

FORM 4

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

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person* Giese Alfred			2. Issuer Name and Ticker or Trading Symbol AMTECH SYSTEMS INC [asys]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/19/2010					
C/O AMTECH SYSTEMS, INC., 131 SOUTH CLARK DR.								
(Street)			4. If Amendment, Date Original Filed(Month/Day/Year)			6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		
TEMPE, AZ 85281								
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned					

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Amtech Systems, Inc. \$.01 par value common stock	08/19/2010		M		6,000	A	\$ 8.32	7,000	D	
Amtech Systems, Inc. \$.01 par value common stock	08/19/2010		M		1,667	A	\$ 3.30	8,667	D	
Amtech Systems, Inc. \$.01 par value common stock	08/19/2010		S		7,667	A	\$ 13.8516	1,000	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
						Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Amtech Systems, Inc. Non-Employee Director Stock Option	\$ 8.32	08/19/2010		M	6,000	04/13/2010	04/13/2017	Amtech Systems, Inc. \$.01 par value common stock	6,000	(1)	0 (2)	D	
Amtech Systems, Inc. Non-Employee Director Stock Option	\$ 3.30	08/19/2010		M	1,667	03/13/2010	03/13/2019	Amtech Systems, Inc. \$.01 par value common stock	1,667	(1)	0 (3)	D	

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other

Giese Alfred C/O AMTECH SYSTEMS, INC. 131 SOUTH CLARK DR. TEMPE, AZ 85281	X			
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Signatures

Robert T. Hass on behalf of Albert W. Giese by Power of Attorney		08/20/2010
 Signature of Reporting Person		Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Price omitted because the transaction is a grant of a stock option
- (2) This is the number of derivative securities, with the same terms and conditions, following the reported transaction.
- (3) This is the number of derivative securities, with the same terms and conditions, following the reported transaction. Total of all derivative securities, with different terms and conditions, held following the reported transaction is 13,333

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.