SEC Form 4

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

1. Name and Address of Reporting Person*	2. Issuer Name **and** Ticker or Trading Symbol	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)

1. Name and Address of Reporting Person*

SKALABRIN MARK F

(Last)	(First)	(Middle)

175 CRANE NECK ROAD

(Street)

WEST NEWBURY	MA	01985

(City)	(State)	(Zip)

2. Issuer Name **and** Ticker or Trading Symbol

MERCURY COMPUTER SYSTEMS INC [MRCY]

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

09/11/2006

4. If Amendment, Date of 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 & GM Advanced Solutions

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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	09/11/2006		A		7,500	A	$0.00[1]	72,044	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. 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 Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	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				
Employee Stock Option (right to buy)	$30.063	09/11/2006		D			15,000	10/10/2001[2]	10/10/2010	Common	15,000	$0.00[3]	0	D	
Employee Stock Option (right to buy)	$37.15	09/11/2006		D			15,000	10/15/2002[4]	10/15/2011	Common	15,000	$0.00[3]	0	D	

Explanation of Responses:

1. On September 11, 2006, Mercury Computer Systems, Inc., cancelled, pursuant to its option exchange program, options granted to the reporting person on October 10, 2000 and October 15, 2001. In exchange the reporting person received a restricted stock award covering 7,500 shares which vests as to two-thirds of the covered shares on September 11, 2008 and one-third of the covered shares on September 11, 2009.

2. The cancelled option provided for vesting in four equal installments commencing on October 10, 2000. On June 20, 2005 the Company fully accelerated the vesting of this option.

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

4. The cancelled option provided for vesting under certain performance criteria. On June 20, 2005 the Company fully accelerated the vesting of this option.

Craig Barrows, Attorney-in-fact   09/12/2006

** 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.