

RUDOLPH TECHNOLOGIES INC
 Form 4
 May 25, 2006

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 *
BROOKS D MAYSON

2. Issuer Name and Ticker or Trading Symbol
RUDOLPH TECHNOLOGIES INC [RTEC]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)
C/O RUDOLPH TECHNOLOGIES, INC., ONE RUDOLPH ROAD, PO BOX 1000

3. Date of Earliest Transaction (Month/Day/Year)
05/24/2006

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
VP, Global Sales Inspection

(Street)
FLANDERS, NJ 07836

4. If Amendment, Date Original Filed(Month/Day/Year)

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)
				(A) or (D)	Price		
Common Stock	05/24/2006		M	9,026 A	\$ 3.11	11,212	D
Common Stock	05/24/2006		S	9,026 D	\$ 16.04	2,186	D

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

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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. Amount or Number of Shares
Incentive Stock Option (right to buy)	\$ 3.11	05/24/2006		M	9,026	⁽¹⁾ 07/06/2006	Common Stock	9,026

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
BROOKS D MAYSON C/O RUDOLPH TECHNOLOGIES, INC. ONE RUDOLPH ROAD, PO BOX 1000 FLANDERS, NJ 07836			VP, Global Sales Inspection	

Signatures

/s/D. Mayson
Brooks

05/25/2006

**Signature of
Reporting Person

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) Pursuant to a merger agreement by and among the August Technology Corporation ("August"), Rudolph Technologies, Inc. ("Rudolph") and NS Merger Sub, Inc., a wholly-owned subsidiary of Rudolph (the "Merger"), the option to purchase 16,700 shares of August Technology Corporation ("August") common stock for \$2.37 per share, initially granted by August on July 6, 1999, which was fully vested, was assumed by Rudolph in the Merger and replaced with the referenced fully vested option.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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