UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K/A

Amendment No. 1

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended: September 30, 2004

OR

Commission File Number: 0-11412

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona	86-0411215		
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)		
131 South Clark Drive, Tempe, Arizona	85281		
131 South Clark Drive, Tempe, Arizona	(Zip Code)		
Registrant's telephone number, including area code: 480-967-5146			
Securities registered pursuant to Section 12(b) of the Act:None			
Securities registered pursuant to Section 12(g) of the Act:			
Common Stock, \$.01 Par Value			

(Title of Class)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. \boxtimes Yes \square No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12(b)(2). Yes 🗵 No

EXPLANATORY NOTE

This is Amendment No. 1 to the Registrant's annual report on Form 10-K for the year ended September 30, 2004, which was originally filed with the Securities and Exchange Commission on January 13, 2004. This amendment is being filed to include responses to the items required by Part III, which originally were expected to be incorporated by reference to the Registrant's definitive Proxy Statement to be delivered to its shareholders in connection with its 2005 Annual Meeting of Shareholders. This amendment is also being filed to update the exhibit index in Item 15 of Part IV.

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AMTECH SYSTEMS, INC.

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PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

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

Name	Age	Position with the Company
Jong S. Whang	59	President, Chief Executive Officer and Director
Robert T. Hass	54	Vice President – Finance, Chief Financial Officer,
		Treasurer, Secretary and Director
Alvin L.Katz	75	Director
Robert F. King	71	Director
Bruce R. Thaw	52	Director

Jong S. Whang has been President, Chief Executive Officer and a Director of the Company since its inception, and was one of its founders. Mr. Whang's responsibilities as President include the sales effort for the Company's semiconductor equipment business, and the development of new products and business opportunities in that industry. He has 30 years of experience in the semiconductor industry, including time spent in both processing and manufacturing of equipment components and systems. From 1973 until 1979, he was employed by Siltronics, Inc., initially as a technician working with chemical vapor deposition, and later as manager of the quartz fabrication plant with responsibility of providing technical marketing support. From 1979 until 1981, he was employed by U.S. Quartz, Inc. as manufacturing manager. In 1981, he left U.S. Quartz to form the Company.

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

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

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

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

Audit Committee and Audit Committee Financial Expert

The Company has a separately-designated standing audit committee established in accordance with section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended. The Company's Audit Committee is comprised as follows: Bruce R. Thaw, Alvin L. Katz and Robert F. King.

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

Section 16(a) Beneficial Ownership Reporting Compliance

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, 2004, or written representations from certain reporting persons, we believe that between October 1, 2003 and September 30, 2004, all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with.

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.

ITEM 11. EXECUTIVE COMPENSATION

The following table sets forth information regarding annual and long-term compensation for services rendered to the Company during the fiscal years ended September 30, 2004, 2003 and 2002 by the Company's Chief Executive Officer and the other most highly compensated executive officer of the Company who received annual compensation exceeding \$100,000 during such periods (collectively, the "Named Executive Officers").

SUMMARY COMPENSATION TABLE

		А	Annual C	Compensatio	n (1)	Long-Term Compensation	
Name and Principal Position	Fiscal Year	Salary (2)	Bor	nus (3)(4)	Other Annual Compensation	Restricted Stock Awards	All Other Compensation
Jong S. Whang	2004	\$ 150,722	\$	_	_	_	_
President and Chief	2003	150,722		_		_	_
Executive Officer	2002	150,722		3,585	—	—	—
Robert T. Hass	2004	\$ 102,000	\$	57,461	_	_	_
Vice President –	2003	102,000					
Finance	2002	102,000		18,000	—	—	—

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

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

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

(4) The discretionary cash bonus granted to Mr. Hass in 2004 was in consideration of work performed in connection with the acquisition of Bruce Technologies, Inc.

Option Grants in Last Fiscal Year

There were no stock option grants during the 2004 fiscal year to any of the Named Executive Officers.

Aggregated Option Exercises and Fiscal Year-End Option Values

The following table sets forth information (on an aggregated basis) concerning exercises of stock options during the 2004 fiscal year by each of the Named Executive Officers, and the year-end value of unexercised options.

	Shares Acquired On	Value	Number of Securities Underlying} Unexercised Options at Fiscal Year-End (#)		Money" Opt	ercised "In-The- tions at Fiscal nd(\$) (1)
Name	Exercise (#)	Realized (\$)	Exercisable	Unexercisable	Exercisable	Unexercisable
Jong S. Whang	_	_	132,767	60,000	\$ 134,462	_
Robert T. Hass	_	_	23,250	13,000	\$ 19,719	_

(1) Options are "in-the-money" at the fiscal year-end if the fair market value (based on the closing price of the Company's Common Stock on the Nasdaq Stock Market on September 30, 2004 of \$4.28 per share, less the exercise price) of the underlying securities exceeds the exercise or base price of the option on such date.

EMPLOYMENT AND CHANGE IN CONTROL ARRANGEMENTS

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

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

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

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

Directors' Compensation

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

Compensation Committee Interlocks and Insider Participation

The Compensation and Option Committee is presently comprised of Mr. Katz and Mr. Thaw, who are not, and never have been, officers or employees of the Company.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plans

The following table sets forth certain information, as of September 30, 2004, concerning outstanding options and rights to purchase Common Stock granted to participants in all of the Company's equity compensation plans and the number of shares of Common Stock remaining available for issuance under such equity compensation plans.

EQUITY COMPENSATION PLAN INFORMATION

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	pric	eighted-average exercise e of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders (1)	429,017	\$	4.51	187,500
Equity compensation plans not approved by security holders (2)	31,000	\$	11.68	
Total	460,017			187,500

(1) Represents the 1995 and 1998 Employee Stock Option Plans and the Non-employee Director Stock Option Plan.

⁽²⁾ Represents (i) 15,000 shares of common stock issuable upon exercise of options granted to non-employee directors under stock purchase agreements prior to the 1996 establishment of the Non-employee Director Stock Option Plan, with an exercise price of \$4.47 and (ii) 21,000 shares of common stock issuable upon exercise of options granted to advisors in the connection with private placement in September 2000, having an exercise price of \$15.12. The options under both plans are fully vested.

Security Ownership Of Certain Beneficial Owners

The following table sets forth certain information concerning the beneficial ownership of our Common Stock as of January 28, 2005, by (i) each director and executive officer of the Company, including the Named Executive Officers, (ii) all executive officers and directors of the Company as a group, and (iii) each person known by the Company to be the beneficial owner of more than 5% of our Common Stock. This information was determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, and is based upon the information furnished by the persons listed below. Except as otherwise indicated, each shareholder listed possesses sole voting and investment power with respect to the shares indicated as being beneficially owned.

Name and Address (1) (2)	Number of Shares Beneficially Held (3)	Percent of Ownership (3)
Jong S. Whang	247,222(4)	8.6%
Robert T. Hass	28,375(5)	1.0%
Alvin L. Katz	96,000(6)	3.5%
Robert F. King	3,667(7)	*
Bruce R. Thaw	32,000(6)	1.2%
Directors and Executive Officers of the Company as a group (5 persons)	345,931(8)	15.1%
5% Shareholders:		

202,500(9)

7.5%

Robert Sussman 520 Madison Avenue 41st Floor New York, NY 10022

* 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 the Company's President, CEO and a director. Mr. Hass is the Vice President Finance, Chief Financial Officer, Treasurer, Secretary and a director. Messrs. Katz, King and Thaw are directors of the Company.
- (3) The share amounts and percentages shown include shares of Common Stock actually owned as of January 28, 2005, 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 28, 2005, 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) 351 shares held jointly with Mr. Whang's spouse and (ii) 162,767 shares issuable upon exercise of options exercisable within 60 days of January 28, 2005.

(5) Includes 28,250 shares issuable upon exercise of options exercisable within 60 days of January 28, 2005.

(6) Includes 32,000 shares issuable upon exercise of options exercisable within 60 days of January 28, 2005.

(7) Includes 3,667 shares issuable upon exercise of options exercisable within 60 days of January 28, 2005.

(8) Includes 258,684 shares issuable upon exercise of options exercisable within 60 days of January 28, 2005.

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

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company had no transactions during 2004 with any director, director nominee, executive officer, security holder known to the Company to own of record or beneficially more than 5% of the Common Stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded \$50,000.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table sets forth the fees billed to us by our independent auditors during the years ended September 30, 2004 and 2003 for: (i) services rendered for the audit of our annual financial statements and the review of our quarterly financial statements, (ii) services by our auditor that are reasonably related to the performance of the audit or review of our financial statements and that are not reported as Audit Fees, (iii) services rendered in connection with tax compliance, tax advice and tax planning, and (iv) all other fees for services rendered.

	Year Ended	Year Ended
	Sept. 30, 2004	Sept. 30, 2003
Audit Fees	\$ 275,000	\$ 123,000
Audit-Related Fees (1)	5,773	
Tax Fees	—	—
All Other Fees		
Total Fees	\$ 280,773	\$ 123,000

(1) Accounting and reporting advisory services related to acquisition activities.

PRE-APPROVAL POLICY

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

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

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

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

All the services provided by the Company's independent auditors during the fiscal year ended September 30, 2004 were pre-approved by the Audit Committee.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

EXHIBIT NO.	DESCRIPTION
31.1	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended. Filed herewith.
31.2	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended. Filed herewith.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.
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January 28, 2005

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMTECH SYSTEMS, INC.

By: /s/ Jong S. Whang

Jong S. Whang, President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints JONG S. WHANG and ROBERT T. HASS, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully and to all intents and purposes as he might or could do in person hereby ratifying and confirming all that said attorneys-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
/s/ Jong S. Whang	Chairman of the Board, President and Chief	
Jong S. Whang	Executive Officer (Principal Executive Officer)	January 28, 2005
/s/ Robert T. Hass	Vice President – Finance, Chief Financial Officer and Director	
Robert T. Hass	(Principal Financial & Accounting Officer)	January 28, 2005
*	Director	January 28, 2005
Alvin L. Katz		
*	— Director	January 28, 2005
Robert F. King		
*	Director	January 28, 2005
Bruce R. Thaw		· ·

* By Robert T. Hass, attorney-in-fact

Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, As Amended

I, Jong S. Whang, certify that:

1. I have reviewed this Annual Report on Form 10-K of Amtech Systems, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial position, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and we have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

(b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By <u>/s/ Jong S. Whang</u> Jong S. Whang President and Chief Executive Officer Amtech Systems, Inc. Date: January 28, 2008

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, As Amended

I, Robert T. Hass, certify that:

1. I have reviewed this Annual Report on Form 10-K of Amtech Systems, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial position, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and we have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

(b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By <u>/s/ Robert T. Hass</u> Robert T. Hass Vice President Finance and Chief Financial Officer Amtech Systems, Inc. Date: January 28, 2008

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Amtech Systems, Inc. (the "Company") on Form 10-K for the period ended September 30, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jong S. Whang, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

By <u>/s/ Jong S. Whang</u> Jong S. Whang President and Chief Executive Officer Date: January 28, 2008

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Amtech Systems, Inc. (the "Company") on Form 10-K for the period ended September 30, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert T. Hass, Vice President – Finance and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

By <u>/s/ Robert T. Hass</u> Robert T. Hass Vice President Finance and Chief Financial Officer Date: January 28, 2008