

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person * <u>HARRINGTON MARK A</u>  (Last) (First) (Middle) <u>C/O TRIMBLE NAVIGATION LTD</u> <u>935 STEWART DRIVE</u>  (Street) <u>SUNNYVALE CA 94085</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>TRIMBLE NAVIGATION LTD /CA/ [ TRMB ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Vice President</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>05/19/2009</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> 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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock								4,498 <sup>(1)</sup>	D	

**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 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)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Employee Stock Option	\$20.01	05/19/2009		A		5,900		(2)	05/19/2016	Common Stock	5,900	\$0	5,900	D	
Employee Stock Option	\$20.01	05/19/2009		A		29,100		(2)	05/19/2016	Common Stock	29,100	\$0	29,100	D	
Restricted Stock Unit	(3)	05/19/2009		A		5,000		(4)	(4)	Common Stock	5,000	\$0	5,000	D	

**Explanation of Responses:**

- Includes 257 shares acquired under the Trimble Navigation stock purchase plan of February 27, 2009.
- This option is exercisable 40% after two years and 1.67% a month thereafter, fully vested in five years from grant date.
- Each restricted stock unit represents a contingent right to receive the value of one share of Trimble Navigation common stock, payable in cash, common stock or a combination of both at the option of Trimble Navigation.
- The restricted stock units will vest 100% in thirty six (36) months after the award date. Vested shares will be delivered to the reporting person upon vest.

James Kirkland as Attorney in Fact 05/21/2009

\*\* 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.