FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Name and Address of Reporting Person* Backus John G						2. Issuer Name and Ticker or Trading Symbol LUNA INNOVATIONS INC [LUNA]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
						<u> </u>	11111	<u> </u>	1110110		<u>u</u> [101	111		X	Directo	r		10% Ow	ner	
(Last) (First) (Middle) C/O LUNA INNOVATIONS INCORPORATED						3. Date of Earliest Transaction (Month/Day/Year) 12/23/2008									Officer below)	(give title		Other (s below)	pecify	
1 RIVERSIDE CIRCLE, SUITE 400						4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable					
(Street) ROANOKE VA 24016			24016		_				-					Line)		led by Mor		orting Persor One Repor		
(City)	(S	tate)	(Zip)																	
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)						ear)	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Dispose Code (Instr. 5)		ities Acquired (A) o d Of (D) (Instr. 3, 4				es For ally (D) collowing (I) (: Direct C Indirect E str. 4)	7. Nature of Indirect Beneficial Ownership		
									Code \	,	Amount	(A) or (D) Pr		ice	Reported Transact (Instr. 3 a	tion(s)			Instr. 4)	
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 I if any (Month/Day	Date,	4. Transaction				6. Date Exercisal Expiration Date (Month/Day/Year			le and 7. Title and Ar of Securities Underlying Derivative Sec (Instr. 3 and 4)			8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	re es ally g d tion(s)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisable		kpiration ate	Title	Amo or Num of Shar	ber						
Stock Option (Right to Buy)	\$2.11	12/23/2008			A		20,000		(1)	12	2/23/2018	Common Stock	20,0	000	\$0.00	20,000)	D		

Explanation of Responses:

1. The option is currently exercisable with respect to 3,335 of the shares subject to the option, which are vested on the date hereof. The remaining 16,665 shares subject to the option vest in five equal monthly installments of 3,333 shares each, beginning on January 12, 2009, with the final such installment vesting on May 12, 2009.

> /s/ Dale E. Messick, Attorney-12/23/2008

In-Fact

** 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.