

OMB APPROVAL	
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**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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* <b>LUND CRAIG</b>			2. Issuer Name and Ticker or Trading Symbol <b>MERCURY COMPUTER SYSTEMS INC</b> [ MRCY ]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <b>VP, Chief Technology Officer</b>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <b>05/16/2005</b>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
3 LANGLEY ROAD			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street)	(City)	(State)	(Zip)					
DURHAM	NH	03824						

**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	05/16/2005		M		2,450	A	\$26.75	2,450	D	
Common Stock	05/16/2005		M		2,450	A	\$26.86	4,900	D	
Common Stock	05/16/2005		S <sup>(1)</sup>		4,900	D	\$26.805	0	D	
Common Stock	05/16/2005		M		4,500	A	\$17.25	4,500	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
Exercise of Non-Qualified Stock Option	\$17.25	05/16/2005		M			4,900	10/18/2001	10/18/2009	Common	4,900	\$0.00 <sup>(2)</sup>	21,612	D	
Exercise of Incentive Stock Option	\$17.25	05/16/2005		M			4,500	10/18/2001	10/18/2009	Common	4,500	\$0.00 <sup>(2)</sup>	12,888	D	

**Explanation of Responses:**

- The sale reported on this Form 4 was effected pursuant to a rule 10b5-1 plan adopted by Mr.Lund On December 15, 2004.
- Field N/A to this transaction but was completed to allow for electronic filing only.

Joseph M. Hartnett, Attorney-in-fact 05/17/2005

\*\* 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.