FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| | OMB APPROVAL | | | | | | | | |
|---|------------------------|-----------|--|--|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | | | |
| l | Estimated average burd | en | | | | | | | |
| | 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).

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* | | | | | | 2. Issuer Name and Ticker or Trading Symbol MKS INSTRUMENTS INC [MKSI] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | |
|--|--|--|--|----------|-------------|--|------------|--|--|-------|--------------------|---|---|---|---|--|---|--|
| COLELLA GERARD G | | | | | | | | | | | | | | | Direc | ctor | 10% | Owner |
| | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) | | | | | | | | X | Office | er (give title v) | Other below | (specify v) |
| 2 TECH DRIVE | | | | | | | 09/13/2016 | | | | | | | | C | CEO, Presid | lent, Director | |
| (Street) | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | |
| ANDOVER MA 01810 | | | | | | | | | | | | | X | Form filed by One Reporting Person | | | | |
| (City) (State) (Zip) | | | | | | | | | | | | | | | Form filed by More than One Reporting Person | | | porting |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/N | | | | | | Execution Date, | | 3. Transaction Code (Instr. 8) 4. Securitie Disposed O | | | | I 5) | 5. Amount of Securities Beneficially Owned Following Reported | | 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 | | Transa | action(s) 3 and 4) | | (111501.4) |
| Common Stock 09/13/20 | | | | | | | 16 | | S | | 5,000 | D | \$47.1 | .109 ⁽¹⁾ 37 | | 900.066 | 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) | vative Conversion Date Execution Date or Exercise (Month/Day/Year) if any | | | on Date, | Code (Instr | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. : and 4) | | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | (A) | (D) | Date Exercis | sable | Expiration Date | Title | Number of Shares | | | | | |

Explanation of Responses:

1. This transaction was executed in multiple trades at prices ranging from \$46.95 to \$47.37. The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide, upon request, the full information regarding the number of shares and prices at which the transaction was effected.

/s/ M. Kathryn Rickards, attorney-in-fact

09/14/2016

** 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.