
 OMB APPROVAL

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U.S. SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

FORM 3

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
 Section 17(a) of the Public Utility Holding Company Act of 1935 or
 Section 30(f) of the Investment Company Act of 1940

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1. Name and Address of Reporting Person*

Chasen, Steven

 (Last) (First) (Middle)

76 Country Club Circle

 (Street)

Pembroke, Massachusetts 02359

 (City) (State) (Zip)

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2. Date of Event Requiring Statement (Month/Day/Year)

7/99

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3. IRS or Social Security Number of Reporting Person (Voluntary)

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4. Issuer Name and Ticker or Trading Symbol

Mercury Computer Systems, Inc.

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5 Relationship of Reporting Person to Issuer
 (Check all applicable)

[] Director [] 10% Owner
 [X] Officer (give title below) [] Other (specify below)

Senior Vice President and General Manager, Operations

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6. If Amendment, Date of Original (Month/Year)

N/A

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7. Individual or joint/Group Filing (Check Applicable Line)

Form filed by One Reporting Person
 Form filed by More than One Reporting Person

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Table I -- Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr.5)
Common Stock	39,340	D	

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Reminder: Report on a separate line for each class of securities beneficially
owned directly or indirectly.
*If the form is filed by more than one reporting person, see Instruction 5(b)(v)

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

1. Title of Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr.5)	7. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exer- cisable	Expira- tion Date	Title	Amount or Number of Shares			
Stock Option (right to buy)	(1)	7/30/06	Common	2,160	2.00	D	
Stock Option (right to buy)	(2)	9/19/06	Common	37,500	4.00	D	
Stock Option (right to buy)	(3)	9/28/08	Common	2,000	7.625	D	

Explanation of Responses:

- (1) The option became exercisable as to 720 shares on July 30, 1999, and becomes exercisable as to an additional 720 shares on each of July 30, 2001 and July 30, 2002.
- (2) The option became exercisable as to 12,500 shares on October 20, 1999 and becomes exercisable as to an additional 12,500 shares on each of October 20, 2000 and October 20, 2001.
- (3) The option became exercisable as to 400 shares on September 28, 1999 and becomes exercisable as to an additional 400 shares on each of September 28, 2000, September 28, 2001, September 28, 2002 and September 20, 2003.

/s/Steven Chasen

11/10/00

**Signature of Reporting Person

Date

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations.

See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

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