FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPRO | OVAL | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | |
| Estimated average burden | | | | | | | |
| hours per response: | 0.5 | | | | | | |

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

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

| 1. Name and Address of Reporting Person* <u>Lima Marcelo G</u> | | | | | | 2. Issuer Name and Ticker or Trading Symbol MERCURY COMPUTER SYSTEMS INC [MRCY] | | | | | | | | | neck all ap Dire | , | g Perso | 10% O | wner (specify |
|--|--|--|--|------------------------------|--|---|-----|--------|--------------------------------------|---------|---|---|-------------------------------|--|------------------------------------|---|---|--|---|
| (Last) (First) (Middle) 199 RIVERNECK ROAD | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 02/20/2006 | | | | | | | | | VP & GM Comm Imaging & Vis | | | | |
| (Street) CHELMSFORD MA 01824 (City) (State) (Zip) | | | | 4. If <i>i</i> | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | 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-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da | | | | | Execution Date, | | | Date, | Transaction Disposed Code (Instr. 5) | | | ities Acquired (A) od Of (D) (Instr. 3, 4 | | | Secur Benef | icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | | | Code V | | Amount | (A (D |) or) | Price | Trans | Transaction(s) (Instr. 3 and 4) | | | (mou. 4) | |
| Common Stock 02/2 | | | | | 2006 | | | A | | 7,000(1 | 1) D | | \$17.2 | 25 13 | 12,994(2) | | D | | |
| | | Та | | | | | | | | | sed of, onvertib | | | | Owned | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deem Execution if any (Month/Da | Date, Transacti Code (Ins | | | | | 6. Date E Expiratio (Month/D | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | | 8. Price of Derivative Security (Instr. 5) | | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | vnership rm: rect (D) Indirect | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | | Date Exercisa | | Expiration Date | Title | Amo or Nun of Sha | nber | | | | | |

Explanation of Responses:

- 1. These shares of restricted stock vest in three equal annual installments commencing on February 20, 2007.
- 2. Includes 109 shares acquired under the Mercury Computer Systems, Inc. stock purchase plan in December 2005.

Craig Barrows, Attorney-in-

fact

** Signature of Reporting Person Date

05/02/2006

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.