Amtech Systems, Inc. 131 South Clark Drive Tempe, AZ 85288

Via EDGAR

February 9, 2024

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street N.E.
Mail Stop 3010CF/AD8
Washington, DC 20549
Attn: Eric McPhee
Kristina Marrone
Benjamin Holt
Dorrie Yale

Re: Amtech Systems, Inc.

Form 10-K for the Fiscal Year Ended September 30, 2023 Filed December 14, 2023 File No. 000-11412

Ladies and Gentlemen:

This letter sets forth the response of Amtech Systems, Inc., an Arizona corporation (the "Company"), to the comments of the staff (the "Staff") of the U.S. Securities and Exchange Commission (the "SEC") contained in the letter dated February 1, 2024, pertaining to the Form 10-K for the fiscal year ended September 30, 2023 (the "2023 10-K"). We have included the Staff's comments below, followed by the Company's responses thereto.

Form 10-K for the Fiscal Year Ended September 30, 2023 Liquidity and Capital Resources, page 42

- 1. We note that on page 44 and elsewhere in your Form 10-K you disclose that you were not in compliance with the Debt to EBITDA and Fixed Charge Coverage Ratio financial covenants under your loan agreement, and that you entered into a forbearance agreement with the bank related to such non-compliance, pursuant to which the bank agreed to forbear through January 17, 2025 from exercising its rights and remedies available to it as a result of such defaults. In future filings, please expand your disclosures of liquidity and capital resources to address the following:
 - Describe the terms of each covenant covered by the forbearance agreement, or any similar agreements, including a presentation of the required and actual ratio/amount as of the most recent compliance date.
 - 'Explain how additional future violations of this or other debt covenants would impact your liquidity and capital resources. Specifically, you should state whether

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noncompliance with any covenants could lead to the acceleration of payments due under any of your debt arrangements. Refer to Items 303(b)(1) and (c)(1) of Regulation S-K.

Response:

In future filings, we will add the following disclosure to the liquidity and capital resources section of our quarterly reports on Form 10-Q and our Form 10-K for the fiscal year ending September 30, 2024:

"Under the amended Loan Agreement, the Company is required to comply with the following financial covenants:

- •Maintaining, on a consolidated basis, a minimum EBITDA (as defined in the Loan Agreement) through the fiscal year ending September 30, 2024, measured on a quarterly basis (the "Minimum EBITDA Covenant"). The Minimum EBITDA Covenant amount increases each quarter during such period. At December 31, 2023, we were in compliance with the Minimum EBITDA Covenant for such period (not less than negative EBITDA of \$1.2 million), with actual positive EBITDA of \$0.2 million for such period. The Minimum EBITDA Covenant replaced the Senior Debt to EBITDA covenant set forth in the original Loan Agreement.
- •As of the end of each of the Company's fiscal years, commencing for the fiscal year ending September 30, 2024, the Company must maintain a ratio of (a) the total for such fiscal year of EBITDAR (as defined in the Loan Agreement) minus the sum of all income taxes paid in cash plus cash dividends/distributions plus maintenance Capital Expenditures (as defined in the Loan Agreement) plus management fees paid in cash, to (b) the sum for such fiscal quarter of (1) Interest Charges (as defined in the Loan Agreement) plus (2) required payments of principal on Debt (as defined in the Loan Agreement) (including the Term Loan, but excluding the Revolver) plus (3) operating lease/rent expense, of not less than 1.30 to 1.00 based on a trailing four (4) quarter basis (the "Fixed Charge Coverage Ratio Covenant"). Prior to entering into the Forbearance Agreement, this covenant was measured as of the end of each of the Company's fiscal quarters, beginning March 31, 2023.
- •As of the end of each of the Company's fiscal quarters, commencing March 31, 2023, the Company must maintain a consolidated working capital of current assets (excluding related party receivables and prepaid expenses) minus current liabilities of at least \$35.0 million. This financial covenant is unchanged in the Forbearance Agreement.

If the Lender does not extend the Forbearance Period or otherwise grant a waiver in the future for the covenant defaults described above, an event of default under the Loan Agreement would exist. To the extent the Lender so elects, the outstanding indebtedness under the Loan Agreement could be accelerated following the expiration of any applicable cure periods, causing such debt to be immediately due and payable. In addition, should the Company default in its obligation to

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comply with any of the covenants described immediately above during the Forbearance Period, an event of default would then exist, and, absent a further forbearance agreement or waiver granted by the Lender, the Lender would have the right to accelerate the indebtedness following the expiration of any applicable cure periods, causing such debt to be immediately due and payable. Both of the foregoing events would also result in the termination of all commitments to extend further credit under the Loan Agreement. There is no guarantee we will have sufficient liquidity to repay our outstanding debt under the Loan Agreement in full if such debt were accelerated. As of December 31, 2023, we had \$17.0 million in cash and cash equivalents, and \$10.0 million in debt under the Loan Agreement. If we are unable to pay such debt as it comes due, or obtain waivers for such payments, our Lender could foreclose on the assets securing such debt. These events could materially adversely affect our business, results of operations and financial condition."

If you have any further questions or comments, please contact the undersigned at (480) 967-5146 or lgibbs@amtechsystems.com.

Sincerely,

Lisa D. Gibbs Chief Financial Officer