FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden 0.5 hours per response:

1. Name and Address of Reporting Person [*] <u>ASLETT MARK</u>	2. Issuer Name and Ticker or Trading Symbol <u>MERCURY COMPUTER SYSTEMS INC</u> [MRCY]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify
(Last) (First) (Middle) 199 RIVERNECK ROAD	3. Date of Earliest Transaction (Month/Day/Year) 11/21/2007	President and CEO
(Street) CHELMSFORD MA 01824 (City) (State) (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person
Table I - Non-Deriv	ative Securities Acquired, Disposed of, or Benefic	cially Owned

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)			4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			Securities	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(Instr. 4)
Common Stock	11/21/2007		Α		114,285 ⁽¹⁾	Α	\$0.00	114,285	D	

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. Transa Code (8)		Derivative		6. Date Exerci Expiration Dat (Month/Day/Ye	te	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Transaction(s) (Instr. 4)		
Non- Qualified Stock Option (Right to buy)	\$14.14	11/21/2007		A		200,000		11/21/2008 ⁽²⁾	11/21/2017	Common	200,000	\$0.00 ⁽³⁾	200,000	D	

Explanation of Responses:

1. These shares of restricted stock vest in four equal annual installments beginning November 21, 2008.

2. This option vests in four equal annual installments beginning November 21, 2008.

3. Field N/A to this transaction but was completed to allow for electronic filing only.

Alex Braverman, Attorney-in-

<u>fact</u>

11/26/2007

** Signature of Reporting Person Date

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 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).

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

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