AMTECH SYSTEMS INC Form DEF 14A January 25, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of

the Securities Exchange Act of 1934

Filed by the Registrant R Filed by a Party other than the Registrant o

Check the appropriate box:

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

AMTECH SYSTEMS, INC. (Name of Registrant as Specified in its Charter) N/A (Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

RNo fee required. oFee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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

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(3) Filing Party:

(4) Date Filed:

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

NOTICE OF 2019 ANNUAL MEETING OF SHAREHOLDERS TO BE HELD ON MARCH 6, 2019

To Our Shareholders:

The 2019 Annual Meeting of Shareholders (the "Annual Meeting") of AMTECH SYSTEMS, INC., an Arizona corporation (the "Company"), will be held at our Corporate Office at 131 South Clark Drive, Tempe, Arizona, USA, on Wednesday, March 6, 2019, 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 ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accountants for the fiscal year ending September 30, 2019;
- 3. To vote on an advisory (non-binding) resolution to approve the compensation of our Named Executive Officers (as defined in the Proxy Statement):
- 4. To approve an amendment to our 2007 Employee Stock Incentive Plan; and
- 5. To transact such other business as may properly come before the meeting and to approve any postponement or adjustment thereof.
- 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 shareholders on Form 10-K for the fiscal year ended September 30, 2018 (the "2018 Annual Report") are also available at http://www.amtechsystems.com/proxy.htm. The materials available on this website include this notice, the proxy statement, the proxy card and our 2018 Annual Report.

The Board of Directors has fixed the close of business on January 18, 2019 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 2018 Annual Report, which includes our audited financial statements, was mailed with this notice and Proxy Statement to all shareholders of record on or about February 4, 2019.

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 the approval of such proposals.

By Order of the Board of Directors:

Robert T. Hass, Secretary Tempe, Arizona January 25, 2019 IMPORTANT: IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED AND VOTED AT THIS MEETING. PLEASE VOTE YOUR SHARES PROMPTLY BY COMPLETING AND RETURNING YOUR PROXY CARD OR BY VOTING ON THE INTERNET OR BY TELEPHONE.

AMTECH SYSTEMS, INC.

PROXY STATEMENT 2019 ANNUAL MEETING OF SHAREHOLDERS

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

PROXY STATEMENT

The Board of Directors, or "Board," of Amtech Systems, Inc., an Arizona corporation (the "Company" or "Amtech"), is soliciting proxies to be used at the 2019 Annual Meeting of Shareholders to be held on Wednesday, March 6, 2019, at 9:00 a.m., Arizona time, and any adjournment or postponement thereof (the "Annual Meeting" or "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, 2019. Who Can Vote

Shareholders of record as of the close of business on January 18, 2019 (the "Record Date"), may vote at the Annual Meeting and at any and all adjournments or postponements of the Meeting. On the Record Date, 14,227,580 shares of our common stock, \$0.01 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 issued and outstanding shares of Common Stock as of the Record Date 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, which will be held at our Corporate Offices at 131 South Clark Drive, Tempe, Arizona, USA, on Wednesday, March 6, 2019, at 9:00 a.m., Arizona time.

How to Vote

If your shares are registered directly in your name, you may vote:

Via the Internet. Go to the website www.investorvote.com/ASYS and follow the instructions. You must specify how you want your shares voted or your Internet vote cannot be completed. Votes have to be received no later than 1:00 a.m. Eastern Standard Time the morning of the Meeting.

By Telephone. To vote by phone, call 1-800-652-VOTE (8683) toll free from the U.S. and Canada and follow the instructions. You must specify how you want your shares voted and confirm your vote at the end of the call or your telephone vote cannot be completed. Votes have to be received no later than 1:00 a.m. Eastern Standard Time the morning of the Meeting.

By Mail. Complete and sign the enclosed proxy card and mail it in the enclosed postage prepaid envelope for receipt on or before March 5, 2019. If you execute the proxy but do not specify how you want your shares voted, your shares will be voted in accordance with the recommendations of the Board set forth in the Proxy Statement. In Person at the Annual Meeting. If you choose to vote in person at the Meeting, you must bring a government-issued proof of identification that includes a photo (such as a driver's license or passport) and either the enclosed proxy card or other verification of your ownership of shares of Common Stock as of the Record Date.

If your shares are held in street name (held for your account by a broker or other nominee):

Your broker, bank or other nominee should give you instructions for voting your shares. You may vote by Internet, telephone or mail as instructed by your broker, bank or other nominee. You may also vote in person if you obtain a legal proxy from your broker, giving you the right to vote your shares at the Meeting and you bring verification of your ownership of shares of Common Stock to the Meeting.

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.

What are the Voting Rights of Holders of Common Stock

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. If a quorum is present, a majority of votes cast by holders of Common Stock represented and entitled to vote at the Annual Meeting will constitute a ratification of the appointment of Mayer Hoffman McCann P.C. as our independent registered public accountants and a majority of votes cast by holders of Common Stock represented and entitled to vote at the Annual Meeting will be required to approve the amendments to our 2007 Stock Incentive Plan, as amended, as set forth in Proposal No. 4 below.

Approval of the advisory vote on the compensation of our named executive officers requires the affirmative vote of a majority of the shares of Common Stock present or represented at the Annual Meeting and entitled to vote. Because the vote is advisory, it will not be binding upon the Board. However, the Compensation and Stock Option Committee will take into account the outcome of the vote when considering future executive compensation arrangements. Revoking Your Proxy or Changing Your Vote

You may revoke your proxy and/or change your vote at any time before the Meeting.

If your shares are registered directly in your name, you must do one of the following:

Via the Internet or by Telephone. Cast your votes again via the Internet or by telephone by following the directions above. Only the last Internet or telephone vote will be counted.

By Mail. Sign a new proxy card and submit it as instructed above, or send a notice revoking your proxy to the Secretary so that it is received on or before March 5, 2019.

In Person at the Annual Meeting. Attend the Meeting and vote in person. Presence at the Meeting will not revoke your proxy unless you specifically request that your proxy be revoked.

If your shares are held through a broker or other nominee and you would like to change your voting instructions, please follow the instructions provided by your broker.

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. Generally, broker non-votes occur when a beneficial owner does not provide instructions to their broker with respect to a matter on which the broker is not permitted to vote without instructions from the beneficial owner. In tabulating the voting result for any particular proposal, shares that constitute broker non-votes are not considered entitled to vote on that proposal. Accordingly, broker non-votes will not affect the outcome of any matter being voted on at the Meeting, assuming that a quorum is obtained. Costs of this Proxy Solicitation

We will pay the costs of preparing and mailing the Notice of Annual Meeting 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. Our officers and directors may also solicit proxies personally, or by telephone or facsimile, without additional compensation. We have not retained any outside party to assist in the solicitation of proxies; however, we have retained Computershare Trust Company, N.A. and Broadridge Financial Solutions, Inc. to provide certain administrative services in connection with the proposals in this Proxy Statement, including coordinating the distribution of proxy materials to beneficial owners of Common Stock, contacting shareholders to ensure they have received this Proxy Statement and overseeing the return of proxy cards. Annual Report

Our Annual Report to Shareholders for the fiscal year ended September 30, 2018 (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.

Audit Committee Report

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

PROPOSAL NO. 1 – ELECTION OF DIRECTORS

(Item No. 1 on the Proxy Card)

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 qualified successor is duly 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. In order to exercise cumulative voting, the voting shareholder must complete the proxy card and indicate cumulative voting in accordance with the instructions included on the proxy card.

Nominees for Director

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

Robert M. Averick Michael Garnreiter Robert F. King Sukesh Mohan Jong S. Whang

Each of these nominees has agreed to be named in this Proxy Statement and to serve if elected. See below for information regarding each of the nominees.

Mr. Whang is the father of Mr. Michael Whang, our Vice President of Operations. There are no other family relationships among any of the director nominees or executive officers. Each nominee was recommended by a non-employee director.

Our Board recommends a vote FOR the election of the five nominees under Proposal No. 1. The persons appointed by the Board as proxies intend to vote for the election of each of the nominees, for a term to expire at the next annual meeting, unless you indicate otherwise on the proxy or voting instruction card. In that regard, our Board solicits authority to cumulate such votes.

If any nominee should become unavailable for any reason, which we do not anticipate, the proxy will be voted "for" any substitute nominee, or nominees, who may be selected by the Board 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 shareholdings 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 individuals nominated to serve as directors of the Company as of the date of this filing.

Age Position with the Company

- Jong S. Whang 73 Executive Chairman, Chairman of the Board and Chief Executive Officer
- Robert T. Hass 68 Vice President Chief Financial Officer, Treasurer and Secretary
- Robert M. Averick 52 Director
- Michael Garnreiter 66 Director
- Robert F. King 85 Director
- Sukesh Mohan 52 Director
- Michael Whang 47 Vice President of Operations and Chief Risk and Information Officer
- Lisa D. Gibbs 44 Vice President and Chief Accounting Officer

Name

Jong S. Whang has been a Director since our inception in 1981and is one of our founders. Mr. Whang served as our Chief Executive Officer since our inception until January 2012, when Mr. Fokko Pentinga was promoted to that position. Since January 2012, Mr. Whang has served as our Executive Chairman and Chairman of the Board. In November 2018, Mr. Whang was elected to serve in the role of Chief Executive Officer when Mr. Pentinga resigned from the Company. In addition, Mr. Whang previously served as our President until March 2010, when Mr. Pentinga was promoted to that position. Mr. Whang's responsibilities include establishing the strategic vision for Amtech and assisting in the marketing effort for our solar and semiconductor equipment business and business opportunities in those industries. He has over 40 years of experience in the solar and semiconductor industries, including time spent in both processing and manufacturing of equipment systems. Mr. Whang brings extensive senior management experience and knowledge of our Company and the markets we serve to the Board of Directors. The Board of Directors believes Mr. Whang is also uniquely positioned to provide the Board of Directors with in-depth and timely information about Company operations and with insight as to his strategic vision for the Company. Mr. Whang is the father of Michael Whang, Amtech's Vice President of Operations.

Robert T. Hass has been our Chief Financial Officer since November 2016 and, prior to that, served as Interim Chief Financial Officer since April 2016. Mr. Hass previously served as our Chief Financial Officer from June 1992 to April 2006, Chief Accounting Officer from April 2006 to June 2013 and as a Director from February 1996 to March 2006. Since July 2013, he has served as our Vice President. Prior to joining Amtech, Mr. Hass held various senior management roles in finance. 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 has a Bachelor of Science degree in Accounting from Indiana University.

Robert M. Averick has been a Director since January 2016. Mr. Averick has over 15 years of experience as a small-capitalization, value-driven public equity portfolio manager. His previous work experience includes positions of increasing responsibility within structured finance, strategic planning and consulting. Mr. Averick received an undergraduate degree in Economics from The University of Virginia and a Masters in Business Administration in Finance from The University of Pennsylvania, The Wharton School of Business. Mr. Averick and certain entities to which his employer provides investment management services currently own in excess of 17% of Amtech's outstanding shares. He previously served on our Board during 2005 and 2006. Mr. Averick also serves on on the board of directors or Gulf Island Fabrication, Inc., a publicly-traded fabricator of complex steel structures, modules and marine vessels. Mr. Averick serves as Chairman of our Compensation and Stock Option Committee and as a member of our Audit and Technology Strategy Committees. Mr. Averick's experience in finance and strategy planning allows him to provide valuable advice to the Board of Directors and the Committees on which he serves.

Michael Garnreiter has been a Director since February 2007. He is the Chairman of our Audit Committee and serves as a member of our Compensation and Stock Option, Nominating and Governance and Technology Strategy Committees. Mr. Garnreiter is our designated financial expert on the Audit Committee. He retired in December 2015 as Vice President of Finance and Treasurer of Shamrock Foods, a privately-held manufacturer and distributor of foods and food-related products. From January 2010 until August 2012, Mr. Garnreiter was a managing director of Fenix Financial Forensics, a Phoenix-based litigation and financial consulting firm. From August 2006 until January 2010, he was a managing member of Rising Sun Restaurant Group LLC, and, from December 2008 until December 2009, he was president of New Era Restaurants, LLC, both of which are privately-held restaurant operating companies. 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. Mr. Garnreiter serves on the boards of directors of Axon Enterprise, Inc. (as Chairman), a publicly-traded manufacturer of non-lethal protection devices, Knight-Swift Transportation Holdings Inc., a publicly-traded nationwide truckload transportation company, and Banner Health, a multi-state health care delivery system. 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 and Certified Fraud Examiner. Mr. Garnreiter's financial background and expertise allows him to provide valuable advice to the Board of Directors.

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. 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. Mr. King has significant experience in advising companies in the solar and semiconductor industries, which allows him to advise the Board with respect to our overall business. Mr. King serves as Chairman of our Nominating and Governance Committee and also provides the Board with technical and financial advice as a member of our Audit, Compensation and Stock Option, and Technology Strategy Committees.

Sukesh Mohan has been a Director since April 2015. He is currently Vice President and Co-Founder of El Camino Technologies, LLC, a software services company that manages online content for leading internet companies. Prior to this, Mr. Mohan was Director of Product Management, Etch Products Division, of Applied Materials, Inc. ("Applied"), a global leader in semiconductor and solar equipment. He held various product management and marketing positions at Applied from 1995 to 2009. From 1989 to 1995, Mr. Mohan was the International Marketing Manager for Amtech, responsible for market development in Asia and India. He received his MBA from the University of Pittsburgh and graduated from the Indian Institute of Technology with a Bachelor of Technology. Mr. Mohan's experience will allow him to advise the Board of Directors with respect to strategic direction, product roadmaps and business development. Mr. Mohan serves as Chairman of our Technology and Strategy Committee and also serves as a member of our Audit, Compensation and Stock Option, and Nominating and Governance Committees.

Michael Whang joined the Company in April 2004 as Director of Information Technology and Risk Management. In May 2016, Michael Whang was promoted to Chief Risk Officer and Chief Information Officer. His responsibilities at Amtech included roles in corporate strategy and operations, compliance, and M&A due diligence and post-acquisition activity, culminating in operational oversight of the USA Operations. He was promoted to Vice President of Operations (Principal Operating Officer) on January 4, 2018. Prior to joining Amtech, Michael Whang served in various information technology management roles at several technology corporations. Michael Whang is the son of Jong S. Whang, Amtech's founder and Executive Chairman.

Lisa D. Gibbs joined Amtech in September 2016 as Corporate Controller and was promoted to Vice President and Chief Accounting Officer (Principal Accounting Officer) on January 4, 2018. Prior to joining Amtech, Ms. Gibbs was a partner in a private consulting firm where she assisted clients with a variety of accounting and finance needs. From 2002 to 2014, Ms. Gibbs was the Vice President of Internal Audit for Insight Enterprises, Inc, a Fortune 500 publicly-traded information technology company. Ms. Gibbs began her career in public accounting with Arthur Andersen LLP. She is a Certified Public Accountant in the State of Arizona.

Information About Board and Committee Meetings

Information concerning our Board and the four committees maintained by our Board is set forth below. Pursuant to NASDAQ and SEC rules, during fiscal 2018 the majority of our directors were not employees of the Company and were "independent" within the meaning of the NASDAQ Listing Rules and SEC standards. Importantly, all members of the Audit, Compensation and Stock Option, and Nominating and Governance Committees are independent. Currently, our independent directors are Robert M. Averick, Michael Garnreiter, Robert F. King and Sukesh Mohan. 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."

Our Board of Directors held three (3) meetings during fiscal year 2018. No director attended less than 75% of the aggregate of all Board meetings held while he served as such director and 75% of all committee meetings on which he served as a committee member. Our Board has the authority under our Amended and Restated Bylaws, as amended, to increase or decrease the size of our Board and to fill vacancies, and the directors chosen to fill such vacancies will hold office until our next annual meeting or until their successors are elected and qualified. We do not have a formal policy with respect to members of the Board attending our annual meetings. All of Board members attended the 2018 annual meeting.

The Audit Committee, the Compensation and Stock Option Committee, the Nominating and Governance Committee and the Technology Strategy Committee are the standing committees of our Board of Directors. The members of these committees as of January 25, 2019, are as follows:

Audit – Michael Garnreiter (Chairman), Robert M. Averick, Robert F. King, and Sukesh Mohan Compensation and Stock Option – Robert M. Averick (Chairman), Michael Garnreiter, Robert F. King, and Sukesh Mohan

Nominating and Governance – Robert F. King (Chairman), Michael Garnreiter, and Sukesh Mohan Technology Strategy – Sukesh Mohan (Chairman), Robert M. Averick, Michael Garnreiter, Robert F. King, and Jong S. Whang

The Audit Committee held four (4) meetings during fiscal year 2018. The Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the independent auditors and members of financial management, and our financial affairs, including financial statements and audits, the adequacy and effectiveness of the internal accounting controls and systems, compliance with legal and regulatory requirements, and the retention and termination of the independent registered public accounting firm. The Audit Committee has a written charter, a copy of which is available on our website at 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 NASDAQ Listing Rules and SEC standards, 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. 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." The Compensation and Stock Option Committee held three (3) meetings during fiscal year 2018. The Compensation and Stock Option Committee makes recommendations concerning officer compensation, benefit programs and retirement plans. Each member of the Compensation and Stock Option Committee has a written charter, a copy of which is available on our website at www.amtechsystems.com.

The Nominating and Governance Committee held two (2) meetings during fiscal year 2018. The Nominating and Governance Committee identifies and approves individuals gualified to serve as members of our Board and also evaluates the Board's performance. In evaluating a prospective nominee, the Nominating and Governance Committee takes several factors into consideration, including such individual's integrity, business skills, experience and judgment. The evaluation of director nominees by the Nominating and Governance Committee also takes into account the diversity of prospective Board members' background. The Nominating and Governance Committee also reviews whether a prospective nominee will meet our independence standards and any other director or committee membership requirements imposed by law, regulation or stock exchange rules. The Nominating and Governance Committee will consider, but is not required to approve, director nominations made by our shareholders, provided a written recommendation is received by us no later than the date shareholder proposals must be submitted for consideration prior to such annual meeting and all other applicable requirements have been satisfied. The Nominating and Governance Committee also develops and recommends corporate governance guidelines to the Board and provides oversight with respect to ethical conduct. Each member of the Nominating and Governance Committee is an "independent director" as defined in the NASDAQ Listing Rules and SEC standards. The Nominating and Governance Committee has a written charter, a copy of which is available on our website at www.amtechsystems.com. The Technology Strategy Committee held one (1) meeting during fiscal year 2018. The Technology Strategy Committee assists the Board of Directors in understanding and evaluating our technology strategy and evaluating potential acquisitions of new technology.

Board Leadership Structure

Mr. Whang currently serves as the Executive Chairman of our Board of Directors ("Chairman") and assumed the role of Chief Executive Officer ("CEO") immediately following Mr. Pentinga's resignation in November 2018. We do not have a policy regarding the combination or separation of the Chairman and CEO roles. Our Nominating and Governance Committee retains flexibility for the Board to determine whether those roles should be combined or separated in light of prevailing circumstances. In light of our ongoing restructuring efforts in 2018 and 2019, the Board has determined it is in the best interests of the Company to combine these roles in order to facilitate Mr. Whang's efforts to develop and explore all strategies for our Solar segment. Historically, the Board had determined that separating the roles of Chairman and CEO would enable Mr. Whang to focus on the strategic direction of the Company and external growth opportunities while Mr. Pentinga, serving in the role of CEO, focused on our operations to transform and sustain innovation within the Company.

The Board has not designated a lead independent director at this time. We believe that our committee chairmen have the opportunity to call and plan executive sessions collaboratively and, between meetings of the full Board of Directors, communicate with management and one another directly. Accordingly, we do not believe there is a need to designate a lead independent director at this time.

Board's Role in Risk Oversight

Our Board of Directors is actively engaged in the oversight of risks that could affect the Company, with key aspects of such oversight being conducted through the committees of the Board. The Audit Committee focuses on financial risks, primarily those that could arise from our accounting and financial reporting processes, and also oversees compliance-related legal and regulatory exposure. The Nominating and Governance Committee focuses on the management of risks associated with corporate governance matters, including board organization, membership and structure; management development; and appropriate approval and oversight mechanisms. The Compensation and Stock Option Committee focuses on the management of risks arising from our compensation policies and programs and, in particular, our executive compensation programs and policies. The Technology Strategy Committee focuses on the management of risks associated with emerging and competing technologies within the markets we serve. While the committees of our Board are focused on the above specific areas of risk, the full Board of Directors retains responsibility for the general oversight of risk. Committee chairs are expected to, and do, provide periodic reports to the full Board regarding the risk considerations within each committee's area of expertise. Periodic reports are provided to the Board or the appropriate committee by the executive management team on areas of material risk, including operational, financial, legal, regulatory and strategic risks. In addition, the general management and operating leadership of each of our divisions and subsidiaries review, with the full Board, their individual assessment of business risks and their approach to manage those risks. The Board relies upon these reports, and its discussions relating to such reports, to enable it to understand our strategies for the identification, management and mitigation of risks. This enables the Board and its committees to coordinate its risk oversight role. The Board's approach to risk oversight does not directly affect the leadership structure of our Board of Directors, as described above.

DIRECTOR COMPENSATION

The following table shows the total dollar value of all fees earned and paid in cash to all directors in fiscal 2018 and the grant date fair value of stock awards to directors made in fiscal 2018.

| Name | Fees Earned or Paid in Cash (1) | Option Awards (2) (3) | All Other Comp. (4) | Total |
|-------------------------|---|-----------------------------|------------------------------|----------|
| Jong S. Whang | \$— | \$— | \$— | \$— |
| Fokko Pentinga (5) | \$— | \$— | \$— | \$— |
| Paul van der Wansem (6) | \$— | \$— | \$— | \$— |
| Robert M. Averick | \$37,000 | \$25,228 | \$8,000 | \$70,228 |
| Michael Garnreiter | \$53,000 | \$25,228 | \$8,000 | \$86,228 |
| Robert F. King | \$38,500 | \$25,228 | \$8,000 | \$71,728 |
| Sukesh Mohan | \$38,000 | \$25,228 | \$8,000 | \$71,228 |
| | | | | |

Directors who are full-time employees of the Company receive no additional compensation for serving as directors. (1)Directors who are not independent within the meaning of the NASDAQ Listing Standards and SEC Rules received

no additional compensation for serving as directors after March 9, 2016.

Amounts represent the aggregate grant date fair value computed in accordance with FASB ASC Topic 718.

(2) For a description of the assumptions made when calculating such grant date fair value, refer to Note 8 of the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2018 filed with the SEC on December 7, 2018.

(3) As of September 30, 2018, Messrs. Averick, Garnreiter, King and Mohan each held 6,000 unvested stock options.

(4) Consists of a discretionary bonus paid in December 2017.

(5)Mr. Pentinga resigned from the Board effective December 6, 2018.

(6)Mr. van der Wansem resigned from the Board effective March 14, 2018.

Non-employee, independent directors receive the following compensation:

•an annual retainer of \$18,000 (an increase from \$8,000 in fiscal 2017);

•fees of \$2,000 per Board meeting attended in person;

•\$750 per Board meeting attended telephonically;

•\$1,250 per Audit Committee meeting attended in person;

•\$750 per Audit Committee meeting attended telephonically;

\$750 per Compensation and Stock Option Committee or Nominating and Governance Committee or Technology Strategy Committee meeting attended in person; and

\$500 per Compensation and Stock Option Committee or Nominating and Governance Committee or Technology Strategy Committee meeting attended telephonically.

In addition, the director serving as the Chairman of the Audit Committee receives an annual retainer of \$15,000. The director serving as the Chairman of the Technology Strategy Committee, the director serving as the Chairman of the Compensation and Stock Option Committee, as well as the director serving as the Chairman of the Nominating and Governance Committee each receive an annual retainer of \$6,000. In addition to meeting fees, members of Board committees receive compensation for time spent on work assigned by the committee. The rate of compensation for the work assignments is \$100 per hour.

In addition to the cash payments listed above, 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 6,000 shares of common stock, or such other number of shares as may be determined by the Board, upon each re-election to the Board at our annual meeting of shareholders or at such other time as may be determined by the Board. The exercise price of the options is equal to the closing price of our common stock the previous trading day before the date of grant. Each option has a term of ten years and becomes exercisable on the six-month anniversary of the date of the grant, or such other date as determined by the Board. 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.

Compensation Committee Interlocks and Insider Participation

The Compensation and Stock Option Committee is presently comprised of Messrs. Robert M. Averick (Chairman), Michael Garnreiter, Robert F. King and Sukesh Mohan who are neither current officers, current employees nor former officers of the Company. No interlocking relationship exists, or in the past fiscal year has existed, between any member of the Compensation and Stock Option Committee and any member of any other company's board of directors or compensation committee.

EXECUTIVE COMPENSATION

Compensation Philosophy

Our Compensation and Stock Option Committee is charged with the evaluation of the compensation of our executive officers and to assure that they are compensated effectively in a manner consistent with our compensation strategy and resources, competitive practice, and the requirements of the appropriate regulatory bodies.

Our Compensation and Stock Option Committee establishes our general compensation policies and specific compensation for each of our executive officers, and administers our stock incentive program. In addition, our Compensation and Stock Option Committee is responsible for developing, administering and interpreting the compensation program for our named executive officers and other key employees. Our Compensation and Stock Option Committee 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 and Stock Option Committee. Our Compensation and Stock Option 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.

Our compensation philosophy has the following basic objectives: (i) attract and retain talented and experienced executives in our industry, (ii) motivate and reward executives whose knowledge, skills and performance are critical to our success, (iii) align the interests of our executives and shareholders by rewarding executives when shareholder value increases; and (iv) 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. We review other public reports and consider the compensation paid to executives at similarly situated companies, both within and outside of our industry, when determining and evaluating our compensation philosophy and compensation levels. Our performance, including, but not limited to, earnings, revenue growth, cash flow, and continuous improvement initiatives, is a significant part of our evaluation and compensation levels.

For our 2019 compensation programs, the Compensation and Stock Option Committee has changed the metrics used in the cash incentive bonus program to a return-on-invested-capital metric. In prior years, the metrics consisted of revenue, gross margin, operating profit and bookings. Also, the equity incentive plan will have defined goals and objectives; the achievement of which will result in the issuance of restricted stock units to executives rather than stock options.

SUMMARY COMPENSATION TABLE

The following table sets forth information regarding compensation for services rendered to Amtech during the fiscal years ended September 30, 2018, 2017 and 2016 by our named executive officers.

| Name and Principal Position | Year | Salary (\$) | Bonus (\$) (1) | Option Awards (\$) (2) | Non-Equity Incentive Plan Compensation (\$) (3) | All Othe Compen (\$) | _ | Total (\$) |
|-----------------------------|------|----------------|-------------------|------------------------------|--|----------------------------|------|---------------|
| Jong S. Whang, Executive | 2018 | 200,000 | | | 80,000 | 46,014 | (4) | 326,014 |
| Chairman, Director and | 2017 | 200,000 | 54,400 | | 205,600 | 37,631 | (5) | 497,631 |
| Chief Executive Officer | 2016 | 268,462 | | 151,720 | — | 35,226 | (6) | 455,408 |
| Fokko Pentinga * | 2018 | 340,429 | | | 122,100 | 53,318 | (7) | 515,847 |
| former Chief Executive | 2017 | 324,719 | | | 260,000 | 58,599 | (8) | 643,318 |
| Officer and Director | 2016 | 379,599 | | 151,720 | _ | 49,653 | (9) | 580,972 |
| Robert T. Hass ** | 2018 | 201,635 | | | 61,875 | 10,350 | (10) | 273,860 |
| Chief Financial Officer | 2017 | 231,500 | | 27,096 | 159,000 | 8,250 | (11) | 425,846 |
| | 2016 | 167,221 | | 15,172 | _ | 6,689 | (12) | 189,082 |

* Mr. Pentinga resigned as Chief Executive Officer and Director effective December 6, 2018.

** Mr. Hass was appointed Interim Chief Financial Officer effective April 1, 2016, and later was appointed Chief Financial Officer effective November 10, 2016.

- (1) Represents discretionary cash bonus awarded on November 16, 2017. No discretionary cash bonuses were awarded for fiscal 2016 or fiscal 2018.
- Amounts represent the aggregate grant date fair value calculated in accordance with FASB ASC Topic 718. For a (2) description of the assumptions made when calculating such grant date fair value, refer to Note 8 of the consolidated financial statements included in our Annual Report on Form 10-K for fiscal 2018.

Non-Equity Incentive Plan Compensation represents bonuses earned by executives under the 2017 and 2018 cash incentive plans. The cash incentive plan compensation for fiscal 2017 was paid to the named executive officers

⁽³⁾ prior to December 31, 2017. The cash incentive plan compensation for fiscal 2018 was paid to the named executive officers prior to December 31, 2018.

Amount represents a car allowance of \$18,000, \$10,809 of life insurance premiums paid by the Company for which Mr. Whang's spouse is the beneficiary, a Company match of \$15,455 under the 401(k) plan and a

⁽⁴⁾ discretionary contribution to his health reimbursement account. We consider the cost of the car allowance and life insurance premiums to be perquisites.

Amount represents a car allowance of \$18,000, \$10,809 of life insurance premiums paid by the Company for (5) which Mr. Whang's spouse is the beneficiary, a discretionary contribution to his health reimbursement account and Company match under the 401(k) plan. We consider the cost of the car allowance and life insurance premiums to

(5) Company match under the 401(k) plan. We consider the cost of the car allowance and life insurance premiums to be perquisites.

Amount represents a car allowance of \$18,692, \$10,809 of life insurance premiums paid by the Company for which Mr. Whang's spouse is the beneficiary, a discretionary contribution to his health reimbursement account and (6) Company match under the 401(k) plan. We consider the cost of the car allowance and life insurance premiums to

⁽⁰⁾Company match under the 401(k) plan. We consider the cost of the car allowance and life insurance premiums to be perquisites.

Amount represents a car allowance of \$34,988, Company contribution under the 2018 Netherlands pension plan of (7)\$17,906 and Company-paid tax preparation fees. We consider the cost of the car allowance and Company-paid tax preparation fees to be perquisites.

Amount represents a car allowance of \$32,951, Company contribution under the 2017 Netherlands pension plan of \$16,689, value received for spousal travel expenses and Company-paid tax preparation fees. We consider the cost

(8) of the car allowance, value received for spousal travel expenses and Company-paid tax preparation fees to be perquisites.

Amount represents a car allowance of \$32,888, Company contribution under the 2016 Netherlands pension plan of (9)\$16,175 and Company-paid tax preparation fees. We consider the cost of the car allowance and Company-paid tax preparation fees to be perquisites.

Amount represents a car allowance, discretionary contribution to Mr. Hass' health reimbursement account and (10) travel incentive payments. We consider the cost of the car allowance, which did not exceed \$10,000, to be a

- perquisite. Amount represents a car allowance and discretionary contribution to Mr. Hass' health reimbursement account. We
- (11) consider the cost of the car allowance, which did not exceed \$10,000, to be a perquisite. Amount represents a car allowance, discretionary contribution to Mr. Hass' health reimbursement account and
- (12) travel incentive payments. We consider the cost of the car allowance, which did not exceed \$10,000, to be a perquisite.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table sets forth information regarding grants of plan-based option awards held by our named executive officers as of September 30, 2018:

| officers as | Option Awards | | | Stock Awards | |
|-------------------|---|---|--|---|--|
| | Number | | | | |
| Name | of Number of Securities UnderlyUngderlying Unexerdisectercised OptionsOptions (#) (#) Unexercisable Exercisable | Options Exercise Price (\$) e | 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 | 10,000 — | \$6.15 | 11/20/2019 | | |
| Fokko Pentinga | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | \$10.64 \$7.98 \$2.95 \$7.01 (1)\$9.98 (2)\$5.25 \$6.15 \$10.64 \$7.98 \$2.95 \$7.01 (1)\$9.98 | 8/6/2020 12/15/2021 12/11/2022 12/12/2023 11/19/2024 11/17/2025 11/20/2019 8/6/2020 12/15/2021 12/11/2022 12/12/2023 11/19/2024 | | |
| Robert T. Hass | 25,000 25,000 3,884 — | (2)\$5.25 \$3.80 | 11/17/2025 12/9/2018 | | |
| | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | \$6.15 \$10.64 \$7.98 \$2.95 \$7.01 \$9.98 \$5.25 (3)\$4.71 | 11/20/2019 8/6/2020 12/15/2021 12/11/2022 12/12/2023 11/19/2024 11/17/2025 11/10/2026 | | |

(1)^{Unvested option awards will vest in equal installments on the first through fourth anniversaries of the November 19, 2014 grant date.}

(2) Unvested option awards will vest in equal installments on the first through fourth anniversaries of the November 17, 2015 grant date.

(3) Unvested option awards will vest in equal installments on the first through fourth anniversaries of the November 10, 2016 grant date.

EMPLOYMENT AND CHANGE IN CONTROL ARRANGEMENTS Employment Agreement with Executive Chairman and Chief Executive Officer On February 9, 2012, we entered into a Second Amended and Restated Employment Agreement with Jong S. Whang, our executive chairman and Chief Executive Officer, as amended on July 1, 2012, June 8, 2013, April 9, 2015 and November 17, 2015. 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 six years, expiring on February 9, 2018. 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

On November 17, 2015, the Company and Mr. Whang entered into a Fifth Amendment to Employment Agreement (the "Fifth Amendment") pursuant to which Mr. Whang voluntarily reduced his annual base salary from \$400,000 to \$200,000, effective January 1, 2016. Under the terms of the Fifth Amendment, Mr. Whang's voluntary salary decrease may be restored by him in his sole discretion at any time upon giving written notice to the Company.

Incentive Compensation

Mr. Whang is also entitled to an annual cash bonus for each fiscal year that is determined in accordance with an annual bonus plan adopted by our Compensation and Stock Option Committee. The annual bonus plan may not be any less favorable to Mr. Whang than the bonus plan for fiscal 2010 that was adopted by our Compensation and Stock Option Committee on December 21, 2009.

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 may also be issued an annual grant of stock options by our Compensation and Stock Option 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 IRC, 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 and Stock Option Committee.

Benefits

Mr. Whang is entitled to receive such employee benefits as are provided to our other executive officers, including family medical, dental, vision, disability and life insurance, and participation in pension and retirement plans, incentive compensation plans, stock option plans, Company-sponsored welfare benefit plans for disability and life insurance and other benefit plans. We provide Mr. Whang with an annual automobile allowance of not less than \$14,000 (annual allowance is currently \$18,000), a life insurance policy in the face amount of \$500,000 (of which Mr. Whang's spouse is the beneficiary) 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 Mr. Whang's base salary in effect on the date of termination for the remainder of the initial six-year term or for two years, whichever is greater (which would be \$800,000 if terminated after the first year of the term); (ii) an amount equal to the maximum amount of incentive compensation he could earn for the fiscal year in which the termination occurs; and (iii) full vesting of all outstanding stock options and restricted stock held by Mr. Whang (see the "Outstanding Equity Awards at Fiscal Year-End" table above). 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 and restricted stock held by him. On November 17, 2015, the Board of Directors, following the recommendation of our Compensation and Options Committee of the Board of Directors, agreed to amend the change in control provisions of Mr. Whang's employment agreement to establish the base salary, for purposes of calculating severance payments would, in any event, be not less than \$400,000 per annum.

Post-Employment Consulting

Mr. Whang's employment agreement provides that upon termination of Mr. Whang against his will and without cause (including by giving notice of termination of his employment agreement as described above), or by Mr. Whang for good reason, for a period of two (2) years following the date of such termination, (i) Mr. Whang will make himself available for an average of 20 hours per week in order to consult with the Company in such manner and on such matters as the Company shall reasonably request, (ii) Mr. Whang will make himself available to serve on the Board of Directors of the Company, and (iii) in consideration for Mr. Whang's agreement to perform such services, we will (A) pay Mr. Whang an annual amount equal to 40% of his base salary in effect on the date he was terminated and (B) include Mr. Whang in our family medical, dental and vision insurance plans, or, if Mr. Whang's inclusion in such plans is not permitted, provide substantially the same benefits to Mr. Whang at our expense.

Mr. Whang agrees that during the term of his employment agreement he will not engage in certain activities in which he would be competing with us or our subsidiaries. He also agrees that for a period of two years after the end of the term of his employment agreement, he will 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 30 days of the date of termination of his employment (provided, however, if such 30 day period begins in one calendar year and ends in another calendar year, Mr. Whang will not have the right to designate the calendar year of payment), 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 and restricted stock he holds (see the "Outstanding Equity Awards at Fiscal Year-End" table above).

Employment Agreement with Chief Financial Officer

On March 10, 2016, we entered into Key Terms of Employment with Robert T. Hass, our then Interim Chief Financial Officer, which was superseded on November 10, 2016, when the Company and Mr. Hass entered into Terms of Employment for Robert T. Hass in connection with his appointment as Chief Financial Officer. On November 10, 2016, the Company and Mr. Hass also entered into a Change of Control and Severance Agreement. Below is a summary of the terms and conditions of Mr. Hass' employment agreement and change of control and severance agreement.

Term

Mr. Hass' employment agreement provides for an employment period commencing on the date of the employment agreement and continuing indefinitely until terminated by either party (see Termination section below for more details).

Base Salary

Pursuant to his Employment Agreement, Mr. Hass receives an annual base salary of \$225,000, which base salary shall be reviewed on an annual basis by our Compensation and Stock Option Committee and can be increased, but not decreased, at the discretion of our Compensation and Stock Option Committee.

Incentive Compensation

Mr. Hass is also entitled to an annual cash bonus for each fiscal year that is determined in accordance with an annual bonus plan adopted by our Compensation and Stock Option Committee. Stock Options

Pursuant to Mr. Hass' employment agreement, any currently outstanding options held by Mr. Hass will remain in full force and effect in accordance with our stock option plans and applicable stock option agreements. Mr. Hass received stock options in November 2016 in connection with his commencement of employment. Mr. Hass may also be issued an annual grant of stock options by our Compensation and Stock Option Committee within 90 days after the end of each fiscal year during his employment period. All of the options granted to Mr. Hass will be incentive stock options within the meaning of the IRC, 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 and Stock Option Committee. Benefits

Mr. Hass will be entitled to receive such employee benefits as are provided to our other executive officers, including family medical, dental, vision, disability and life insurance, and participation in pension and retirement plans, incentive compensation plans, stock option plans, Company-sponsored welfare benefit plans for disability and life insurance and other benefit plans. We will provide Mr. Hass with an annual automobile allowance of not less than \$7,000 (annual allowance is currently \$7,000) and such other benefits as we may deem appropriate from time to time. Termination

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

If we terminate the employment of Mr. Hass against his will and without cause (including by giving notice of termination of his employment agreement as described above), or if Mr. Hass terminates his employment for good reason, Mr. Hass is entitled to receive salary, incentive compensation and vacation accrued through the date of termination, plus an

amount equal to one year of Mr. Hass' base salary in effect on the date of termination. If Mr. Hass voluntarily terminates his employment other than for good reason, if we terminate Mr. Hass' employment for cause, or if Mr. Hass' employment is terminated due to his death or disability, Mr. Hass will be entitled to receive salary and accrued vacation through the date of termination only.

Noncompetition

Mr. Hass agrees that during the term of his employment agreement he will not engage in certain activities in which he would be competing with us or our subsidiaries. He also agrees that for a period of two years after the end of the term of his employment agreement, he will 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. Hass' 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. Hass' employment agreement) of our Company or within one year following the occurrence of a "change in control" (as that term is defined in Mr. Hass' employment agreement), or (ii) by Mr. Hass for good reason within one year following the occurrence of a change in control of our Company, then Mr. Hass will be entitled to receive within 30 days of the date of termination of his employment (provided, however, if such 30 day period begins in one calendar year and ends in another calendar year, Mr. Hass will not have the right to designate the calendar year of payment), in lieu of the severance payment otherwise payable, (i) an amount equal to one year 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, which amount shall be prorated for the year in which the termination occurs, and (iii) full vesting of all outstanding stock options and restricted stock he holds (see the "Outstanding Equity Awards at Fiscal Year-End" table above).

Severance Agreement with former Chief Executive Officer

On November 28, 2018, we entered into a Separation Agreement and General Release of all claims with Fokko Pentinga, our former Chief Executive Officer, pursuant to which, Mr. Pentinga stepped down as the Chief Executive Officer, President and a director of the Company effective December 6, 2018. Pursuant to the Separation Agreement, Mr. Pentinga will receive the following benefits:

a severance payment of \$864,000 in gross, less all customary and appropriate income and employment taxes;
a payment of \$458,500 for all other amounts due him;

all of his time-based stock options, consisting of 264,167 options (the "Options"), became fully vested and immediately exercisable. Mr. Pentinga has the right to exercise 122,500 of such Options with an exercise price of \$7.01 or less until December 31, 2019. The remaining 141,667 of such Options are exercisable during the 90-day period following the Effective Date; and

certain other benefits as set forth in the Separation Agreement.

Compensation Policies and Practices as Related to Risk Management

The Compensation and Stock Option Committee does not believe our compensation policies and practices create risks that are reasonably likely to have a material adverse effect on the Company. The Compensation and Stock Option Committee has determined that our executive compensation program does not encourage unnecessary or excessive risk taking as a result of the following factors:

As discussed elsewhere in this Proxy Statement, our executive officer compensation includes a balanced mix of cash and equity.

Base salaries do not encourage risk taking as they are fixed in amount.

Performance-based cash bonus awards under the non-equity incentive plan focus on achievement of short-term or annual goals. Although this may seem to encourage the taking of short-term risks at the expense of long-term results, these bonuses in actuality represent only a portion of the executive officers' total compensation opportunities, and the Compensation and Stock Option Committee believes that the non-equity incentive plan awards appropriately balance risk and the desire to focus executives on specific short-term individual and financial goals important to our success. Discretionary cash bonuses are awarded at the discretion of the Compensation and Stock Option Committee, which allows the Compensation and Stock Option Committee to evaluate whether the executives are engaging in activities that create risks prior to awarding any such cash bonuses. This discretion mitigates the likelihood that executives will engage in activities that create risk and allows the Compensation and Stock Option Committee the ability to refrain from rewarding any such risk-taking.

Compensation provided to the executive officers in the form of long-term equity awards is important to help further align executives' interests with those of our shareholders. The Compensation and Stock Option Committee believes that these awards do not encourage unnecessary or excessive risk taking because the ultimate value of the awards is tied to our stock price over the long-term. In addition, the awards are subject to long-term vesting schedules to help ensure that executives have significant value tied to long-term stock price performance.

AUDIT COMMITTEE REPORT

In accordance with its written charter adopted by our Board of Directors on January 12, 2012, a copy of which is available on the Company's website at www.amtechsystems.com, 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 practices, 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. Moreover, the Audit Committee is directly responsible for the appointment, compensation, retention and oversight of the independent, registered public accounting firm.

The Board of Directors annually reviews the independence of the Audit Committee members in view of FINRA'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 the standards of the Public Company Accounting Oversight Board (United States). The Audit Committee meets with the external auditors and management to review the Company's financial results before publication of the Company's quarterly earnings press releases and the filing of the Company's quarterly reports on Form 10-Q and annual report on Form 10-K. Additionally, management provides the Audit Committee with periodic updates throughout the year on the Company's compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. The Committee also monitors the activities and performance of the external auditors, including audit scope, audit fees, auditor independence and performance of non-audit services. All services to be performed by the Company's independent registered public accounting firm are subject to pre-approval by the Audit Committee.

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, 2018, as audited by its independent auditors, Mayer Hoffman McCann P.C. ("Mayer Hoffman"), and has discussed these financial statements with management. In addition, the Audit Committee has discussed with Mayer Hoffman the matters required to be discussed by Auditing Standard No. 1301 (Communications with Audit Committee has received the written disclosures and the letter from Mayer Hoffman required by applicable requirements of the Public Company Accounting Oversight Board regarding Mayer Hoffman's communications with the Audit Committee concerning independence and has discussed with Mayer Hoffman 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, 2018 be included in the Company's Annual Report on Form 10-K for filing with the SEC. RESPECTFULLY SUBMITTED,

Michael Garnreiter, Chairman Robert M. Averick Robert F. King Sukesh Mohan

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 our 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 fiscal years ended September 30, 2018 and 2017, all services rendered by our independent auditors were pre-approved by the Audit Committee pursuant to the 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.

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, 2018 and 2017, 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.

Our independent auditors, Mayer Hoffman McCann P.C. ("Mayer Hoffman"), leases substantially all of its personnel, who work under the control of Mayer Hoffman shareholders, from wholly-owned subsidiaries of CBIZ, Inc., in an alternative practice structure.

| | Year Ended | Year |
|------------------------|---------------|-----------|
| | I ear Ended | Ended |
| | September 30, | September |
| | 2018 | 30, 2017 |
| Audit Fees (1) | \$ 496,000 | \$494,000 |
| Audit-Related Fees (2) | 23,000 | 43,000 |
| Tax Fees | | |
| All Other Fees | | |
| Total Fees | \$ 519,000 | \$537,000 |
| | | |

Annual audit and review of financial statements included in our reports on Form 10-Q and Form 10-K including an (1)audit of our internal control over financial reporting, and services normally provided by the auditors in connection with statutory and regulatory filings.

Consists primarily of services related to the audit of our defined contribution plan (in fiscal 2018), the filing of a (2)prospectus supplement in connection with an offering of our Common Stock and the preparation of a comfort letter related thereto (in fiscal 2017).

Code of Ethics

The Board of Directors has adopted a Code of Ethics for all employees, as recommended by the Nominating and Governance 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 our Corporate Secretary.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We had no transactions during fiscal 2018, nor are any transactions currently proposed, with any director, director nominee, executive officer, security holder known to us to own of record or beneficially more than 5% of our common stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded \$120,000.

The written policy of the Board is for its Nominating and Governance Committee to review each related person transaction (as defined below) and determine whether it will approve or ratify that transaction. Any Board member who has any interest (actual or perceived) will not be involved in the consideration of Directors.

For purposes of the policy, a "related person transaction" is any transaction, arrangement or relationship in which we are a participant and, the related person (defined below) had, has or will have a direct or indirect material interest and the aggregate amount involved is expected to exceed \$120,000 in any calendar year. "Related person" includes (a) any person who is or was (at any time during the last fiscal year) an officer, director or nominee for election as a director; (b) any person or group who is a beneficial owner of more than 5% of our voting securities; (c) any immediate family member of a person described in provisions (a) or (b) of this sentence; or (d) any entity in which any of the foregoing persons is employed, is a partner or has a greater than 5% beneficial ownership interest.

In determining whether a related person transaction will be approved or ratified, the Board, or committee, will consider a multitude of factors including (a) the extent of the related person's interest in the transaction; (b) the availability of other sources of comparable products or services; (c) whether the terms are competitive with terms generally available in similar transactions with persons that are not related persons; (d) the benefit to us; and (e) the aggregate value of the transaction.

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 18, 2019, by (i) each director, director nominee and named executive officer of Amtech and (ii) all executive officers, directors and director nominees of Amtech as a group. The information included in the tables below was determined in accordance with Rule 13d-3 under the Exchange Act 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) |
|---------------------------------------|--|---|
| Jong S. Whang | 259,733 | (4)1.8 % |
| Fokko Pentinga | 266,667 | (5)1.8 % |
| Robert T. Hass | 44,582 | (6)* |
| Robert M. Averick | 2,418,000 | (7)17.0 % |
| Michael Garnreiter | 52,000 | (8)* |
| Robert F. King | 44,601 | (9)* |
| Sukesh Mohan | 24,000 | (10)* |
| Director and Officer Total (9 people) | 3,127,001 | (11)22.0 % |

*Less than 1%.

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

Mr. Whang is our Executive Chairman, Chairman of the Board of Directors and Chief Executive Officer. Mr.

Based on 14.227,580 shares of common stock outstanding as of January 18, 2019. The share amounts and percentages shown include shares of common stock actually owned as of January 18, 2019, and shares of common stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date

(3) pursuant to options or warrants. All shares of common stock that the identified person had the right to acquire within 60 days of January 18, 2019, 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 206,667 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019.

- Includes 251,667 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019. Mr. (5) Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the Chick Particular is a chick of the chick Particular in the chick Particular is a chick of the chick Particular in the chick Particular is a chick of the chick Particular in the chick Particular is a chick of the chick Particular in the chick Particular is a chick of the chick Particular in the chick of the chick Particular in the chick of the chick Particular in the chick of Pentinga resigned as Chief Executive Officer and Director effective December 6, 2018.
- (6) Includes 43,000 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019. Mr. Averick is the Portfolio Manager at Kokino LLC, which is a family office that provides investment management services to various clients who own shares of the Company's common stock, including (i) Cornice Fiduciary Management LLC, as Trustee under Trust Agreement dated December 23, 1989 FBO the issue of
- Jonathan D. Sackler (the "Trust"); (ii) M3C Holdings LLC ("M3C"); and (iii) Piton Capital Partners LLC ("Piton"). As the Portfolio Manager at Kokino LLC, Mr. Averick shares the power to vote and dispose (or direct the disposition of 2,418,000 shares of common stock, which is the sum of the common stock beneficially

⁽²⁾ Pentinga is our former Chief Executive Officer, President and director. Mr. Hass is our Executive Vice President - Chief Financial Officer, Treasurer and Secretary. Messrs. Averick, Garnreiter, King and Mohan are directors of Amtech.

owned by the following persons: (i) 1,386,312 shares of common stock beneficially owned by the Trust; (ii) 263,688 shares of common stock beneficially owned by M3C; (iii) 600,000 shares of common stock beneficially owned by Piton; and (iv) 150,000 shares of common stock beneficially owned by Mr. Averick jointly with his wife, along with 18,000 shares that Mr. Averick may acquire by exercising options that are immediately exercisable. (8)Includes 52,000 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019. (9)Includes 36,401 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019. (10)Includes 24,000 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019. (11)Includes 649,153 shares issuable upon exercise of options exercisable within 60 days of January 18, 2019.

The following table sets forth certain information concerning the beneficial ownership of our common stock based on information received by the Company as of January 18, 2019, by each person (other than directors or executive officers as disclosed in the chart above) known by us to be the beneficial owner of more than 5% of our common stock based on such filings.

| Name and Address | No. of Shares of Common Stock Beneficially Held (1) | Con Stoc | ent of imon k iership |
|--|--|------------------|--------------------------------|
| 5% Shareholders Cornice Fiduciary Management LLC, as Trustee FBO the issue of Jonathan D. Sackler Royce & Associates LLC | 1,386,312 1,121,468 | (2)9.7 (3)7.9 | % % |

Based on 14,227,580 shares of common stock outstanding as of January 18, 2019. The share amounts and percentages shown include shares of common stock actually owned as of January 18, 2019, and shares of common stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date

(2) serves as sole Trustee and has voting power and dispositive power over such shares. Cornice Fiduciary Management LLC has no pecuniary interest in the shares held by the Trust. The Trust is a member of Piton, along with other clients of Kokino LLC. In the aggregate, clients of and other persons associated with Kokino LLC beneficially own 2,440,917 shares of common stock. The address for Cornice Fiduciary Management LLC is c/o Norton Rose Fulbright (US) LLP, 1301 Avenue of Americas, New York, NY 10019.

⁽¹⁾ pursuant to options or warrants. All shares of common stock that the identified person had the right to acquire within 60 days of January 18, 2019, 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.
Information based on (i) the Schedule 13D/A filed with the SEC on Nevember 27, 2018 on baself of the Trust

Information based on (i) the Schedule 13D/A filed with the SEC on November 27, 2018 on behalf of the Trust, M3C, Mr. Averick, Piton and OIH LLC and (ii) the Form 4 filed by Mr. Averick on May 15, 2018. Cornice Fiduciary Management LLC is Trustee under a Trust Agreement dated December 23, 1989 FBO the issue of Jonathan D. Sackler. Amount represents shares held in the Trust, for which Cornice Fiduciary Management LLC

⁽³⁾ Associates, LLC is 745 Fifth Avenue, New York, NY 10151.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our 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 us 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, 2018, or written representations from certain reporting persons, we believe that between October 1, 2017 and September 30, 2018, all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with. SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth certain information, as of September 30, 2018, concerning outstanding options and rights to purchase Common Stock granted to participants in all of our equity compensation plans and the number of shares of Common Stock remaining available for issuance under such equity compensation plans.

Number of

| | | | | Number of |
|-----------------------|-------------|------|----------------|---------------|
| | | | | securities |
| | Number of | | | remaining |
| | securities | | | available for |
| | to be | Wei | ighted-average | future |
| | issued | exe | rcise price of | issuance |
| | upon | outs | standing | under |
| | exercise of | opti | ons, | equity |
| | outstanding | war | rants and | compensation |
| | options, | righ | its | plans |
| | warrants | (b) | | (excluding |
| | and rights | | | securities |
| | (a) | | | reflected in |
| | | | | column (a)) |
| | | | | (c) |
| Plan Category | | | | |
| Equity compensation | | | | |
| plans approved by | 1,248,758 | \$ | 7.69 | 828,161 |
| security holders (1) | | | | |
| Equity compensation | | | | |
| plans not approved by | | | | |
| security holders | | | | |
| Total | 1,248,758 | | | 828,161 |
| | | | | |

Represents the 2007 Employee Stock Incentive Plan and the Non-Employee Director Stock Option Plan and any respective amendments to each thereto.

PROPOSAL NO. 2 -- TO APPROVE THE RATIFICATION OF THE INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

(Item No. 2 on the Proxy Card)

The Audit Committee has selected the independent registered public accounting firm Mayer Hoffman McCann P.C. ("Mayer Hoffman") to audit our financial statements for the fiscal year ending September 30, 2019, and is seeking ratification of that choice by our shareholders. Regardless of whether the selection is ratified, the Audit Committee is responsible for the selection and ongoing oversight of the auditors and has the authority to replace Mayer Hoffman as the auditors for the 2019 fiscal year, if it deems it appropriate to do so. Any such change subsequent to the Annual Meeting will not be submitted to the shareholders for ratification.

The Board of Directors anticipates that one or more representatives of Mayer Hoffman will be present at the Annual Meeting. Any such representative will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

PROPOSAL NO. 3 -- TO VOTE ON AN ADVISORY (NON-BINDING) RESOLUTION TO APPROVE NAMED EXECUTIVE COMPENSATION

(Item No. 3 on the Proxy Card)

The Dodd-Frank Act requires that our shareholders have the opportunity to cast a non-binding, advisory vote on the compensation of our named executive officers. This proposal, commonly known as a "Say-on-Pay" proposal, gives our shareholders the opportunity to express their views on the compensation of our named executive officers. The advisory vote on executive compensation is not a vote on our general, non-named executive officer compensation

policies, the compensation of our Board or our compensation policies as they relate to risk management.

Our Compensation and Stock Option Committee establishes our general compensation policies and specific compensation for each of our executive officers and administers our equity incentive compensation program. Our Compensation and Stock Option Committee is responsible for developing, administering and interpreting the compensation program for executive officers and other key employees.

Shareholders are urged to read the Executive Compensation section of this Proxy Statement and the tabular disclosure regarding named executive officer compensation (together with the accompanying narrative disclosure) in this Proxy Statement, which discusses how our compensation policies and procedures implement our compensation philosophy. The Compensation and Stock Option Committee and the Board of Directors believe that these policies and procedures are effective in implementing our compensation philosophy and in achieving its goals.

The vote solicited by this Proposal 3 is advisory, and, therefore, is not binding on the Company, our Board or our Compensation and Stock Option Committee, nor will its outcome require the Company, our Board or our Compensation and Stock Option Committee to take any action. Moreover, the outcome of the vote will not be construed as overruling any decision by the Company or the Board.

Furthermore, because this non-binding, advisory resolution primarily relates to the compensation of our named executive officers that has already been paid or contractually committed, there is generally no opportunity for us to revisit these decisions. However, our Board, including our Compensation and Stock Option Committee, values the opinions of our shareholders and, to the extent there is any significant vote against the executive officer compensation as disclosed in this Proxy Statement, we will consider our shareholders' concerns and evaluate what actions, if any, may be appropriate to address those concerns.

The Board believes that the compensation of our named executive officers is appropriate and recommends a vote FOR the following advisory (non-binding) resolution:

RESOLVED, that the shareholders approve, on an advisory (non-binding) basis, the compensation of the Company's named executive officers, as disclosed pursuant to the compensation disclosure rules of the SEC (which disclosure includes the Compensation Philosophy, the compensation tables and any related material).

The Board of Directors recommends that you indicate your support for the compensation policies and procedures for our named executive officers, as outlined in the above resolution.

PROPOSAL NO. 4 -- TO APPROVE AN AMENDMENT TO OUR 2007 EMPLOYEE STOCK INCENTIVE PLAN OF AMTECH SYSTEMS, INC.

(Item No. 4 on the Proxy Card)

At the Annual Meeting, shareholders will be asked to approve an amendment to the Company's 2007 Employee Stock Incentive Plan, as amended (the "Amended Employee Plan"), which amendment provides as follows:

Extends the plan termination date for an additional four years from March 11, 2020 to March 11, 2024; and Authorizes the Compensation and Stock Option Committee to grant restricted stock units ("RSUs") under the Amended Employee Plan.

The proposed amendment was adopted by the Board on January 23, 2019, and will become effective upon shareholder approval at the Annual Meeting. The Board believes that the extension of the plan termination date for an additional four years is necessary to enable the future grant of awards to employees and prospective employees of the Company. In addition, the Board believes that the Amended Employee Plan is necessary to ensure that the Company will continue to retain, motivate and attract qualified employees and to provide recognition for exemplary service. The full text of the proposed amendment is attached as Appendix A.

As of January 24, 2019, 616,651 shares remain available for grant under the Amended Employee Plan. The proposed amendment will have no impact on the number of shares available for grant under the Amended Employee Plan.

Summary of the Amended Employee Plan

The following summary of the main features of the Amended Employee Plan is not a complete description of all the provisions of the Amended Employee Plan. Any shareholder of the Company who wishes to obtain a copy of the Amended Employee Plan may do so upon written request to the Corporate Secretary at the Company's principal executive offices at 131 South Clark Drive, Tempe, Arizona 85281.

The Amended Employee Plan authorizes the grant and issuance of three different types of Awards: Options ("Stock Options"), which can qualify as "incentive stock options" under the Internal Revenue Code, or as "non-qualified stock options;" Restricted Stock, which is stock that is contingent on an employee satisfying conditions, including without limitation continued employment, passage of time or satisfaction of performance criteria, and Restricted Stock Units, which represent the right to receive shares of our Common Stock at a future date determined in accordance with the participants award agreement (generally contingent upon an employee satisfying conditions, including without limitation continued employment, passage of time or satisfaction of performance criteria).

The Amended Employee Plan has a number of special terms and limitations, including:

The exercise price for Stock Options granted under the plan must at least equal the Shares' fair market value at the time the Stock Option is granted;

The Amended Employee Plan expressly states that Stock Options granted under it cannot be "repriced," as defined in the Amended Employee Plan and

Shareholder approval is required for certain types of amendments to the Amended Employee Plan.

The Amended Employee Plan is designed to enable the Company to attract, retain and motivate its officers and other key employees, and to further align their interests with those of the shareholders of the Company, by providing for or increasing the proprietary interest of such persons in the Company.

The Amended Employee Plan has various provisions so that Awards under it may, but need not, qualify for an exemption from the "short swing liability" provisions of Section 16(b) of the Exchange Act pursuant to Rule 16b-3 and/or qualify as "performance based compensation" that is exempt from the \$1 million limitation on the deductibility of compensation under Section 162(m) of the Tax Code. However, shareholder approval of the class of eligible participants, the per person annual award limitations, the "Qualifying Performance Criteria" potentially associated with Awards granted under the Amended Employee Plan and the option price (or formula under which the price is determined) are required in order for awards under the Amended Employee Plan to qualify potentially as "performance based compensation" under Tax Code Section 162(m).

The Amended Employee Plan's per person award limitations for purposes of Section 162(m) are the following: (1) the aggregate number of Shares subject to Stock Options granted under the Amended Employee Plan during any calendar

year to any one participant may not exceed 250,000; and (2) the aggregate number of Shares issued or issuable under all Awards other than Stock Options granted under the Amended Employee Plan during any calendar year to any one participant may not exceed 250,000. In the future, if such limitations are not required under Code Section 162(m), then a change in such limitations shall not be subject to Shareholder approval.

Eligibility

Participants in the Amended Employee Plan can be any person who is an employee or prospective employee of the Company or any Subsidiary. The Company estimates that all employees (468 people at September 30, 2018) will be eligible to participate in the Amended Employee Plan during fiscal year 2019.

Administration

The Amended Employee Plan is administered by the Compensation and Stock Option Committee (the "Committee") although the Board of Directors may exercise any authority of the Committee under the Amended Employee Plan in lieu of the Committee's exercise thereof. The Committee may designate subcommittees and may delegate certain administrative functions to others.

Subject to the express provisions of the Amended Employee Plan, the Committee has broad authority to administer and interpret the Amended Employee Plan, including, without limitation, authority to determine who is eligible to participate in the Amended Employee Plan and to which of such persons, and when, Awards are granted under the Amended Employee Plan, to determine the number of shares of Common Stock subject to Awards and the exercise or purchase price of such shares under an Award, to establish and verify the extent of satisfaction of any performance goals applicable to Awards, to prescribe and amend the terms of the agreements evidencing Awards made under the Amended Employee Plan, and to make all other determinations deemed necessary or advisable for the administration of the Amended Employee Plan.

Stock Subject to the Amended Employee Plan

The aggregate number of Shares that can be issued under the Amended Employee Plan may not exceed 3,000,000 (including pursuant to ISOs). If the outstanding Shares or other securities of the Company, or both, for which the Award is then exercisable or as to which the Award is to be settled shall at any time be changed or exchanged by declaration of a stock dividend, stock split, combination of shares, recapitalization, or reorganization, the Committee may appropriately and equitably adjust the number and kind of Shares or other securities which are subject to the Plan or subject to any Awards theretofore granted, and the exercise or settlement prices of such Awards, so as to maintain the proportionate number of Shares or other securities without changing the aggregate exercise or settlement price, provided, however, that such adjustment shall be made so as to not affect the status of any Award intended to qualify as an ISO or as "performance based compensation" under Section 162(m) of the Code. For purposes of calculating the aggregate number of Shares issued under the Amended Employee Plan, only the number of shares actually issued upon exercise or settlement of an Award shall be counted (shares not delivered or retained by the Company upon cancellation, expiration or forfeiture of an Award shall not be counted).

Awards

The Amended Employee Plan authorizes the grant and issuance of the following types of Awards: Stock Options, Restricted Stock and Restricted Stock Units.

Stock Options. Subject to the express provisions of the Amended Employee Plan and as discussed in this paragraph, the Committee has discretion to determine the vesting schedule of Stock Options, the events causing a Stock Option to expire, the number of shares subject to any Stock Option, the restrictions on transferability of a Stock Option, and such further terms and conditions, in each case not inconsistent with the Amended Employee Plan, as may be determined from time to time by the Committee. The Amended Employee Plan expressly provides that the Company cannot "reprice" Stock Options. The exercise price for Stock Options may not be less than 100% of the fair market value

of the Common Stock (as determined pursuant to the Amended Employee Plan) at the time the Stock Option is granted. The exercise price of an Stock Option may be paid through various means specified by the Committee, including in cash or check, or by a promissory note or other commitment to pay (including such a commitment by a stock broker to pay over proceeds from the sale of shares issuable under a Stock Option). Stock Options granted under the Amended Employee

Plan may be either incentive stock options ("ISOs") qualifying under Section 422 of the Tax Code or non-qualified stock options ("NQSOs"), which are not intended to qualify as ISOs.

Restricted Stock. The Committee may make awards of restricted stock to participants, which will be subject to restrictions on transferability and other restrictions as the Committee may impose, including, without limitations on the right to vote restricted stock or the right to receive dividends, if any, on the restricted stock. These awards may be subject to forfeiture upon any conditions or criteria established by the Committee, including without limitation termination of employment or upon a failure to satisfy Qualifying Performance Criteria during the applicable restriction period. In addition, in the discretion of the Compensation Committee, awards of restricted stock may be issued upon participants meeting certain Qualifying Performance Criteria.

Restricted Stock Units. The Committee may grant restricted stock units under the Amended Employee Plan, which represent rights to receive shares of our Common Stock at a future date determined in accordance with the participant's award agreement. No monetary payment is required for receipt of restricted stock units or the shares issued in settlement of the award, the consideration for which is furnished in the form of the participant's services to the Company. The Committee may grant restricted stock unit awards subject to the attainment of one or more performance goals similar to those described below in connection with performance awards, or may make the awards subject to vesting conditions similar to those applicable to restricted stock awards. Restricted stock units may not be transferred by the participant. Unless otherwise provided by the Committee, a participant will forfeit any restricted stock units which have not vested prior to the participant's termination of service. Participants have no voting rights or rights to receive cash dividends with respect to restricted stock unit awards until shares of Common Stock are issued in settlement of such awards. However, the Committee may grant restricted stock units that entitle their holders to dividend equivalent rights, which are rights to receive cash or additional restricted stock units whose value is equal to any cash dividends the Company pays. Dividend equivalent rights may be made subject to the same vesting conditions and settlement terms as the original award. However, if dividend equivalents are paid in cash with respect to unvested restricted stock units and those units are subsequently forfeited upon the participant's termination of service, the Company may require repayment of the cash dividend equivalents applicable to the forfeited units.

Qualifying Performance Criteria

Subject to shareholder approval of the Amended Employee Plan, the performance criteria for any Award that is intended to satisfy the requirements for "performance based compensation" under Code Section 162(m) shall be any one or more of the following performance criteria, either individually, alternatively or in any combination, applied to either the Company as a whole, to a business unit or subsidiary, or based on comparisons of any of the performance measures relative to other companies, either individually, alternatively or in any combination, and measured either annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, to previous years' results or to a designated comparison group, in each case as specified by the Committee in the Award: (a) cash flow, (b) earnings per share or increases of same, (c) earnings before interest, taxes and amortization, (d) return on equity, (e) total shareholder return, (f) share price performance, (g) return on capital or investment, (h) return on assets or net assets, (i) revenue, (j) income or net income, (k) operating income or net operating income, (l) operating profit or net operating profit, (m) operating margin or profit margin, (n) return on operating revenue, (o) pre-tax or after-tax profit levels expressed in either absolute dollars, (p) revenues or revenue growth, (q) economic or cash value added, (r) results of customer satisfaction surveys, (s) other measures of performance, quality, safety, productivity or process improvement, (t) market share and (u) overhead or other expense reduction. These factors may have a minimum performance standard, a target performance standard and a maximum performance standard. The Committee shall appropriately adjust any evaluation of performance under a Qualifying Performance Criteria to exclude any of the following events that occurs during a performance period: (i) asset write-downs, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax law, accounting principles or other such laws or provisions affecting reported results, (iv) accruals for reorganization and restructuring programs and (v) any extraordinary non-recurring

items as described in Accounting Principles Board Opinion No. 30 and/or in management's discussion and analysis of financial condition and results of operations appearing in the Company's annual report to shareholders for the applicable year.

Transferability of Awards and Other Provisions Applicable to Awards

Generally, Awards granted under the Amended Employee Plan may not be sold, assigned, conveyed, gifted, pledged, hypothecated or otherwise transferred in any manner prior to the vesting or lapse of any and all restrictions applicable thereto.

The Amended Employee Plan has provisions designed so that it qualifies as an "eligible plan" under the margin provisions of Regulation U, by expressly providing that the Committee may, but is not required to, loan the amount necessary to purchase shares and/or pay taxes under any award. The Amended Employee Plan also provides that the Committee may, but need not, provide that the holder of an Award has a right under an Award to receive a number of shares, the amount of which is determined by reference to the value of the Award. Finally, the Amended Employee Plan does not limit the Company's right to make other arrangements to provide stock options and other forms of compensation arrangements as it determines appropriate.

Anticipated Awards Under Amended Employee Plan

The Company is unable to determine the awards it anticipates will be made to its Named Executive Officers and directors under the Amended Employee Plan following the annual meeting. Accordingly, the table below sets forth the number of stock options granted (no stock awards were granted) by the Company to each of its Named Executive Officers and each group indicated below for fiscal year 2018 pursuant to the Amended Employee Plan. The amounts set forth in the table below are meant to illustrate grants of awards that would have been made pursuant to the Amended Employee Plan, and do not represent awards discussed under "Executive Compensation" elsewhere in this Proxy Statement, and were not granted in addition to such awards discussed elsewhere.

| | Option Awards | |
|---|---------------|----------|
| | Dollar | Number |
| Name and Principal Position | Value | |
| - | (\$)(*) | of Units |
| Jong S. Whang, Executive Chairman, Director and Chief Executive Officer | \$— | |
| Fokko Pentinga, former Chief Executive Officer and Director | \$— | |
| Robert T. Hass, Chief Financial Officer | \$— | |
| Executive Officers as a Group | \$84,094 | 20,000 |
| | | |

^{*} The dollar values of the number of units shown in this illustration are the grant date fair values of awards, assuming that the market price of the underlying shares on the date of the grant was \$7.40, the market value at the close of trading on May 11, 2018 (the grant date).

Amendments and Termination

The Board of Directors may amend, alter or discontinue the Amended Employee Plan or any agreement evidencing an Award made under the Amended Employee Plan, but no such amendment shall, without the approval of the shareholders of the Company:

change the maximum number of shares of Common Stock for which Awards may be granted under this Plan; extend the term of this Plan; or

change the class of persons eligible to participate in the Plan.

The Board may amend, alter or discontinue the Plan or any agreement evidencing an Award made under the Plan, but no amendment or alteration shall be made which would impair the rights of any Award holder, without such holder's

consent, under any Award theretofore granted; provided that no such consent shall be required if the Committee determines in its sole discretion and prior to the date of any change in control, recapitalization, stock dividend, stock split, reorganization, merger, consolidation or similar type transaction that such amendment or alteration either is required or advisable in order for the Company, the Plan, or any Award granted, to satisfy any law or regulation or to meet the requirements of any accounting standard.

No Award granted under the Amended Employee Plan shall be granted pursuant to the Amended Employee Plan more than 10 years after the latest date of the Company stockholder's adoption of the Amended Employee Plan.

Federal Income Tax Consequences

The following discussion of the federal income tax consequences of the Amended Employee Plan is intended to be a summary of applicable federal law as currently in effect. State and local tax consequences may differ, and tax laws may be amended or interpreted differently during the term of the Amended Employee Plan or of Awards thereunder. Because the federal income tax rules governing Awards and related payments are complex and subject to frequent change, and they depend on the Participant's individual circumstances, participants are advised to consult their tax advisors prior to exercise of options or other Awards or dispositions of stock acquired pursuant to Awards.

The Stock Options

ISOs and NQSOs are treated differently for federal income tax purposes. ISOs are intended to satisfy the requirements of Section 422 of the Code. NQSOs need not satisfy such requirements.

ISOs

No taxable income will result to a Participant upon the grant of an ISO. Upon the exercise of an ISO, any excess of the fair market value of the stock over the option price is a tax preference item that may result in the imposition of the alternative minimum tax in the year of exercise. However, if any of such shares are disposed of by the Participant in a disqualifying disposition (see below) in the same taxable year as the exercise, there will be no item of tax preference as to such disposed shares, although the Participant will recognize ordinary income as discussed below. In cases where the exercise of the option does produce an item of tax preference, the basis of the stock for purposes of the alternative minimum tax will include the amount of such tax preference item.

On the subsequent sale of stock acquired by the exercise of an ISO, gain or loss will be recognized in an amount equal to the difference between the amount realized on the sale and the Participant's tax basis in the stock sold. The tax basis of stock acquired solely for cash will be equal to the amount of cash paid. If an ISO is exercised using previously acquired stock (or stock and cash) in payment, the Participant's tax basis for the number of stock received equal to the number used in payment shall be the same as the Participant's basis in the stock used as payment. The Participant's aggregate tax basis in any additional stock received will be equal to the amount of cash paid (if any).

If a disposition of stock does not take place until more than two years after grant and more than one year after exercise of the option, any gain or loss realized will be treated as long term capital gain or loss. Under such circumstances, the Company will not be entitled to a deduction for income tax purposes in connection with the exercise of the option. If a disposition occurs within two years after grant and one year after exercise of the option, the difference between the fair market value of the stock on the date of exercise and the tax basis in the stock is taxable as compensation income to the Participant and is deductible by the Company for federal income tax purposes. Any additional amount realized on the disposition will be taxed as either long term or short term capital gain.

If the option price of an ISO is paid by using stock that was acquired upon the exercise of an ISO ("Payment Shares") and the Payment Shares have not been held for more than one year from exercise and two years from grant, the transfer of such Payment Shares to exercise an ISO will be treated as a "disposition" of such Payment Shares. Upon such disposition, the excess of the fair market value of the Payment Shares on the date they had originally been acquired (or, if less, the fair market value of the Payment Shares on the date of disposition) over the Participant's tax basis in such Payment Shares is taxable as compensation income to the Participant and is deductible by the Company.

NQSO

In general, no taxable income will be recognized by the Participant, and no deduction will be allowed to the Company, upon the grant of a NQSO. Upon exercise of an unrestricted NQSO, a Participant will recognize ordinary income (and the Company will be entitled to a corresponding tax deduction) in an amount equal to the amount by which the fair market value of the shares on the exercise date exceeds the option exercise price. Any gain or loss realized by a Participant on disposition of such shares generally is a capital gain or loss and does not result in any tax deduction to the Company.

Restricted Stock

A grant of restricted stock does not result in income to the Participant or a corresponding tax deduction for the Company until the shares are no longer subject to restrictions, or forfeiture, unless the Participant, elects under Section 83(b) of the Code to have the amount of income to the Participant (and deduction to the Company) determined at the date of the grant. At the time of lapse of restrictions (or a Section 83(b) election), the Participant generally will recognize ordinary income equal to the fair market value of the shares less any amount paid for them, and the Company will be entitled to a tax deduction in the same amount (subject to certain restrictions set forth below under Section 162(m) of the Code. Any dividends paid on restricted stock will be treated as compensation for federal income tax purposes, unless the Participant has made a Section 83(b) election. After the restrictions have lapsed (or a Section 83(b) election has been made), the Participants receiving Restricted Stock should consult their tax advisors regarding the ability and advisability of making the Section 83(b) election, including the limitations on claiming a loss if the shares decline in value or are forfeited after receipt.

Restricted Stock Units

A participant generally will recognize no income upon the receipt of a restricted stock unit award. Upon the settlement of such award, participants normally will recognize ordinary income in the year of settlement in an amount equal to the cash received and the fair market value of any substantially vested shares of stock received. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. If the participant receives shares of restricted stock, the participant generally will be taxed in the same manner as described above under "Restricted Stock." Upon the sale of any shares received, any gain or loss, based on the difference between the sale price and the fair market value of the shares on the Determination Date (as defined above under "Restricted Stock"), will be taxed as capital gain or loss. We generally should be entitled to a deduction equal to the amount of ordinary income recognized by the participant on the Determination Date, except to the extent such deduction is limited by applicable provisions of the Code.

Withholding and Other Issues for Employees

The Company generally will be entitled to withhold any required taxes in connection with the exercise or payment of an Award, and may require the participant to pay such taxes as a condition to exercise of an Award. Special rules will apply in cases where a recipient of an Award pays the exercise or purchase price of the Award or applicable withholding tax obligations under the Amended Employee Plan by delivering previously owned shares or by reducing the number of shares otherwise issuable pursuant to the Award. The surrender or withholding of such shares will in certain circumstances result in the recognition of income with respect to such shares or a carryover basis in the shares acquired, and may constitute a disposition for purposes of applying the ISO holding periods as discussed above.

The Committee, pursuant to the terms of the agreements or other documents pursuant to which specific Awards are made under the Amended Employee Plan, may agree to reimburse participants for some or all of the federal, state and local income taxes associated with the grant or exercise of an Award or the receipt of the cash or Shares from an Award, or the 20% excise tax on any "excess parachute payments" under Code Sections 280G and Code Section 4999, and may agree to reimburse the additional federal, state and local income tax from the reimbursement payments made.

Tax Effect to Company

The Company generally will be entitled to a tax deduction in connection with an Award under the Amended Employee Plan in an amount equal to the compensation income (ordinary income) realized by a Participant and at the time the Participant recognizes such income (for example, the exercise of a NQSO). Special rules limit the deductibility of compensation paid to certain Covered Employees of the Company (as defined by Code Section 162(m)(3)). Under Section 162(m) of the Internal Revenue Code, the annual compensation paid to any of these Covered Employees will be deductible only to the extent that it does not exceed \$1,000,000 or if the compensation is paid solely on account of attaining one or more pre-established, objective performance goals. The Amended Employee Plan has been constructed such that some Awards in the Committee's discretion may qualify as "performance-based compensation" under Section 162(m) of the Code and thus would be deductible even if the total compensation paid to the Covered Employee is in excess of \$1,000,000. However, whether an Award will qualify under Section 162(m) as "performance-based compensation" will depend on the terms, conditions and type of the Award issued the Covered Employee. For example, grants of Options or Restricted Stock often vest only according to the optionee's or Grantee's length of employment rather than pre-established performance goals. Therefore, the compensation derived from the Awards made to Covered Employees may not be deductible by the Company to the extent the Covered Employee's total compensation derived from the Awards made to Covered Employees may not be deductible by the Company to the extent the Covered Employee's total compensation exceeds \$1,000,000.

Vote Required

Assuming a quorum is present at the Annual Meeting, the affirmative vote of a majority of votes cast by holders of Common Stock represented and entitled to vote at the Annual Meeting is required to approve the Amended Employee Plan.

THE BOARD OF DIRECTORS RECOMMENDS AND ENCOURAGES YOU TO VOTE "FOR" THE APPROVAL OF THE AMENDMENT TO THE 2007 EMPLOYEE STOCK INCENTIVE PLAN.

OTHER MATTERS

Annual Report

Our Annual Report for the fiscal year ended September 30, 2018, is enclosed herewith.

Deadline for Shareholder Proposals for Action at our Next Annual Meeting

We anticipate holding our 2020 Annual Meeting of Shareholders on March 4, 2020. Any shareholder who wishes to present any proposal for shareholder action at the 2020 Annual Meeting of Shareholders must, in addition to complying with any other applicable requirements, including, without limitation, those set forth in Rule 14a-8 of the Exchange Act, submit notice of such proposal to our Corporate Secretary, at our offices, not later than December 14, 2019, in order to be included in our 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 2020 Annual Meeting of Shareholders without any discussion of the proposal in our proxy statement, and the shareholder does not notify us on or before January 19, 2020, as required by SEC Rule 14a-4(c)(1), of the intent to raise such proposal at the Annual Meeting of Shareholders, then proxies received by us for the 2020 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

We do not have formal procedures for shareholder communications with the Board of Directors. However, any matter intended for the Board or any Board Committee should be directed to our Corporate Secretary 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 for forwarding to the Board or specified Board members will be forwarded in accordance with the shareholder's instructions.

No Incorporation by Reference

In our filings with the SEC, information is sometimes "incorporated by reference." This means that we refer you to information previously filed with the SEC that should be considered as part of the particular filing. As provided under SEC regulations, the "Audit Committee Report" contained in this Proxy Statement specifically is not incorporated by reference into any other filings with the SEC and shall not be deemed to be "Soliciting Material." In addition, this Proxy Statement includes several website addresses. These website addresses are intended to provide inactive, textual references only. The information on these websites is not part of this Proxy Statement.

Householding of Proxy Materials

The SEC permits 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 our 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 our Corporate Secretary at Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281 if you are a shareholder of record. Shareholders currently participating in householding may request additional copies of the Proxy Statement and Annual Report by contacting us at (480) 967-5146.

Appendix A

2019 AMENDMENT TO 2007 EMPLOYEE STOCK INCENTIVE PLAN OF AMTECH SYSTEMS, INC.

WHEREAS, Amtech Systems, Inc. (the "Company") maintains the 2007 Employee Stock Incentive Plan of Amtech Systems, Inc. (the "Plan"); and

WHEREAS, Section 12 of the Plan provides that the Plan may be amended from time to time; and

WHEREAS, the Company desires to amend the Plan in certain respects;

NOW, THEREFORE, the Plan is hereby amended, effective as of the date the shareholders of the Company approve this amendment, in the following respects:

1. Section 5.1 of the Plan is hereby amended by addition new Section 5.1(c) as follows:

(c) Restricted Stock Unit. A Restricted Stock Unit represents the right to receive Shares under Section 8, subject to certain restrictions and the risk of forfeiture and terms as are expressed in the agreement and other document evidencing the Award.

2. New Section 8 of the Plan is added as follows, and each subsequent Section of the Plan is hereby renumbered accordingly:

Section 8. Restricted Stock Units.

Restricted Stock Unit Awards shall be evidenced by Award Agreements specifying the number of Restricted Stock Units subject to the Award, in such form as the Committee shall establish. Such Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

8.1 Grant of Restricted Stock Unit Awards. Restricted Stock Unit Awards may be granted upon such conditions as the Committee shall determine, including, without limitation, upon the attainment of one or more performance criteria described in Section 9.2. If either the grant of a Restricted Stock Unit Award or the vesting conditions with respect to such Award is to be contingent upon the attainment of one or more Performance Goals, the Committee shall follow procedures substantially equivalent to those set forth in Section 9.2.

8.2 Purchase Price. No monetary payment (other than applicable tax withholding, if any) shall be required as a condition of receiving a Restricted Stock Unit Award, the consideration for which shall be services actually rendered to the Company or for its benefit. Notwithstanding the foregoing, if required by applicable state corporate law, an Eligible Employee shall furnish consideration in the form of cash or past services rendered to the Company or for its benefit having a value not less than the par value of the Shares issued upon settlement of the Restricted Stock Unit Award.

8.3 Vesting. Restricted Stock Unit Awards may (but need not) be made subject to vesting conditions based upon the satisfaction of such service requirements, conditions, restrictions or performance criteria, including, without limitation, performance goals as described in Section 9.2, as shall be established by the Committee and set forth in the Award Agreement evidencing such Award.

8.4 Voting Rights, Dividend Equivalent Rights and Distributions. Eligible Employees shall have no voting rights with respect to Shares represented by Restricted Stock Units until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). However, the Committee, in its discretion, may provide in the Award Agreement evidencing any Restricted Stock Unit Award that the Eligible Employee shall be entitled to dividend equivalent amounts with respect to the payment of cash dividends on Shares during the period beginning on the date such Award is granted and ending, with respect to each share subject to the Award, on the earlier of the date the Award is settled or the date on which it is terminated. Dividend equivalent amounts, if any, shall be paid by crediting the Eligible Employee with a cash amount or with additional whole Restricted Stock Units as of the date of payment of such cash dividends on Shares, as determined by the Committee. The number of additional Restricted Stock Units (rounded to the nearest whole number), if any, to be credited shall be determined by dividing (a) the amount of cash dividends paid on the dividend payment date with

respect to the number of shares of Stock represented by the Restricted Stock Units previously credited to the Participant by (b) the fair

market value per Share on such date. If so determined by the Committee and provided by the Award Agreement, such cash amount or additional Restricted Stock Units shall be subject to the same terms and conditions and shall be settled in the same manner and at the same time as the Restricted Stock Units originally subject to the Restricted Stock Unit Award. In the event of a dividend or distribution paid in shares of Stock or other property or any other adjustment made upon a change in the capital structure of the Company as described in Section 10, appropriate adjustments shall be made in the Eligible Employee's Restricted Stock Unit Award so that it represents the right to receive upon settlement any and all new, substituted or additional securities or other property (other than regular, periodic cash dividends) to which the Eligible Employee would be entitled by reason of the Shares issuable upon settlement of the Award, and all such new, substituted or additional securities or other property shall be immediately subject to the same vesting conditions as are applicable to the Award.

8.5 Effect of Termination of Service. Unless otherwise provided by the Committee and set forth in the Award Agreement evidencing a Restricted Stock Unit Award, if an Eligible Employee's service terminates for any reason, whether voluntary or involuntary (including the Eligible Employee's death or disability), then the Eligible Employee shall forfeit to the Company any Restricted Stock Units pursuant to the Award which remain subject to vesting conditions as of the date of the Eligible Employee's termination of service.

8.6 Settlement of Restricted Stock Unit Awards. The Company shall issue to an Eligible Employee on the date on which Restricted Stock Units subject to the Eligible Employee's Restricted Stock Unit Award vest or on such other date determined by the Committee in compliance with Section 409A, if applicable, and set forth in the Award Agreement one (1) Share (and/or any other new, substituted or additional securities or other property pursuant to an adjustment described in Section 10) for each Restricted Stock Unit then becoming vested or otherwise to be settled on such date, subject to the withholding of applicable taxes, if any. The Committee, in its discretion, may provide in any Award Agreement evidencing a Restricted Stock Unit Award that if the settlement date with respect to any shares issuable upon vesting of Restricted Stock Units would otherwise occur on a day on which the sale of such shares would violate the provisions of the Trading Compliance Policy, then the settlement date shall be deferred until the next trading day on which the sale of such shares would not violate the Trading Compliance Policy but in any event no later than the 15th day of the third calendar month following the year in which such Restricted Stock Units vest. If permitted by the Committee, the Eligible Employee may elect, consistent with the requirements of Section 409A, to defer receipt of all or any portion of the Shares or other property otherwise issuable to the Eligible Employee pursuant to this Section, and such deferred issuance date(s) and amount(s) elected by the Eligible Employee shall be set forth in the Award Agreement. Notwithstanding the foregoing, the Committee, in its discretion, may provide for settlement of any Restricted Stock Unit Award by payment to the Eligible Employee in cash of an amount equal to the fair market value on the payment date of the Shares or other property otherwise issuable to the Eligible Employee pursuant to this Section.

8.7 Nontransferability of Restricted Stock Unit Awards. The right to receive shares pursuant to a Restricted Stock Unit Award shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Eligible Employee or the Eligible Employee's beneficiary, except transfer by will or by the laws of descent and distribution. All rights with respect to a Restricted Stock Unit Award granted to a Participant hereunder shall be exercisable during his or her lifetime only by such Eligible Employee or the Eligible Employee's guardian or legal representative.

3. The last sentence of Section 16 of the Plan is hereby amended and restated in its entirety, to provide as follows: No Awards shall be granted pursuant to this Plan after March 11, 2024. * * *

IN WITNESS WHEREOF, the Company has caused this 2019 Amendment to be executed by its duly appointed officer on this ______ day of ______, 2019, effective as of the date specified above.

AMTECH SYSTEMS, INC.

| By: Name: | | |
|--------------|--|--|
| Its: | | |
| 35 | | |

Amtech Systems, Inc. Holder Account Number

Electronic Voting Instructions Available 24 hours a day, 7 days a week!

Instead of mailing your proxy, you may choose one of the voting methods outlined below to vote your proxy. VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR. Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Eastern Standard Time, on March 6, 2019. Vote by Internet

Vote by Internet

• Go to www.investorvote.com/ASYS

• Or scan the QR code with your smartphone

• Follow the steps outlined on the secure website

Vote by telephone

• Call toll free 1-800-652-VOTE (8683) within the USA, US territories & Canada on a touch tone telephone

• Follow the instructions provided by the recorded message

A. Proposals-The Board of Directors recommends a vote FOR all the nominees listed and FOR Proposals 2, 3 and 4. 1. ELECTION OF DIRECTORS:

For Withhold

- 1. Jong S. Whang o o votes
- 2. Robert Averick o o votes

3. Michael Garnreiter o o votes

- 4. Robert F. King o o votes
- 5. Sukesh Mohan o o votes

o To specify a method of cumulative voting, mark the box to the left with an "X" and write the number of shares you wish to vote in favor of each nominee on the line next to such nominee's name above.

2. RATIFICATION OF THE APPOINTMENT OF MAYER HOFFMAN MCCANN P.C. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR 2019

- For Against Abstain
- 0 0 0

3. ADVISORY (NON-BINDING) VOTE TO APPROVE NAMED EXECUTIVE OFFICER COMPENSATION For Against Abstain

0 0 0

4. VOTE TO APPROVE AN AMENDMENT TO THE COMPANY'S 2007 EMPLOYEE STOCK INCENTIVE PLAN

For Against Abstain

0 0 0

B. Authorized Signatures – This section must be completed for your vote to be counted - Date and Sign below 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. 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.

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

| [/ | _/] [| |] |
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IF VOTING BY MAIL, YOU MUST COMPLETE SECTIONS A - C ON BOTH SIDES OF THIS CARD

PROXY - AMTECH SYSTEMS, INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF AMTECH SYSTEMS, INC. FOR THE 2019 ANNUAL MEETING OF SHAREHOLDERS

The undersigned shareholder of Amtech Systems, Inc., an Arizona corporation (the "Company"), hereby acknowledges receipt of the Notice of Annual Meeting of Shareholders dated January 25, 2019, and hereby appoints Jong S. Whang and Robert T. Hass, and each of them, proxies and attorneys-in-fact, with full power of substitution, on behalf and in the name of the undersigned, to represent the undersigned at the Annual Meeting of Shareholders of AMTECH SYSTEMS, INC. to be held at our Corporate Offices at 131 South Clark Drive, Tempe, Arizona, USA, on Wednesday, March 6, 2019, 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 form of proxy confers discretionary authority to cumulate votes with respect to the election of directors. Unless you have specified on the proxy card how you want your shares voted with respect to the election of directors, the proxy agents intend to cumulatively vote all of the shares covered by the proxies solicited by this Proxy Statement in favor of the number of nominees named in this Proxy Statement as they may, in their discretion, determine is required to elect the maximum number of nominees named in this Proxy Statement.

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.

C. Non-Voting Items

Change of Address - Please print your new address below. Comments - Please print your comments below.
[______]
[_____]
IF VOTING BY MAIL, YOU MUST COMPLETE SECTIONS A - C ON BOTH SIDES OF THIS CARD