

RUDOLPH TECHNOLOGIES INC
 Form 4
 October 17, 2006

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 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 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 *
 LITTLE NATHAN H

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)

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

____ Director
 Officer (give title below)
 ____ 10% Owner
 ____ Other (specify below)
 Executive Vice President & GM

C/O RUDOLPH TECHNOLOGIES, INC., ONE RUDOLPH ROAD, PO BOX 1000

(Street)

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

FLANDERS, NJ 07836

(City) (State) (Zip)

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 Ownership (Instr. 4)
				(A) or (D)	Price		
				Code	V	Amount	
Common Stock ⁽¹⁾	10/13/2006		M	A	\$ 21,600	27,814	D
Common Stock ⁽¹⁾	10/13/2006		S	D	\$ 20	6,214	D

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

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SEC 1474
 (9-02)

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 Security (Instr. 3 and 4)	8. Amount or Number of Shares
Non-Qualified Stock Option (right to buy) <u>(1)</u>	\$ 16.41	10/13/2006		M	21,600	<u>(2)</u> 01/28/2013	Common Stock	21,600

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
LITTLE NATHAN H C/O RUDOLPH TECHNOLOGIES, INC. ONE RUDOLPH ROAD, PO BOX 1000 FLANDERS, NJ 07836			Executive Vice President & GM	

Signatures

/s/ Nathan H.
Little
Date: 10/17/2006

**Signature of Reporting Person

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) The option exercises and stock sales reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on March 15, 2006.
- (2) 20% of the shares of Common Stock subject to the Option became exercisable twelve months after the date the Option was granted and 1/60th of the shares of Common Stock subject to the Option vested each month thereafter. However, the Option became vested in full on April 14, 2005 due to accelerated vesting.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.