

MERCURY COMPUTER SYSTEMS INC  
 Form 3  
 September 14, 2005

**FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

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**INITIAL STATEMENT OF 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 *		2. Date of Event Requiring Statement	3. Issuer Name and Ticker or Trading Symbol	
Â BARROWS CRAIG		(Month/Day/Year)	MERCURY COMPUTER SYSTEMS INC [MRCY]	
(Last)	(First)	(Middle)	09/14/2005	
199 RIVERNECK ROAD			4. Relationship of Reporting Person(s) to Issuer	5. If Amendment, Date Original Filed(Month/Day/Year)
(Street)			(Check all applicable)	
CHELMSFORD,Â MAÂ 01824			<input type="checkbox"/> Director <input type="checkbox"/> 10% Owner	6. Individual or Joint/Group Filing(Check Applicable Line)
(City)	(State)	(Zip)	<input checked="" type="checkbox"/> Officer <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Form filed by One Reporting Person
			(give title below) (specify below)	<input type="checkbox"/> Form filed by More than One Reporting Person
			VP, General Counsel	

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
No Securities Beneficially Owned	0	D	Â

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly. SEC 1473 (7-02)

**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.**

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

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of	

				Shares		(I) (Instr. 5)	
NQ Stock Option (Right to buy)	⌘ (1)	08/29/2015	Common	30,000	\$ 25.8		D ⌘

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
BARROWS CRAIG 199 RIVERNECK ROAD CHELMSFORD, MA 01824	⌘	⌘	⌘ VP, General Counsel	⌘

## Signatures

Craig Barrows                      09/14/2005  
 \_\_Signature of                      Date  
 Reporting Person

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 5(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 in four equal installments beginning August 29, 2006.

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.