

OBRIEN WILLIAM K  
Form 4  
November 19, 2008

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
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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 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(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
OBRIEN WILLIAM K

2. Issuer Name and Ticker or Trading Symbol  
MERCURY COMPUTER SYSTEMS INC [MRCY]

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

(Last) (First) (Middle)  
199 RIVERNECK ROAD  
(Street)

3. Date of Earliest Transaction (Month/Day/Year)  
11/17/2008

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

CHELMSFORD, MA 01844  
(City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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. 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 Ownership (Instr. 4) |     |       |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|-----|-------|
|                                 |                                      |  |                                | (A) or (D)  | Code  | V  | Amount                            | (D) | Price |

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

**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 control number.**

SEC 1474 (9-02)

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

| 1. Title of Derivative Security | 2. Conversion or Exercise | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any | 4. Transaction Code | 5. Number of Derivative Securities | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Underlying Security (Instr. 3 and 4) |
|---------------------------------|---------------------------|--------------------------------------|-----------------------------------|---------------------|------------------------------------|--|---|
|---------------------------------|---------------------------|--------------------------------------|-----------------------------------|---------------------|------------------------------------|--|---|

## Edgar Filing: OBRIEN WILLIAM K - Form 4

| (Instr. 3)                                      | Price of<br>Derivative<br>Security | (Month/Day/Year) | (Instr. 8)<br>Acquired (A)<br>or Disposed of<br>(D)<br>(Instr. 3, 4,<br>and 5) | Code | V | (A)    | (D) | Date Exercisable          | Expiration<br>Date | Title  |
|---|------------------------------------|------------------|--|------|---|--------|-----|---------------------------|--------------------|--------|
| Non-Qualified<br>Stock Option<br>(Right to buy) | \$ 4.92                            | 11/18/2008       | A  |      |   | 30,000 |     | 11/17/2009 <sup>(1)</sup> | 11/17/2015         | Common |

## Reporting Owners

| Reporting Owner Name / Address                                 | Relationships |           |         |       |
|--|---------------|-----------|---------|-------|
|  | Director      | 10% Owner | Officer | Other |
| OBRIEN WILLIAM K<br>199 RIVERNECK ROAD<br>CHELMSFORD, MA 01844 | X             |           |         |       |

## Signatures

|   |            |
|---|------------|
| Karl D. Noone,<br>Attorney-in-fact        | 11/18/2008 |
| <u>    </u> 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) This option vests as to 15,000 shares on each of November 17, 2009 and 2010.
- (2) Field N/A to this transaction but was completed to allow for electronic filing only.

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.