## FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## 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 hours per response: 0.5

1. Name and Addre Lima Marcele (Last) 199 RIVERNEC	(First) (Middle)		2. Issuer Name and Ticker or Trading Symbol <u>MERCURY COMPUTER SYSTEMS INC</u> [ MRCY ]     3. Date of Earliest Transaction (Month/Day/Year)     12/08/2006	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title X Other (specify below) VP & GM Comm Imaging & Vis					
(Street) CHELMSFORD (City)	) MA (State)	01824 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	<ul> <li>6. Individual or Joint/Group Filing (Check Applicable Line)</li> <li>X Form filed by One Reporting Person</li> <li>Form filed by More than One Reporting Person</li> </ul>					
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)					5. Amount of Securities Beneficially Owned Following Reported	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	Transaction(s) (Instr. 3 and 4)		(instit 4)
Common Stock	12/08/2006		S		50	D	\$13	12,935	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 6. Date Exercisable and Expiration Date (Month/Day/Year) 8. Price of Derivative 7. Title and 9. Number of 1. Title of 3. Transaction 3A. Deemed 4 5. Number 10. 11. Nature Derivative Conversion Execution Date Transaction Amount of derivative Ownership of Indirect Date of (Month/Day/Year) Derivative Code (Instr. Securities Security (Instr. 5) or Exercise if anv Securities Form: Beneficial Price of (Month/Day/Year) 8) Securities Underlying Beneficially Direct (D) Ownership (Instr. 4) Acquired (A) or Owned Derivative Derivative or Indirect Security Security (Instr. 3 Following (I) (Instr. 4)

		of of		3,4					Reported Transaction(s) (Instr. 4)	
	Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		

Explanation of Responses:

(Instr. 3)

## **Craig Barrows**

\*\* Signature of Reporting Person

12/13/2006

Date

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

 $\ast$  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.