FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

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 [®] COOK JOHN M | | | 2. Issuer Name and Ticker or Trading Symbol <u>CRYOLIFE INC</u> [CRY] | | ationship of Reporting Person(s) to Issuer (all applicable) Director 10% Owner | | | | | |
|--|---------|----------|---|-----------------------|--|--------------------------|--|--|--|--|
| (Last) (First) (Middle) | | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 05/01/2008 | | Officer (give title below) | Other (specify below) | | | | |
| CRYOLIFE, INC. 1655 ROBERTS BOULEVARD, NW | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indi Line) X | lividual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person | | | | | |
| (Street) | | | | | Form filed by More than One Reporting | | | | | |
| KENNESAW | GA | 30144 | | | Person | | | | | |
| (City) | (State) | (Zip) | | | | | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | |

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 Disposed Of and 5) | | | 5. Amount of Securities Beneficially Owned | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership |
|---------------------------------|--|---|---|---|--|---------------|-------------------|---|--|---|
| | | | Code | v | Amount | (A) or (D) | Price | Following Reported Transaction(s) (Instr. 3 and 4) | (Instr. 4) | (Instr. 4) |
| Common Stock | 05/01/2008 | | Α | | 6,250(1) | Α | \$ <mark>0</mark> | 75,000 | D | |
| Common Stock | | | | | | | | 19,500 | Ι | By LLC controlled by reporting person |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| | | | (e.g., p | uis, cai | is, | warra | ants, | opuons, o | convertio | le sec | unues | | | | |
|---|---|--|---|----------------------------------|-----|--|-------------------------------------|-------------------------------------|--------------------|---|--|--|--|---|-------------------------|
| 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. Transact Code (In 8) | | of Deriv Secu Acqu (A) o Dispo of (D | r osed) [.] .3,4 | 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) | Beneficial Ownership |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

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.

Remarks:

/s/ John M. Cook

05/02/2008

Date

** Signature of Reporting Person

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.