

McCall Ronald D  
Form 4  
May 24, 2010

**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 \*  
McCall Ronald D

(Last) (First) (Middle)

CRYOLIFE, INC., 1655 ROBERTS BOULEVARD, NW

(Street)

KENNESAW, GA 30144

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
CRYOLIFE INC [CRY]

3. Date of Earliest Transaction (Month/Day/Year)  
05/20/2010

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)

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	05/20/2010		A		10,000 (1)	A	\$ 0 144,464 D
Common Stock	05/20/2010		A		2,748 (2)	A	\$ 0 147,212 D
Common Stock							16,000 I By Spouse

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

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SEC 1474  
(9-02)

number.

**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. 5)	9. Number of Derivative Securities Beneficially Owned Following Reporting Transaction (Instr. 6)
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## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
McCall Ronald D CRYOLIFE, INC. 1655 ROBERTS BOULEVARD, NW KENNESAW, GA 30144	X			

## Signatures

/s/ D.A. Lee, 05/24/2010  
 Attorney-in-Fact 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) Represents shares of restricted stock that vest on the first anniversary of the grant date if the reporting person remains a member of the Company's board of directors, subject to earlier vesting upon certain events including death, disability and retirement from the board after serving out his full term because the director is not standing for re-election at the end of the term.
  - (2) Represents shares of restricted stock that were received as supplemental presiding director compensation and that vest on the first anniversary of the grant date if the reporting person remains a member of the Company's board of directors, subject to earlier vesting upon certain events including death, disability and retirement from the board after serving out his full term because the director is not standing for re-election at the end of the term.

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.