

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
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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* <u>Quirk Brian Charles</u> (Last) (First) (Middle) 2 TECH DRIVE, SUITE 201 (Street) ANDOVER MA 01810 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MKS INSTRUMENTS INC [MKSI]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) X Sr. VP, Global Operations
	3. Date of Earliest Transaction (Month/Day/Year) 02/15/2018	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	02/15/2018		M		2,181,553	A	(1)	14,044,436	D	
Common Stock	02/15/2018		M		1,773,149	A	(1)	15,817,585	D	
Common Stock	02/15/2018		M		2,805	A	(1)	18,622,585	D	
Common Stock	02/15/2018		M		2,157	A	(1)	20,779,585	D	
Common Stock	02/15/2018		M		1,489	A	(1)	22,268,585	D	
Common Stock	02/15/2018		M		1,230	A	(1)	23,498,585	D	
Common Stock	02/15/2018		F ⁽²⁾		3,858	D	\$111.1	19,640,585	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	Amount or Number of Shares				
Restricted Stock Unit	(1)	02/15/2018		A		3,375,338		(3)	(3)	Common Stock	3,375,338	(1)	9,159,186	D	
Restricted Stock Unit	(1)	02/15/2018		A		2,250,225		(4)	(4)	Common Stock	2,250,225	(1)	6,870,992	D	
Restricted Stock Unit	(1)	02/15/2018		M			2,181,553	(5)	(5)	Common Stock	2,181,553	(1)	10,077,848	D	
Restricted Stock Unit	(1)	02/15/2018		M			1,773,149	(6)	(6)	Common Stock	1,773,149	(1)	8,007,767	D	
Restricted Stock Unit	(1)	02/15/2018		M			2,805	(7)	(7)	Common Stock	2,805	(1)	7,272,848	D	
Restricted Stock Unit	(1)	02/15/2018		M			2,157	(8)	(8)	Common Stock	2,157	(1)	5,850,767	D	
Restricted Stock Unit	(1)	02/15/2018		M			1,489	(9)	(9)	Common Stock	1,489	(1)	5,783,848	D	
Restricted Stock Unit	(1)	02/15/2018		M			1,230	(10)	(10)	Common Stock	1,230	(1)	4,620,767	D	

Explanation of Responses:

- Each restricted stock unit represents the contingent right to receive one share of common stock of MKS Instruments, Inc.
- This transaction was effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.
- These RSUs are subject to the achievement of performance criteria determined in the first year of grant and thereafter vest in three equal annual installments beginning on February 15, 2019, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs vest in three equal annual installments commencing on February 15, 2019, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs are subject to the achievement of performance criteria determined in the first year of grant and thereafter vest in three equal annual installments beginning on February 15, 2016, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs vest in three equal annual installments commencing on February 15, 2016, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs are subject to the achievement of performance criteria determined in the first year of grant and thereafter vest in three equal annual installments beginning on February 15, 2017, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs vest in three equal annual installments commencing on February 15, 2017, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs are subject to the achievement of performance criteria determined in the first year of grant and thereafter vest in three equal annual installments beginning on February 15, 2018, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.
- These RSUs vest in three equal annual installments commencing on February 15, 2018, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

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

02/16/2018

** Signature of Reporting Person

Date

* 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.

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