

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>Lucky James L.</u>			2. Issuer Name and Ticker or Trading Symbol <u>AtriCure, Inc. [ATRC]</u>			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) <u>VP, Clinical, Regulatory & QS</u>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>03/05/2013</u>			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		
6217 CENTRE PARK DRIVE			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street) <u>WEST CHESTER OH 45069</u>								
(City) (State) (Zip)								

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	03/05/2013		M		13,949	A	\$6.34	60,342	D	
Common Stock	03/05/2013		S		13,949	D	\$8.13 ⁽¹⁾	46,393	D	
Common Stock	03/05/2013		M		31,500	A	\$5.6	77,893	D	
Common Stock	03/05/2013		S		31,500	D	\$8.13 ⁽¹⁾	46,393	D	
Common Stock	03/05/2013		M		9,473	A	\$1.52	55,866	D	
Common Stock	03/06/2013		S		616	D	\$8.22	55,250	D	
Common Stock	03/06/2013		S		4,000	D	\$8.22 ⁽²⁾	51,250	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
Stock Option (right to buy)	\$6.34	03/05/2013		M		13,949		09/06/2007 ⁽³⁾	09/06/2016	Common Stock	13,949	\$0.00	156,051	D	
Stock Option (right to buy)	\$5.6	03/05/2013		M		31,500		02/17/2011 ⁽⁴⁾	02/17/2020	Common Stock	31,500	\$0.00	124,551	D	
Stock Option (right to buy)	\$1.52	03/05/2013		M		9,473		01/01/2005 ⁽⁵⁾	01/01/2014	Common Stock	9,473	\$0.00	115,078	D	

Explanation of Responses:

- This transaction was executed in multiple trades at prices ranging from \$8.00 to \$8.33 per share. The price reported above reflects the weighted average purchase price. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- This transaction was executed in multiple trades at prices ranging from \$8.21 to \$8.24 per share. The price reported above reflects the weighted average purchase price. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- These options were granted on September 6, 2006 and vest and are exercisable as to 25% of the shares one year from the date of grant, and the remaining 75% thereafter vest and is exercisable in equal monthly installments on the same day of the month over the following three years.
- These options were granted on February 17, 2010 and vest and are exercisable as to 25% of the shares one year from the date of grant, and the remaining 75% thereafter vests and is exercisable in equal monthly installments on the same day of the month over the following three years.
- These options were granted on January 1, 2004 and are exercisable cumulatively at a rate of 25% per annum beginning one year from the date of grant date.

/s/ James L. Lucky

03/07/2013

** 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.

