

Flaherty James E
 Form 4
 August 15, 2012

FORM 4

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

OMB APPROVAL

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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 *
 Flaherty James E

(Last) (First) (Middle)
 651 CAMPUS DRIVE
 (Street)

ST. PAUL, MN 55112

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 Cardiovascular Systems Inc [CSII]

3. Date of Earliest Transaction
 (Month/Day/Year)
 08/13/2012

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
 Chief Administrative Officer

6. Individual or Joint/Group Filing(Check Applicable Line)
 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)
			Code	V	Amount or Price		
Common Stock	08/13/2012		A		9,388 (1)	A	\$ 0 128,022 D
Common Stock	08/13/2012		A		9,388 (2)	A	\$ 0 137,410 D
Common Stock	08/13/2012		A		18,776 (3)	A	\$ 0 156,186 D
Common Stock	08/15/2012		S		1,271 (4)	D	\$ 8,9178 154,915 D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(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. 3)	
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Stock Option (right to buy)	\$ 8.83					<u>(5)</u>	12/18/2016	Common Stock	9,381
Stock Option (right to buy)	\$ 8.83					<u>(5)</u>	04/17/2017	Common Stock	25,233
Stock Option (right to buy)	\$ 7.9					<u>(5)</u>	08/06/2017	Common Stock	22,645
Stock Option (right to buy)	\$ 12.15					<u>(5)</u>	12/11/2017	Common Stock	32,350
Stock Option (right to buy)	\$ 8.75					<u>(5)</u>	03/02/2019	Common Stock	10,999
Stock Option (right to buy)	\$ 9.28					<u>(5)</u>	11/15/2014	Common Stock	4,852
Stock Option	\$ 12.37					<u>(5)</u>	06/30/2015	Common Stock	16,175

(right to buy)

Stock Option (right to buy)	\$ 12.37	(5)	11/07/2015	Common Stock	7,764
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Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Flaherty James E 651 CAMPUS DRIVE ST. PAUL, MN 55112			Chief Administrative Officer	

Signatures

/s/ Scott J. Dorfman as Attorney-in-Fact for James E. Flaherty pursuant to Power of Attorney previously filed 08/15/2012

__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) Subject to performance-based forfeiture based on total shareholder return for fiscal 2013 versus the Company's peer group.
- (2) Subject to performance-based forfeiture based on annual revenue growth for fiscal 2013 versus the Company's peer group.
- (3) Restrictions lapse over a three year period.
- (4) The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$8.83 to \$9.00 inclusive. The reporting person undertakes to provide Cardiovascular Systems, Inc., any security holder of Cardiovascular Systems, Inc. or the staff of the Securities and Exchange Commission upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- (5) Fully exercisable.

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.