

MERCURY COMPUTER SYSTEMS INC  
 Form 4  
 February 22, 2006

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 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).

**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 \*  
**FLOOD DOUGLAS**

(Last) (First) (Middle)  
 4 CONSTITUTION DRIVE  
 (Street)

SOUTHBOROUGH, MA 01772  
 (City) (State) (Zip)

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

3. Date of Earliest Transaction (Month/Day/Year)  
 02/20/2006

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)  
 \_\_\_ Director \_\_\_ 10% Owner  
X Officer (give title below) \_\_\_ Other (specify below)  
 VP, Corporate Development

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-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)	Amount or Price		
Common Stock	02/20/2006		A	(1)	6,000 \$ 17.25	D	

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 (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. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Nu	Deriv	Secur	Benef	Owne	Follo	Repor	Trans	(Instr
--	--	--------------------------------------	--	--------------------------------	---	--	---	--	-------	-------	-------	-------	------	-------	-------	-------	--------

Date Exercisable	Expiration Date	Title	Amount or Number of Shares
------------------	-----------------	-------	----------------------------

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
FLOOD DOUGLAS 4 CONSTITUTION DRIVE SOUTHBOROUGH, MA 01772			VP, Corporate Development	

## Signatures

Craig Barrows,  
Attorney-in-fact  
02/22/2006  
\*\*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) These shares of restricted stock vest in three equal annual installments commencing on February 20, 2007.

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.