Chief Financial Officer of Zila, Inc., an international provider of healthcare technology and products. Mr. Anderson began his career with Deloitte (formerly Deloitte & Touche) where he worked for over 11 years. He graduated from Brigham Young University with a Bachelor of Science in Accounting. Mr. Anderson is Certified Public Accountant.

Robert T. Hass has been our Chief Accounting Officer and Assistant Secretary since April 2006. Prior to that, he served as our Vice President - Finance, Chief Financial Officer, Treasurer and Secretary from June 1992 to April 2006, and as Director from February 1996 to March 2006. From 1991 until May, 1992, he operated a financial consulting practice. From 1985 to 1991, Mr. Hass was Director of Accounting Services and then Controller for Lifeshares Group, Inc., and from 1988 to 1991 was Controller and Chief Accounting Officer of some of Lifeshares’ subsidiaries. From 1984 to 1985, he was Vice President - Finance and Treasurer of The Victorio Company. From 1977 to 1984, he served in various capacities including Vice President, Chief Financial Officer and Treasurer of Altamil Corporation, then a public diversified manufacturing company. From 1972 to 1977, he was an auditor with Ernst & Ernst, now known as Ernst & Young. Mr. Hass has a Bachelor of Science degree in Accounting from Indiana University.

Michael Garnreiter has been a Director since February 19, 2007. He is currently a managing member of Rising Sun Restaurant Group LLC and is president of New Era Restaurants, LLC. Both organizations are privately held restaurant operating companies. Mr. Garnreiter serves on the boards of directors of Taser International, a manufacturer of non-lethal protection devices, and Knight Transportation Company, a nationwide truckload transportation company. From 2002 to 2006, Mr. Garnreiter was CFO of Main Street Restaurant Group, a publicly traded restaurant operating company, and from 1976 to 2002, he was a senior audit partner of Arthur Andersen LLP. He graduated from California State University Long Beach with a Bachelor of Science in Accounting and Business Administration. Mr. Garnreiter is a Certified Public Accountant.

Alfred W. Giese has been a Director since April 13, 2007. He was Interim President and General Manager of Sea Fare Foods Corp. from January 2007 to June 2007. Mr. Giese is Founder and Senior Partner of IBC, International Business Consultants, a firm in which he was active from 2001 to 2006 with an emphasis on sales and marketing for Aviza Technology Corporation, a semiconductor equipment manufacturer. He also assembled and managed a sales and marketing team for Epion Corporation, a high-technology equipment company which was acquired by TEL (Tokyo Electron Ltd.). From 1998 to 2001, he was the Vice President, Sales for Silicon Valley Group, or SVG, with responsibility for both Asia and Europe. From 1988 to 1998, Mr. Giese held positions of Vice President of Sales with Thermco Systems, Corp. and SVG, both semiconductor equipment companies. Prior to 1988, he held various sales positions for Thermco. For several years during that time, he served on the Board of Directors of Thermco’s joint venture company in Japan. Mr. Giese has a degree in International Business from the Industriehochschule in Essen, Germany.

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Brian L. Hoekstra has been a Director since February 19, 2007. He is Founder, President & CEO of Applied Photonics, Inc., a leading laser solutions provider for the flat panel display industry. Mr. Hoekstra has more than 25 years of professional experience including corporate management, strategic planning and business development, as well as extensive technical expertise in lasers, optics and materials processing. He was previously Vice President of Technology at Accudyne Corporation and the Project Scientist on a laser glass separation project. He was also Founder and Deputy Director of a NASA Commercial Center focused on space-based bulk crystal growth. Prior to that he was a leading researcher in laser annealing of Si and GaAs at the Air Force Materials Laboratory. Mr. Hoekstra graduated from Illinois Institute of Technology with a bachelor’s degree in Physics.

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

Information About Board and Committee Meetings

Information concerning our Board of Directors and the three committees maintained by our Board is set forth below. A majority of the Board of Directors, as well as the Company’s Board committees, consist of Directors who are not employees of the Company and who are “independent” within the meaning of the listing standards of the NASDAQ Stock Market. Currently, the Company’s independent directors include Alfred W. Giese, Michael Garnreiter, Brian L. Hoekstra and Robert F. King.

Our Board of Directors held seven (7) meetings during fiscal year 2008. No director attended less than 75% of all Board meetings while he served as such director, or less than 75% of all committee meetings on which he served as a committee member. Our Board has the authority under the Company's Bylaws to increase or decrease the size of our Board and fill vacancies, and the directors chosen to fill such vacancies will hold office until the Company's next annual meeting or until their successors are elected and qualified.

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

Audit – Michael Garnreiter (Chairman), Brian Hoekstra and Robert F. King

Compensation and Option – Robert F. King (Chairman), Alfred W. Giese and Michael Garnreiter

Nominating and Governance – Michael Garnreiter (Chairman), Brian Hoekstra and Robert F. King

The Audit Committee held four (4) meetings during fiscal year 2008. The Audit Committee is responsible for maintaining communication between the Board of Directors, the independent auditors and members of financial management with respect to the Company's financial affairs in general, including financial statements and audits, the adequacy and effectiveness of the internal accounting controls and systems and the retention and termination of the independent auditors. The Audit Committee also develops and recommends corporate governance guidelines to the Board and provides oversight with respect to corporate governance and ethical conduct. A copy of the charter of the Audit Committee is available at the Company's website, www.amtechsystems.com.

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

The Compensation and Option Committee held two (2) meetings during fiscal year 2008. The Compensation and Option Committee makes recommendations concerning officer compensation, employee benefit programs and retirement plans. The Compensation and Option Committee does not currently have a charter.

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The Nominating and Governance Committee held one (1) meeting during fiscal year 2008. The Nominating and Governance Committee identifies and approves individuals qualified to serve as members of our Board and also evaluates the Board's performance. In evaluating a prospective nominee, the Nominating Committee takes several factors into consideration, including such individual's integrity, business skills, experience and judgment. The Nominating Committee also reviews whether a prospective nominee will meet the Company's independence standards and any other director or committee membership requirements imposed by law, regulation or stock exchange rules. The Nominating and Governance Committee approved the nomination of the candidates reflected in Proposal 1. The Nominating and Governance Committee will consider, but is not required to approve, director nominations made by shareholders for any annual meeting of the Company, provided, a written recommendation is received by the Company no later than the date shareholder proposals must be submitted for consideration prior to such annual meeting. A copy of the charter of the Nominating and Governance Committee is available at the Company's website, www.amtechsystems.com.

DIRECTORS' COMPENSATION

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
Jong S. Whang ⁽²⁾	—	—	—	—
Michael Garnreiter	40,000	12,698	—	52,698
Alfred W. Giese	17,250	14,234	34,050 (3)	65,534
Brian L. Hoekstra	20,250	12,698	—	32,948
Robert F. King	24,750	20,888	27,300 (3)	72,938

(1) Amounts represent the share-based compensation expense recognized for financial statement reporting purposes for fiscal year 2008 in accordance with FAS 123R. The grant date fair values of options awarded to our directors during fiscal year 2008 are as follows: Mr. Garnreiter - \$31,034; Mr. Giese - \$31,034; Mr. Hoekstra - \$31,034; Mr. King - \$31,034.

(2) Directors who are full-time employees of our company receive no additional compensation for serving as directors.

(3) Amount represents consulting fees for sales and marketing services.

Directors who are full-time employees of our company receive no additional compensation for serving as directors. Non-employee directors receive an annual retainer of \$8,000, fees of \$1,250 per board meeting and Audit Committee meeting attended in person, \$750 per board meeting and Audit Committee meeting attended telephonically, \$750 per Compensation and Option Committee or Nominating and Governance Committee meeting attended in person, and \$500 per Compensation and Option Committee or Nominating Committee meeting attended telephonically. In addition, under our Non-Employee Directors Stock Option Plan, each non-employee director currently receives a grant of options to purchase 6,000 shares of common stock, or such other number of shares as may be determined by the board, when first elected or appointed to the board, and 5,000 shares of common stock, or such other number of shares as maybe determined by the board, upon each re-election to the board at our annual meeting of shareholders. The exercise price of the options is set at the fair market value of common stock on the date of grant. Each option has a term of ten years and is exercisable in three equal installments commencing on the first anniversary of the date of grant and continuing for the two successive anniversaries thereafter. In the event of disability (as defined in the plan) or death of an outside director, all options remain exercisable for a period of 30 days following the date such person ceased to be a director, or such other date as may be determined by the board, but only to the extent such options were exercisable on the date the director ceased to be a director. Furthermore, the director serving as the Chairman of the Audit Committee receives an annual retainer of \$14,000. The director serving as the Chairman of the Compensation and Option Committee as well as the director serving as the Chairman of the Nominating and Governance Committee receives an annual retainer of \$2,500.

Compensation Committee Interlocks and Insider Participation

The Compensation and Option Committee is presently comprised of Messrs. Robert F. King, Alfred W. Giese and Michael Garnreiter who are not officers or employees of the Company.

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EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

This section discusses the principles underlying our executive compensation policies and decisions. It provides qualitative information regarding the manner in which compensation is earned by our executive officers and directors. The following discussion and analysis of compensation arrangements should be read together with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion. In addition, we address the compensation paid or awarded during fiscal year 2008 to our chief executive officer (principal executive officer), chief financial officer (principal financial officer), and our only other executive officer serving during fiscal year 2008. Such persons are referred to herein as our “named executive officers”.

We believe that the compensation of our executive officers should facilitate the achievement of short-term corporate goals as well as the performance of long-term business objectives. It is the responsibility of the compensation committee of our board of directors to administer our compensation practices to ensure that they are competitive and include incentives which are designed to appropriately drive corporate performance. Our Compensation and Option Committee, or Compensation Committee, reviews and approves all of our compensation policies, including executive officer salaries, bonuses and equity incentive compensation.

Objectives of Our Executive Compensation Programs

Our compensation programs for our named executive officers are designed to achieve the following objectives:

- attract and retain talented and experienced executives in our industry;
- motivate and reward executives whose knowledge, skills and performance are critical to our success;
- align the interests of our executives and shareholders by rewarding executives when shareholder value increases; and
- motivate our executives to manage our business to meet our short-term and long-term corporate goals and business objectives, and reward them for meeting these objectives.

We use a mix of short-term compensation in the form of base salaries and cash incentive bonuses and long-term compensation in the form of equity incentive compensation to provide a total compensation structure that is designed to encourage our executives to achieve these objectives.

Determining Executive Compensation

Our Compensation Committee establishes our general compensation policies and specific compensation for each of our executive officers, and administers our stock option program. Our Compensation Committee is responsible for developing, administering and interpreting the compensation program for executive officers and other key employees. Our Compensation Committee was appointed by our board of directors, and consists entirely of independent, outside directors who are “non-employee directors” for purposes of Rule 16b-3 under the Exchange Act.

Our Compensation Committee may delegate some or all of its responsibilities to one or more subcommittees whenever necessary to comply with any statutory or regulatory requirements or otherwise deemed appropriate by our Compensation Committee. Our Compensation Committee has the authority to retain consultants and other advisors to assist with its duties and has sole authority to approve the fees and other retention terms of such consultants and advisors.

During each fiscal year, our Compensation Committee reviews published information regarding salaries, including the compensation of executives of comparable companies within similar industries and to make recommendations regarding the salary of our chief executive officer and chief financial officer. For our executive officers whose bonus awards are based partly on individual performance, our chief executive officer’s evaluation of such performance is provided to and reviewed by our Compensation Committee. Based on the foregoing, our Compensation Committee uses its judgment in making compensation decisions that will best carry out our philosophy and objectives for executive compensation.

Our Compensation Committee’s objective is to make the compensation packages of our executive officers sufficient to attract and retain persons of exceptional quality and to provide effective incentives to motivate and reward our executives for achieving our financial and strategic goals, which are essential to our long-term success and growth in shareholder value.

Elements of Our Executive Compensation Programs

Our executive compensation package for the fiscal year ended September 30, 2008 consisted of three main components: base salary, incentive cash bonuses and equity incentives. We believe it is important that the interests of our executives are aligned with those of our shareholders; therefore, equity incentive compensation, in the form of stock options and restricted stock grants, constitutes a significant portion of our total executive compensation.

Within the context of the overall objectives of our compensation programs, we determined the specific amounts of compensation to be paid to each of our executives in fiscal year 2008 based on a number of factors including:

- the roles and responsibilities of our executives;
- the individual experience and skills of our executives;
- the amounts of compensation being paid to our other executives;
- our executives’ historical compensation at our company;
- the overall benefits package provided to our executives; and

- our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities.

We discuss each of the primary elements of our executive compensation in detail below. While we have identified particular compensation objectives that each element of executive compensation serves, our compensation programs are designed to complement each other and collectively serve all of our executive compensation objectives described above.

Annual Cash Compensation

Base Compensation

Our Compensation Committee's approach is to offer executives salaries competitive with those of other executives in the industry in which we operate. To that end, our Compensation Committee evaluates the competitiveness of base salaries annually based on information drawn from a variety of sources, including published and proprietary survey data and our own experience recruiting and retaining executives, although complete information is not easily obtainable. Our base salary levels are intended to be consistent with competitive practice and level of responsibility, with salary increases reflecting competitive trends, our overall financial performance and the performance of the individual executive. Salaries are adjusted to reflect individual roles and performance and may be increased at other times if a change in the scope of the officer's responsibilities justifies such consideration or in order to maintain salary equity among executive officers. We believe that a competitive base salary is a necessary element of any compensation program designed to attract and retain talented and experienced executives. We also believe that attractive base salaries can serve as an effective reward for the executives' overall performance.

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During fiscal 2008, our chief financial officer, at the request of our Compensation Committee, summarized the base pay for chief executive officers and chief financial officers as reported in the American Electronics Association Salary Survey. Using parameters that best fit our company (for example, revenues, public companies, similarities in numbers of employees, and geographic region), our chief financial officer presented a statistical summary of such information and made recommendations to our Compensation Committee that were in line with the average and median salaries of similarly situated companies.

In fiscal year 2008, the base salary for our chief executive officer increased by approximately 10%, the base salary for our chief financial officer increased by approximately 10% and the base salary for our chief accounting officer increased by approximately 15%.

Cash incentive bonuses

In addition to base salary, our executives are eligible to receive a discretionary annual bonus. The primary objectives of our incentive bonus plan are to provide an incentive for superior work, to motivate our executives toward even higher achievement and business results, to tie our executives' goals and interests to ours and our shareholders' and to enable us to attract and retain highly qualified individuals. Near the beginning of each year, our Compensation Committee and our chief executive officer 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 our company. In addition, for all executives, our Compensation Committee reviews our actual financial performance against its internally budgeted performance in determining year-end bonuses, if any.

Under our bonus plan, participants can earn a target bonus equal to a specified percentage of their base salary by achieving 100% of pre-defined performance objectives. The participant's bonus calculation is based upon achieving performance objectives established in each of the following categories: (i) bookings; (ii) revenue; (iii) gross margin; and (iv) operating profit. Objectives established for participants in these categories may be either at the corporate level, the operating division level or both. In addition, individual performance objectives may be established for certain participants. In order to be eligible for a bonus with respect to any of the above performance categories, the participant must achieve not less than 80% (90% in the case of gross margin) of the applicable performance objective. At these minimum levels, 20% of the bonus for the category is eligible for payment. The bonus calculation percentage with respect to any performance category increases by 4% (8% with respect to gross margin) for each 1% improvement in performance over the minimum level up to 100%, and by 1% (10% with respect to gross margin) for each 1% improvement in performance over 100%, up to a maximum of 150% (200% with respect to gross margin) of the participant's target bonus.

Mr. Whang's target bonus for fiscal 2008 was 60% of his base salary, or \$165,000; Mr. Anderson's target bonus was 50% of base salary, or \$99,000; Mr. Hass' target bonus was 25% of base salary, or \$34,000. The bonus of the three executive officers was calculated solely upon the basis of performance objectives at the corporate level. If fiscal 2008 performance was equivalent to 80% (90% with respect to gross margin) of performance objectives in all corporate performance categories, Mr. Whang's bonus calculation would be \$33,000, Mr. Anderson's bonus calculation would be \$19,800, and Mr. Hass' bonus calculation would be \$6,900. If fiscal 2008 performance was 150% (110% with respect to gross margin) of performance objectives in all corporate performance categories, Mr. Whang's bonus calculation would be \$268,125, Mr. Anderson's bonus calculation would be \$160,875, and Mr. Hass' bonus calculation would be \$55,250.

Notwithstanding the calculation of any bonus amount under the fiscal 2008 bonus plan, (i) no bonuses would have been payable based on achievement of corporate level objectives if consolidated operating profit was less than 3%; (ii) no bonuses would have been payable based on achievement of divisional level objectives if division operating profit (before corporate expense allocation) was less than 5%; and (iii) all bonus payments were subject to the discretionary approval of our Compensation Committee.

Equity incentive compensation

From time to time, we grant stock options and shares of restricted stock in order to provide certain of our executives with a competitive total compensation package, and to reward them for their contribution to the long-term price performance of the common stock. These equity incentive awards are in the form of stock options and restricted stock grants to align the interests of our executives with our shareholders by providing our executives with strong incentives to increase shareholder value. Our board of directors does not apply a rigid formula in allocating stock options or restricted stock to our executives as a group or to any particular executive. Instead, our board of directors exercises its judgment and discretion and considers, among other things, the executive's past performance and contributions, and the executive's anticipated future contributions and responsibilities, competitive factors, the amount of stock-based equity compensation already held by the executive, the non-equity compensation received by the executive and the total number of options and shares of restricted stock to be granted to all participants during the year.

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Under our 1998 Stock Option Plan and 2007 Employee Stock Incentive Plan, our Compensation Committee has discretion to determine the vesting schedule of the stock options and restricted period of the restricted stock. The vesting period and restricted period provide added incentive for the executive to continue his or her employment with us.

In fiscal 2008, we granted options to purchase a total of 120,000 shares of common stock, of which options to purchase a total of 50,000 shares were granted to our named executive officers, representing 42% of all options granted in fiscal 2008. In fiscal 2008, we granted 31,500 shares of restricted stock, of which 16,500 shares of restricted stock

were granted to our named executive officers. The number of stock options and shares of restricted stock granted to each executive is set forth in the “Grants of Plan-Based Awards” table below. The dollar amount recognized as expense with respect to such grants, as determined for financial statement reporting purposes in accordance with SFAS 123R, for each individual named executive officer is set forth in the column “Option Awards” and “Stock Awards” in the “Summary Compensation Table.” The exercise price of each stock option granted under our plan is based on the fair market value of our common stock on the grant date.

Benefits

All of our executive officers are eligible for benefits offered to employees generally, including life, health, disability and dental insurance and our 401(k) plan. Consistent with our compensation philosophy is our intent to maintain our current benefits for our executive officers. Our Compensation Committee, in its discretion, may revise the executive officers’ benefits if it deems it advisable.

Severance and change in control arrangements

Our chief executive officer has an employment agreement that provides various benefits triggered by such employment-related actions as termination without cause, resignation with good reason and/or termination without cause following a change in control. See “Employment Agreement with Chief Executive Officer” below for a description of such provisions. Additionally, our chief financial officer and chief accounting officer have agreements that provide for severance payments and change of control payments. See “Change of Control Agreement with Chief Financial Officer” and “Severance and Change of Control Agreements with Chief Accounting Officer” below for a description of such provisions.

In setting the terms of and determining whether to approve these severance and change in control arrangements, our Compensation Committee or board of directors, as applicable, recognized that executives often face challenges securing new employment following a termination of their existing employment and that distractions created by uncertain job security may have a detrimental impact on their performance. None of these benefits are triggered by a change in control unless our named executive officer’s employment is terminated without cause following such change in control.

Effect of accounting treatment on compensation decisions

In the review and establishment of our compensation programs, we consider the anticipated accounting and tax implications to us and our executives. For example, we may utilize restricted stock as forms of equity compensation incentives in response to changes in the accounting treatment of equity awards under SFAS 123R. While we consider the applicable accounting and tax treatment, these factors alone are not determinative, and we also consider the cash and non-cash impact of the programs and whether a program is consistent with our overall compensation philosophy and objectives.

SUMMARY COMPENSATION TABLE

The following table sets forth information regarding compensation for services rendered to Amtech during the fiscal year ended September 30, 2008 by our named executive officers who received annual compensation exceeding \$100,000 during such period.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)	Total (\$)
Jong S. Whang, Chief Executive Officer and Director ⁽³⁾	2008	272,788	—	27,346	79,229	200,000	11,152 ⁽⁴⁾	590,515
	2007	240,385	—	—	28,114	115,248	2,060 ⁽⁴⁾	385,807
Bradley C. Anderson, Chief Financial Officer	2008	196,408	—	13,673	69,443	107,307	10,427 ⁽⁵⁾	397,258
	2007	176,154	—	—	38,053	69,149	9,846 ⁽⁵⁾	283,356
Robert T. Hass, Chief Accounting Officer	2008	135,946	—	4,102	13,211	37,395	7,754 ⁽⁵⁾	198,408
	2007	120,000	—	—	6,870	23,050	5,438 ⁽⁵⁾	149,920

- (1) On December 6, 2007 and December 9, 2008, the board of directors granted restricted stock and incentive stock options to executives for their fiscal 2007 and 2008 performance, respectively, as disclosed in the “Grants of Plan Based Awards” table below. However, this table does not reflect expense related to the 2008 grants as the service period did not begin until the grant date.
- (2) On December 6, 2007 and December 9, 2008, the board of directors awarded non-equity incentive plan compensation executives for their fiscal 2007 and 2008 performance, respectively, in the amounts indicated.
- (3) Directors who are full-time employees of our company receive no additional compensation for serving as directors.
- (4) Amount represents \$9,092 of car allowance that was initiated mid-year and \$2,060 in life insurance premiums paid by our company for which Mr. Whang’s spouse is the beneficiary.
- (5) Amount primarily represents car allowance.

GRANTS OF PLAN-BASED AWARDS

The following table sets forth grants of plan-based awards made to our named executive officers in fiscal 2008 and related fair value compensation for fiscal 2008:

GRANTS OF PLAN-BASED AWARDS

All Other Stock Awards:	All Other Option Awards:	All Other Awards:	Grant Date Fair Value
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Name	Date Grant Approved	Date Grant by Board ⁽¹⁾	Estimated Future Payouts			Number of Shares of Stock or Units (#) (1)	Number of Securities Underlying Options (#) (1)	Number of Securities Underlying Awards (\$/Sh) (2)	Number of and Option Awards (\$) (3)
			Under Non-Equity Incentive Plan Awards						
			Threshold (\$)	Target (\$)	Maximum (\$)				
Jong S. Whang	12/6/07	12/6/07	33,000	165,000	247,500	10,000	30,000	14.79	408,921
Bradley C. Anderson	12/6/07	12/6/07	19,800	99,000	148,500	5,000	15,000	14.79	204,461
Robert T. Hass	12/6/07	12/6/07	6,900	34,000	51,000	1,500	5,000	14.79	65,689

- (1) The stock and option awards listed above vest in four (4) equal annual installments commencing with the first anniversary of the date of grant.
- (2) The exercise price is equal to the closing price of the Company's Common Stock on the date of the grant.
- (3) See Stock-Based Compensation under Note 1 to the consolidated financial statements included in our Form 10-K filed December 10, 2008 for a discussion of the assumptions used under SFAS 123R to value equity based compensation.

EMPLOYMENT AND CHANGE IN CONTROL ARRANGEMENTS

Employment Agreement with Chief Executive Officer

On April 13, 2007, we entered into a new employment agreement with Jong S. Whang, our chief executive officer. Below is a summary of the terms and conditions of Mr. Whang's employment agreement.

Term

Mr. Whang's employment agreement provides for an employment period commencing on the date of the employment agreement and continuing for an initial term of three years. Thereafter, the employment period will continue for successive one-year terms unless either we or Mr. Whang provides written notice of termination of the employment period at least 120 days prior to the end of any given term. If Mr. Whang remains in the full time employ of our company beyond the employment period without any written agreement, his employment agreement will be deemed to continue on a month to month basis and either party will have the right to terminate the employment agreement at the end of any ensuing calendar month with written notice of at least 30 days.

Base Salary

Pursuant to his employment agreement, Mr. Whang will receive an initial base salary of \$250,000 per annum. Mr. Whang's base salary will be reviewed on an annual basis by our Compensation Committee and can be increased, but not decreased, at the discretion of our Compensation Committee.

Incentive Compensation

Mr. Whang is also entitled to an annual cash bonus for each fiscal year that will be determined in accordance with an annual bonus plan adopted by our Compensation Committee. The annual bonus plan may not be less favorable to Mr. Whang than the bonus plan for fiscal 2007 that was adopted by our Compensation Committee on December 8, 2006. The terms of Mr. Whang's 2007 bonus plan are described below in more detail under the section "Other Agreements and Compensatory Arrangements."

Stock Options

Pursuant to Mr. Whang's employment agreement, any currently outstanding options held by Mr. Whang will remain in full force and effect in accordance with our stock option plans and applicable stock option agreements. Mr. Whang will also be issued an annual grant of stock options by our Compensation Committee within 90 days after the end of each fiscal year during his employment period. All of the options granted to Mr. Whang will be incentive stock options within the meaning of the Internal Revenue Code of 1986, or if they do not qualify as incentive stock options, they will be non-qualified stock options. The amount and terms of the grants will be determined by our Compensation Committee, but may not be any less favorable to Mr. Whang than the terms of the options previously granted to Mr. Whang on December 8, 2006.

Benefits

Mr. Whang will be entitled to receive from our company cash in lieu of participating in the benefit plans offered to executive officers of our company. We will provide Mr. Whang with an annual automobile allowance of not less than \$12,000, a life insurance policy in the face amount of \$250,000 and such other benefits as we may deem appropriate from time to time.

Termination

Mr. Whang's employment is "at will" and either we or Mr. Whang can terminate his employment agreement at any time, with or without "cause" or "good reason" (as those terms are defined in Mr. Whang's employment agreement), upon 30 days written notice. Mr. Whang's employment agreement can also be terminated by us due to the disability of Mr. Whang after at least 30 days' written notice by us of our intention to terminate his employment.

Severance

If we terminate the employment of Mr. Whang against his will and without cause (including by giving notice of termination of his employment agreement as described above), or if Mr. Whang terminates his employment for good reason, Mr. Whang is entitled to receive salary, incentive compensation and vacation accrued through the date of termination, plus (i) an amount equal to two years of Mr. Whang's base salary in effect on the date of termination (which would have been \$550,000, if terminated during fiscal 2008); (ii) a pro-rata portion of the amount of incentive compensation he would earn for the fiscal year in which the termination occurs if the results of operations of our

company for such fiscal year were annualized; and (iii) full vesting of all outstanding stock options held by Mr. Whang.

If Mr. Whang voluntarily terminates his employment other than for good reason, if we terminate Mr. Whang's employment for cause, or if Mr. Whang's employment is terminated due to his death or disability, Mr. Whang will be entitled to receive salary and accrued vacation through the date of termination only. However, in the event Mr. Whang's employment is terminated due to his death or disability, he will also be entitled to receive (i) a pro-rata portion of the amount of incentive compensation he would earn for the fiscal year in which the termination occurs if the results of operations of Amtech for such fiscal year were annualized, and (ii) full vesting of all outstanding stock options held by him.

Noncompetition

Mr. Whang agreed that during the term of his employment agreement he would not engage in certain activities in which he would be competing with us or our subsidiaries. He also agreed that for a period of two years after the end of the term of his employment agreement he would not engage in certain activities in which he would be competing with us or our subsidiaries and he would not own, directly or indirectly, more than a 5% interest in entities which compete with us or our subsidiaries.

Change in Control

In the event that Mr. Whang's employment with us is terminated either (i) by us for any reason other than for cause during a "pending change in control" (as that term is defined in Mr. Whang's employment agreement) of our company or within one year following the occurrence of a "change in control" (as that term is defined in Mr. Whang's employment agreement), or (ii) by Mr. Whang for good reason within one year following the occurrence of a change in control of our company, then Mr. Whang will be entitled to receive within 10 days of the date of termination of his employment, in lieu of the severance payment otherwise payable, (i) an amount equal to three years of his base salary in effect on the date of termination of his employment, (ii) the maximum amount of the incentive compensation which he could earn for the fiscal year in which the termination occurs, and (iii) full vesting of all outstanding stock options he holds.

Change of Control Agreement with Chief Financial Officer

On March 10, 2008, we entered into a Change of Control Severance Agreement with Bradley C. Anderson, our chief financial officer. Below is a summary of the terms and conditions of the agreement.

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Term

The term of the agreement with Mr. Anderson commences on March 10, 2008 and continues for an initial term of three years. Thereafter, the employment period will continue for successive one-year terms unless either we or Mr. Anderson provides written notice of termination of the employment period at least 120 days prior to the end of any given term.

Change in Control

In the event that Mr. Anderson's employment with us is terminated (other than as a consequence of death or disability) either (i) by us for any reason other than for cause during a "pending change in control" (as the term is defined in Mr. Anderson's change of control agreement) or within one year following the occurrence of a "change in control" (as the term is defined in Mr. Anderson's change of control agreement), or (ii) by Mr. Anderson for good reason within one year following the occurrence of a change in control, then Mr. Anderson will be entitled to receive from the Company the following: (i) an amount equal to two years of his base salary in effect on the date of termination of his employment (which would have been equal to \$396,000, if terminated during fiscal 2008); (ii) the maximum amount of the incentive compensation which he could earn for the fiscal year in which the termination occurs; and (iii) full vesting of all outstanding stock options and restricted stock he holds.

Severance and Change of Control Agreements with Chief Accounting Officer

In 1992, we also entered into a severance agreement with Robert T. Hass, now our Chief Accounting Officer, which provides for a minimum severance of 90 days under terms similar to those described above for Mr. Whang. Mr. Hass is entitled to a lump sum severance payment equal to one year's base salary should his employment be terminated within one year following a change in control pursuant to a separate agreement entered into in 1998 (which would have been equal to \$138,000, if terminated during fiscal 2008).

Other Compensatory Arrangements

On December 6, 2007, our Compensation Committee approved the following compensation arrangements for J.S. Whang, President and Chief Executive Officer, Bradley C. Anderson, Vice President and Chief Financial Officer, and Robert T. Hass, Chief Accounting Officer: (i) salaries of \$275,000, \$198,000 and \$138,000, effective December 1, 2007, for Messrs. Whang, Anderson and Hass, respectively; (ii) bonuses for fiscal 2007 of \$115,000, \$69,000, and \$23,000 for Mr. Whang, Mr. Anderson, and Mr. Hass, respectively; and (iii) incentive stock options to purchase 30,000, 15,000 and 5,000 shares for Mr. Whang, Mr. Anderson and Mr. Hass, respectively; and (iv) restricted stock grants of 10,000, 5,000 and 1,500 shares for Mr. Whang, Mr. Anderson and Mr. Hass, respectively. Each of the options granted to the named individuals has an exercise price of \$14.79 (the closing price of Amtech's common stock on December 6, 2007). The options expire ten years from the date of grant, and vest 25% per year on the first through fourth anniversaries of the grant date.

Our Compensation Committee also approved a bonus plan for fiscal 2007 in which Mr. Whang, Mr. Anderson and Mr. Hass are eligible to participate. Under the bonus plan, participants can earn a target bonus equal to a specified percentage of their base salary by achieving 100% of pre-defined performance objectives. The participant's bonus calculation is based upon achieving performance objectives established in each of the following categories: (i) bookings; (ii) revenue; (iii) gross margin; and (iv) operating profit. Objectives established for participants in these categories may be either at the corporate level, the operating division level or both. In addition, individual performance objectives may be established for certain participants. In order to be eligible for a bonus with respect to any of the above performance categories, the participant must achieve not less than 80% (90% in the case of gross margin) of the applicable performance objective. At these minimum levels, 20% of the bonus for the category is eligible for payment. The bonus calculation percentage with respect to any performance category increases by 4% (8% with respect to gross margin) for each 1% improvement in performance over the minimum level up to 100%, and by 1% for each 1% improvement in performance over 100%, up to a maximum of 150% of the participant's target bonus.

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EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information regarding grants of plan-based option awards held by our named executive officers as of September 30, 2008:

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

Name	Option Awards			Stock Awards		
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Jong S. Whang	135,000		6.50	6.50		
	7,500	22,500	6.90	6.90		
		30,000	14.79	14.79		
					10,000	93,100
Bradley C. Anderson	4,000	6,000	8.51	8.51		
	2,500	7,500	6.90	6.90		
	5,000	15,000	7.30	7.30		
					5,000	46,550
Robert T. Hass	20,000		5.88	5.88		
	1,250	3,750	6.90	6.90		
		5,000	14.79	14.79		
					1,500	13,965

Option Exercises and Stock Vested

The following table shows all stock options exercised and the value realized upon exercise, and all stock awards vested and the value realized upon vesting, by the named executive officers during fiscal 2008, which ended on September 30, 2008.

OPTION EXERCISES AND STOCK VESTED FOR FISCAL 2008

Name	Option Awards		Stock Awards	
	Number of Shares		Number of Shares	
	Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Acquired on Vesting (#)	Value Realized on Vesting (\$)(2)
Jong S. Whang	15,000	157,778	—	—
Bradley C. Anderson	—	—	—	—
Robert T. Hass	7,000	27,330	—	—

(1) The value realized equals the difference between the option exercise price and the fair market value of Amtech common stock on the date of exercise, multiplied by the number of shares for which the option was exercised.

(2) The value realized equals the fair market value of Amtech common stock on the vesting date, multiplied by the number of shares that vested.

Pension Benefits

None of our named executive officers receive pension benefits.

Nonqualified Deferred Compensation

None of our named executive officers receive nonqualified deferred compensation benefits.

REPORT OF COMPENSATION AND OPTION COMMITTEE

The Compensation and Option 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 Compensation and Option Committee has reviewed and discussed the Compensation Discussion and Analysis included above with management and based on such review and discussions the Compensation and Option Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

RESPECTFULLY SUBMITTED,

Robert King, Chairman
Alfred W. Giese

AUDIT COMMITTEE REPORT

In accordance with its written charter adopted by our Board of Directors on April 16, 2005, a copy of which is attached as an exhibit to the Company's Proxy Statement filed with the Securities and Exchange Commission (the "SEC") on January 28, 2008, the Audit Committee is responsible for reviewing and discussing the audited financial statements with management, discussing with the Company's auditors information relating to the auditors' judgments about the quality of the Company's accounting principles, recommending to our Board of Directors that the Company include the audited financial statements in its Annual Report on Form 10-K and overseeing compliance with the requirements of the SEC for disclosure of auditors' services and activities. The Audit Committee also develops and recommends corporate governance guidelines to the Board and provides oversight with respect to corporate governance and ethical conduct.

The Board of Directors annually reviews the independence of the Audit Committee members in view of the NASD's listing standards' and the SEC's definitions of independence for audit committee members. The Board has determined that each of the members of the Audit Committee meets those definitions and standards. Additionally, each member of the Audit Committee is financially literate, and one of the Audit Committee members, Michael Garnreiter, has financial management expertise as required by NASDAQ's rules and meets the SEC's definition of an "audit committee financial expert."

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

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The Audit Committee meets regularly with the independent accountants without management present and also meets in executive session without any others present. The Audit Committee has reviewed the Company's consolidated financial statements for the fiscal year ended September 30, 2008, as audited by its independent auditors, Mayer Hoffman McCann P.C. ("Mayer Hoffman McCann"), and has discussed these financial statements with management. In addition, the Audit Committee has discussed with Mayer Hoffman McCann the matters required to be discussed by Statement of Auditing Standards No. 61, "Communications with Audit Committees." Furthermore, the Audit Committee has received the written disclosures and the letter from Mayer Hoffman McCann required by the Independence Standards Board Standard No. 1, "Independence Discussions with Audit Committees," and has discussed with Mayer Hoffman McCann its independence.

Based upon the foregoing review and discussion, the Audit Committee recommended to our Board of Directors that the audited financial statements for the fiscal year ended September 30, 2008 be included in the Company's Annual Report on Form 10-K for filing with the SEC.

RESPECTFULLY SUBMITTED,

Michael Garnreiter, Chairman
Robert F. King
Brian Hoekstra

PRE-APPROVAL POLICY

In March 2008, the Audit Committee adopted a Pre-Approval Policy (the "Policy") governing the approval of all audit and non-audit services performed by the Company's independent auditor in order to ensure that the performance of such services does not impair the auditor's independence.

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

Any service to be provided by the independent auditor that has not received general pre-approval under the Policy is required to be submitted to the Audit Committee for approval prior to the commencement of a substantial portion of the engagement. Any proposed service exceeding pre-approved cost levels is also required to be submitted to the Audit Committee for specific approval. For the years ended September 30, 2007 and 2008, all services rendered by the Company's independent auditors were pre-approved by the Audit Committee pursuant to the pre-approval Policy.

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

CODE OF ETHICS

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

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DISCLOSURE OF AUDIT AND NON-AUDIT FEES

The following table sets forth the fees billed to us by our independent auditors for services rendered for the audit of our annual financial statements and the review of our quarterly financial statements for the fiscal years ended September 30, 2008 and 2007, and fees billed during those fiscal years for (i) services by our auditor that are reasonably related to the performance of the audit or review of our financial statements and that are not reported as audit fees, (ii) services rendered in connection with tax compliance, tax advice and tax planning, and (iii) all other fees for services rendered.

Year Ended Year Ended

	Sept. 30, 2008	Sept. 30, 2007
Audit Fees (1)	\$ 294,077	\$ 244,274
Audit-Related Fees (2)	15,851	8,300
Tax Fees	--	--
All Other Fees	--	--
Total Fees	\$ 309,928	\$ 252,574

- (1) Annual audit of the Company, review of financial statements included the Company's reports on Form 10-Q and Form 10-K, including an audit of the Company's internal control over financial reporting, and services normally provided by the accountant in connection with statutory and regulatory filings, including the Company's registration statements related to our 2007 and 2008 public offerings and the 2007 registration of shares under our employee stock incentive plan.
- (2) Accounting and reporting advisory services related to acquisition activities.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We had no transactions during fiscal 2008 with any director, director nominee, executive officer, security holder known to us to own of record or beneficially more than 5% of the common stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded \$120,000.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of our common stock as of January 22, 2009, by (i) each director and executive officer of Amtech, including the named executive officers, (ii) all executive officers and directors of Amtech as a group. The information included in the tables below 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)}	No. of Shares of Common Stock Beneficially Held ⁽³⁾	Percent of Common Stock Ownership ⁽³⁾
Officers and Directors:		
Jong S. Whang	175,000 (4)	1.9%
Bradley C. Anderson	27,000 (6)	*
Robert T. Hass	31,500 (5)	*
Michael Garnreiter	5,667 (7)	*
Alfred W. Giese	3,667 (8)	*
Brian L. Hoekstra	5,667 (7)	*
Robert F. King	24,333 (9)	*
Director and Officer Total	272,583 (9)	3.0%

*Less than 1%.

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

- (2) Mr. Whang is our President, CEO and is a director. Mr. Hass is the Chief Accounting Officer. Mr. Anderson is our Vice President-Chief Financial Officer, Treasurer and Secretary. Messrs. King, Garnreiter, Giese and Hoekstra are directors of Amtech.
- (3) Based on 9,103,698 shares of common stock outstanding as of January 22, 2009. The share amounts and percentages shown include shares of common stock actually owned as of January 22, 2009, and shares of common stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date pursuant to options or warrants. All shares of common stock that the identified person had the right to acquire within 60 days of January 22, 2009, 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 157,500 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (5) Includes 23,750 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (6) Includes 22,750 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (7) Includes 5,667 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (8) Includes 3,667 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (9) Includes 15,333 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.
- (10) Includes 237,333 shares issuable upon exercise of options exercisable within 60 days of January 22, 2009.

The following table sets forth certain information concerning the beneficial ownership of our common stock as of January 22, 2009, by each person known by us to be the beneficial owner of more than 5% of our common stock.

Name and Address of 5% Shareholders:	No. of Shares of Common Stock Beneficially Held ⁽¹⁾	Percent of Common Stock Ownership ⁽¹⁾
Austin W. Marxe 527 Madison Avenue, Suite 2600 New York, NY 10022	1,076,385 ⁽²⁾	11.82% ⁽²⁾
David M. Greenhouse 527 Madison Avenue, Suite 2600 New York, NY 10022	1,076,385 ⁽²⁾	11.82% ⁽²⁾
Jeffrey L. Gendell 55 Railroad Avenue Greenwich, CT 06830	908,014 ⁽³⁾	9.07% ⁽³⁾
Richard L. Scott 700 11 th Street South, Suite 101 Naples, FL 34102	733,464	8.06% ⁽⁴⁾
Systematic Financial Management. L.P. 300 Frank W. Burr Blvd. Glenpointe East, 7th Floor Teaneck, NJ 07666	698,045 ⁽⁴⁾	7.67% ⁽⁵⁾
Essex Investment Management Co. LLP 125 High Street 29th floor Boston, MA 02110-2702	663,403 ⁽⁵⁾	7.29% ⁽⁶⁾

- (1) Based on 9,103,698 shares of common stock outstanding as of January 22, 2009. The share amounts and percentages shown include shares of common stock actually owned as of January 22, 2009, and shares of common stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date pursuant to options or warrants. All shares of common stock that the identified person had the right to acquire within 60 days of January 22, 2009, 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.

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- (2) Mr. Marxe and Mr. Greenhouse share voting and investment power over and beneficially own a total of 1,124,885 shares of common stock. Mr. Marxe and Mr. Greenhouse are the controlling principals of AWM Investment Company, Inc., which is the general partner of MGP Advisers Limited Partnership, which is the general partner of Special Situations Fund III QP, L.P. which owns 773,585 shares of common stock. Mr. Marxe and Mr. Greenhouse are also members of SST Advisers, L.L.C., which is the general partner of Special Situations Technology Fund, L.P. and Special Situations Technology Fund II, L.P., which own 42,800 and 308,500 shares of common stock, respectively.
- (3) Mr. Gendell and the limited liability entities referred to below share voting and investment power over and beneficially own a total of 908,014 shares of common stock. Mr. Gendell is the managing member and in that capacity directs the operations of Tontine Capital Management, L.L.C. and Tontine Overseas Associates, L.L.C., which owns 180,600 shares of common stock. Tontine Capital Management, L.L.C. is the general partner of Tontine Capital Partners, L.L.P., which owns 727,414 shares of common stock and in that capacity has the power to direct the affairs of Tontine Capital Partners, L.L.P.
- (4) Mr. Scott is a controlling member of Amtech Investments LLC, a member-managed limited liability company which owns 733,464 shares of common stock.
- (5) Systematic Financial Management, L.P. ("Systematic") beneficially owns 515,500 shares of common stock. Systematic has sole dispositive power over all stock owned, and sole voting power with respect to 293,700 shares. Systematic considers itself to be an investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E) of the Securities Exchange Act of 1934 (the "Exchange Act").
- (6) Essex Investment Management Company, LLC ("Essex") beneficially owns 498,670 shares of common stock. Essex has sole dispositive power over all stock owned, and sole voting power with respect to 468,751 shares. Essex considers itself to be an investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E) of the Exchange Act.

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

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

Based solely on our review of such forms received by us during the fiscal year ended September 30, 2008, or written representations from certain reporting persons, we believe that between October 1, 2006 and September 30, 2008, all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with, except that: (i) Messrs. Austin Marxe and David Greenhouse appear to have failed to timely file; (ii) Mr. Michael Garnreiter failed to timely file with respect to one (1) transaction; (iii) Mr. Alfred Giese failed to timely file with respect to one (1) transaction; (iv) Mr. Brian L. Hoekstra failed to timely file with respect to one (1) transaction; and (v) Mr. Robert F. King failed to timely file with respect to two (2) transactions.

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Annual Report

The Annual Report of the Company for the fiscal year ended September 30, 2008, is enclosed herewith.

Voting By Proxy

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

Independent Auditors

Our Board of Directors selected the accounting firm of Mayer Hoffman McCann P.C. (MHM) as the Company’s independent public accountants for the fiscal year ending September 30, 2008 and expects to reappoint them for the fiscal year ending September 30, 2009, immediately following the Annual Meeting. A representative of MHM is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she so desires, and will also be available to respond to appropriate questions.

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

The Company anticipates holding its 2010 Annual Meeting of Shareholders on March 11, 2010. Any shareholder who wishes to present any proposal for shareholder action at the 2010 Annual Meeting of Shareholders must be submitted to the Company’s Secretary, at the Company’s offices, not later than October 16, 2009, 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 2009 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 31, 2008, 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 2009 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.

Shareholder Communications with Board of Directors

The Company does not have formal procedures for shareholder communications with the Board of Directors. However, any matter intended for the Board of Directors or any Board Committee should be directed to the Corporate Secretary of the Company at 131 South Clark Drive, Tempe, Arizona 85281, with a request to forward the same to the intended recipient. All shareholder communications delivered to the Corporate Secretary of the Company for forwarding to the Board of Directors or specified Board members will be forwarded in accordance with the shareholder’s instructions.

HOUSEHOLDING OF PROXY MATERIALS

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

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

By Order of the Board of Directors:



Bradley C. Anderson, Secretary

Tempe, Arizona
February 9, 2009

Amtech Systems, Inc.

Holder Account Number

A. ITEMS OF BUSINESS

1. **ELECTION OF DIRECTORS** - The Board of Directors recommends a vote FOR the listed nominees as Directors.

	For	Withhold	
1. Jong S. Whang	<input type="checkbox"/>	<input type="checkbox"/>	votes
2. Michael Garnreiter	<input type="checkbox"/>	<input type="checkbox"/>	votes

3. Alfred W. Giese	<input type="checkbox"/>	<input type="checkbox"/>	votes
4. Brian L. Hoekstra	<input type="checkbox"/>	<input type="checkbox"/>	votes
5. Robert F. King	<input type="checkbox"/>	<input type="checkbox"/>	votes

B. AUTHORIZED SIGNATURES

Sign here – This section must be completed for your instructions to be executed.

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.

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. Please return in the enclosed, postage-paid envelope.

Signature 1 - Please keep signature within the box Signature 2 - Please keep signature within the box Date (mm/dd/yyyy)
 [_____] [_____] [___/___/___]

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PROXY - AMTECH SYSTEMS, INC.

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
 OF AMTECH SYSTEMS, INC. FOR THE 2008 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 4, 2009, and hereby appoints Jong S. Whang and Bradley C. Anderson, and each or either of them, proxies and attorneys-in-fact, with full power of substitution, on behalf and in the name of the undersigned, to represent the undersigned at the Annual Meeting of Shareholders of AMTECH SYSTEMS, INC. to be held at the Phoenix Airport Marriott Hotel, 1101 North 44th Street, Phoenix, Arizona 85008 USA, on Thursday, March 12, 2009, at 9:00 a.m., Arizona time, and at any adjournment(s) or postponement(s) thereof, and to vote all shares of Common Stock that the undersigned would be entitled to vote if then and there personally present, on the matters set forth on the reverse side.

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

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