FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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

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 [*] Benson James				2. Issuer Name and Tick CRYOLIFE INC	0	Symbol	(Check	ationship of Reporting Person(s) to Issuer < all applicable) Director 10% Owner				
(Last) (First) (Middle)				3. Date of Earliest Trans 05/19/2009	action (Month/	Day/Year)	X	Director Officer (give title below)		(specify		
CRYOLIFE, INC. 1655 ROBERTS BLVD., NW			4	4. If Amendment, Date o	of Original Filed	(Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person					
(Street)								Form filed by More than One Reporting				
KENNESAW	GA	30144						Person	e man One Re	Joning		
(City)	(State)	(Zip)										
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned												
1. Title of Security (Instr. 3) 2. Transact Date			2. Transaction Date	n 2A. Deemed Execution Date,	3. Transaction	4. Securities Acquired Disposed Of (D) (Instr.		5. Amount of Securities	6. Ownership Form: Direct	7. Nature of Indirect		

	Date (Month/Day/Year)	Execution Date, if any (Month/Day/Year)	Transac Code (Ir 8)		Disposed Of (D) (Instr. 3, 4 and 5)			Beneficially Owned	(D) or Indirect (I)	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	05/19/2009		A		10,000(1)	Α	\$ <mark>0</mark>	30,000	D	

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

		(e.g., p	uts, cal	IS, V	warra	ants,	options, d	convertib	le sec	urities)				
1. Title of Derivative Security (Instr. 3)		3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transact Code (In 8)		· ·	rities ired r osed) :. 3, 4	6. Date Exer Expiration D (Month/Day/	ate	Amour Securi Underl Deriva	nt of ties ying tive ty (Instr.	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/ James S. Benson

05/20/2009

** 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.

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.