

MOOG INC.
Form 10-Q
January 31, 2017
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended December 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 1-05129

INC.
(Exact name of registrant as specified in its charter)

New York State (State or other jurisdiction of incorporation or organization)	16-0757636 (I.R.S. Employer Identification No.)
East Aurora, New York (Address of principal executive offices) (716) 652-2000 (Telephone number including area code)	14052-0018 (Zip Code)

Former name, former address and former fiscal year, if changed since last report.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes No

Edgar Filing: MOOG INC. - Form 10-Q

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The number of shares outstanding of each class of common stock as of January 23, 2017 was:

Class A common stock, \$1.00 par value, 32,236,629 shares

Class B common stock, \$1.00 par value, 3,634,435 shares

Moog Inc.
 QUARTERLY REPORT ON FORM 10-Q
 TABLE OF CONTENTS

<u>PART I FINANCIAL INFORMATION</u>		PAGE
<u>Item</u> <u>1</u>	<u>Financial Statements:</u>	
	<u>Consolidated Condensed Statements of Earnings for the Three Months Ended December 31, 2016 and January 2, 2016</u>	<u>3</u>
	<u>Consolidated Condensed Statements of Comprehensive Income (Loss) for the Three Months Ended December 31, 2016 and January 2, 2016</u>	<u>4</u>
	<u>Consolidated Condensed Balance Sheets as of December 31, 2016 and October 1, 2016</u>	<u>5</u>
	<u>Consolidated Condensed Statements of Shareholders' Equity as of December 31, 2016 and October 1, 2016</u>	<u>6</u>
	<u>Consolidated Condensed Statements of Cash Flows for the Three Months Ended December 31, 2016 and January 2, 2016</u>	<u>7</u>
	<u>Notes to Consolidated Condensed Financial Statements</u>	<u>8</u>
<u>Item</u> <u>2</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>22</u>
<u>Item</u> <u>3</u>	<u>Quantitative and Qualitative Disclosures about Market Risk</u>	<u>35</u>
<u>Item</u> <u>4</u>	<u>Controls and Procedures</u>	<u>35</u>
 <u>PART II OTHER INFORMATION</u>		
<u>Item</u> <u>2</u>	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>36</u>
<u>Item</u> <u>6</u>	<u>Exhibits</u>	<u>37</u>
	<u>SIGNATURES</u>	<u>38</u>

Table of Contents

PART I FINANCIAL INFORMATION

Item 1. Financial Statements

Moog Inc.

Consolidated Condensed Statements of Earnings
(Unaudited)

(dollars in thousands, except per share data)	Three Months Ended	
	December 31, 2016	January 2, 2016
Net sales	\$589,670	\$568,457
Cost of sales	417,164	406,997
Gross profit	172,506	161,460
Research and development	34,564	34,798
Selling, general and administrative	85,063	82,994
Interest	8,486	8,322
Other	7,905	(309)
Earnings before income taxes	36,488	35,655
Income taxes	6,430	9,495
Net earnings attributable to Moog and noncontrolling interest	30,058	26,160
Net earnings (loss) attributable to noncontrolling interest	(506)	(81)
Net earnings attributable to Moog	\$30,564	\$26,241
Net earnings per share attributable to Moog		
Basic	\$0.85	\$0.71
Diluted	\$0.84	\$0.71
Average common shares outstanding		
Basic	35,869,052	36,713,949
Diluted	36,272,767	37,028,331

See accompanying Notes to Consolidated Condensed Financial Statements.

Table of Contents

Moog Inc.

Consolidated Condensed Statements of Comprehensive Income (Loss)

(Unaudited)

	Three Months	
	Ended	
(dollars in thousands)	December 31,	January 2,
	2016	2016
Net earnings attributable to Moog and noncontrolling interest	\$30,058	\$26,160
Other comprehensive income (loss), net of tax:		
Foreign currency translation adjustment	(41,509)	(23,199)
Retirement liability adjustment	8,572	5,332
Change in accumulated income (loss) on derivatives	574	438
Other comprehensive income (loss), net of tax	(32,363)	(17,429)
Comprehensive income (loss)	(2,305)	8,731
Comprehensive income (loss) attributable to noncontrolling interest	(506)	(81)
Comprehensive income (loss) attributable to Moog	\$(1,799)	\$8,812

See accompanying Notes to Consolidated Condensed Financial Statements.

Table of Contents

Moog Inc.

Consolidated Condensed Balance Sheets
(Unaudited)

(dollars in thousands)	December 31, 2016	October 1, 2016
ASSETS		
Current assets		
Cash and cash equivalents	\$ 331,664	\$325,128
Receivables	677,841	688,388
Inventories	464,402	479,040
Prepaid expenses and other current assets	39,659	34,688
Total current assets	1,513,566	1,527,244
Property, plant and equipment, net of accumulated depreciation of \$726,615 and \$725,809, respectively	508,656	522,369
Goodwill	730,271	740,162
Intangible assets, net	104,940	113,560
Deferred income taxes	69,039	75,800
Other assets	26,707	25,839
Total assets	\$2,953,179	\$3,004,974
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Short-term borrowings	\$ 1,366	\$1,379
Current installments of long-term debt	144	167
Accounts payable	148,253	144,450
Accrued salaries, wages and commissions	115,081	126,319
Customer advances	171,530	167,514
Contract loss reserves	30,045	32,543
Other accrued liabilities	99,843	116,577
Total current liabilities	566,262	588,949
Long-term debt, excluding current installments	1,000,338	1,004,847
Long-term pension and retirement obligations	385,962	401,747
Deferred income taxes	10,157	11,026
Other long-term liabilities	4,454	4,343
Total liabilities	1,967,173	2,010,912
Commitments and contingencies (Note 17)	—	—
Redeemable noncontrolling interest	5,145	5,651
Shareholders' equity		
Common stock - Class A	43,688	43,667
Common stock - Class B	7,592	7,613
Additional paid-in capital	469,971	465,762
Retained earnings	1,737,103	1,706,539
Treasury shares	(740,838)	(741,700)
Stock Employee Compensation Trust	(59,307)	(49,463)
Supplemental Retirement Plan Trust	(9,924)	(8,946)
Accumulated other comprehensive loss	(467,424)	(435,061)
Total Moog shareholders' equity	980,861	988,411
Total liabilities and shareholders' equity	\$2,953,179	\$3,004,974
See accompanying Notes to Consolidated Condensed Financial Statements.		

Table of Contents

Moog Inc.
 Consolidated Condensed Statements of Shareholders' Equity
 (Unaudited)

(dollars in thousands, except per share data)	Amount	Number of Shares	
		Class A Common Stock	Class B Common Stock
COMMON STOCK			
Beginning of period	\$51,280	43,666,801	7,612,912
Conversion of Class B to Class A	—	20,917	(20,917)
End of period	51,280	43,687,718	7,591,995
ADDITIONAL PAID-IN CAPITAL			
Beginning of period	465,762		
Issuance of treasury shares	(3,941)		
Equity-based compensation expense	2,168		
Adjustment to market - SECT, SERP and other	5,982		
End of period	469,971		
RETAINED EARNINGS			
Beginning of period	1,706,539		
Net earnings attributable to Moog	30,564		
End of period	1,737,103		
TREASURY SHARES AT COST			
Beginning of period	(741,700)	(11,110,087)	(3,323,926)
Class A and B shares issued related to equity awards	6,076	146,784	6,696
Class A and B shares purchased	(5,214)	(62,638)	(15,412)
End of period	(740,838)	(11,025,941)	(3,332,642)
STOCK EMPLOYEE COMPENSATION TRUST (SECT)			
Beginning of period	(49,463)	(425,148)	(404,919)
Issuance of shares	867	—	15,000
Purchase of shares	(5,709)	—	(84,441)
Adjustment to market	(5,002)	—	—
End of period	(59,307)	(425,148)	(474,360)
SUPPLEMENTAL RETIREMENT PLAN (SERP) TRUST			
Beginning of period	(8,946)		(150,000)
Adjustment to market	(978)		—
End of period	(9,924)		(150,000)
ACCUMULATED OTHER COMPREHENSIVE LOSS			
Beginning of period	(435,061)		
Other comprehensive income (loss)	(32,363)		
End of period	(467,424)		
TOTAL MOOG SHAREHOLDERS' EQUITY	\$980,861	32,236,629	3,634,993
REDEEMABLE NONCONTROLLING INTEREST			
Beginning of period	\$5,651		
Net loss attributable to redeemable noncontrolling interest	(506)		
End of period	\$5,145		

Table of Contents

Moog Inc.
Consolidated Condensed Statements of Cash Flows
(Unaudited)

(dollars in thousands)	Three Months Ended	
	December 31, 2016	January 2, 2016
CASH FLOWS FROM OPERATING ACTIVITIES		
Net earnings attributable to Moog and noncontrolling interest	\$30,058	\$26,160
Adjustments to reconcile net earnings to net cash provided (used) by operating activities:		
Depreciation	17,918	19,208
Amortization	4,541	5,877
Deferred income taxes	1,371	3,532
Equity-based compensation expense	2,168	936
Other	9,868	804
Changes in assets and liabilities providing (using) cash:		
Receivables	(11,012)	5,221
Inventories	6,996	(11,131)
Accounts payable	6,737	(22,522)
Customer advances	8,287	(498)
Accrued expenses	(17,479)	(17,114)
Accrued income taxes	(8,885)	(2,685)
Net pension and post retirement liabilities	(1,295)	(5,709)
Other assets and liabilities	1,309	(2,534)
Net cash provided (used) by operating activities	50,582	(455)
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisitions of businesses, net of cash acquired	—	(11,016)
Purchase of property, plant and equipment	(14,849)	(12,305)
Other investing transactions	(976)	1,021
Net cash (used) by investing activities	(15,825)	(22,300)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from revolving lines of credit	62,400	148,605
Payments on revolving lines of credit	(67,400)	(93,605)
Payments on long-term debt	(50)	(9,540)
Proceeds from sale of treasury stock	2,135	2,230
Purchase of outstanding shares for treasury	(5,211)	(3,034)
Proceeds from sale of stock held by SECT	867	—
Purchase of stock held by SECT	(5,709)	(1,020)
Excess tax benefits from equity-based payment arrangements	—	580
Net cash provided (used) by financing activities	(12,968)	44,216
Effect of exchange rate changes on cash	(15,253)	(7,996)
Increase in cash and cash equivalents	6,536	13,465
Cash and cash equivalents at beginning of period	325,128	309,853
Cash and cash equivalents at end of period	\$331,664	\$323,318

See accompanying Notes to Consolidated Condensed Financial Statements.

Table of Contents

Moog Inc.

Notes to Consolidated Condensed Financial Statements

Three Months Ended December 31, 2016

(Unaudited)

(dollars in thousands, except per share data)

Note 1 - Basis of Presentation

The accompanying unaudited consolidated condensed financial statements have been prepared by management in accordance with U.S. generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. In the opinion of management, all adjustments consisting of normal recurring adjustments considered necessary for the fair presentation of results for the interim period have been included. The results of operations for the three months ended December 31, 2016 are not necessarily indicative of the results expected for the full year. The accompanying unaudited consolidated condensed financial statements should be read in conjunction with the financial statements and notes thereto included in our Form 10-K for the fiscal year ended October 1, 2016. All references to years in these financial statements are to fiscal years.

Certain prior year amounts have been reclassified to conform to current year's presentation. Refer to the table below for a summary of ASUs we have adopted during 2017 and the related financial statement impact. During 2016, we made a change to our segment reporting to include Medical Devices within our Components segment and Linear within Space and Defense Controls. The Segment footnote has been restated to reflect these changes.

Recent Accounting Pronouncements Adopted

Standard	Description	Financial Statement Effect or Other Significant Matters
ASU no. 2015-03 Presentation of Debt Issuance Costs (And All Related ASUs)	This standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The provisions of this standard and all subsequently issued guidance are effective for fiscal years beginning after December 15, 2015 and interim periods within those fiscal years. Early adoption is permitted and retrospective application is required.	We adopted this standard on a retrospective basis, resulting in the reclassification of \$5,457 of debt issuance costs as of October 1, 2016 previously reported as Other Assets in our balance sheet to Long Term Debt, excluding current installments. Date adopted: Q1 2017
ASU no. 2015-17 Balance Sheet Classification of Deferred Taxes	The standard amends existing guidance to require presentation of deferred tax assets and liabilities as noncurrent within the balance sheet. The provisions of the standard are effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years. Early adoption is permitted and may be applied either prospectively or retrospectively.	We adopted this standard on a retrospective basis, resulting in the reclassification of a net \$92,620 of previously reported current deferred income tax assets and liabilities as of October 1, 2016 to the appropriate long term deferred income tax classification based upon the net tax position within each of our relevant taxing jurisdictions. Date early adopted: Q1 2017
ASU no. 2016-09 Improvements to Employee Shared Based Payment Accounting	This standard simplifies several aspects of the accounting for share-based payment transactions, including income tax consequences, statement of cash flows classifications, share repurchases relating to tax withholdings and forfeiture	We adopted this standard on a prospective basis and as a result prior periods have not been adjusted. Going forward, recognized excess tax benefits previously reported as part of additional paid-in capital in our balance sheet

accounting. The provisions of this standard are effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years.

will be included as part of income tax expense in our income statement. Additionally, cash flow relating to these excess tax benefits previously reported as a financing activity will be included as an operating activity.

Date early adopted:

Q1 2017

Table of Contents

Recent Accounting Pronouncements Not Yet Adopted

Standard	Description	Financial Statement Effect or Other Significant Matters
ASU no. 2014-09 Revenue from Contracts with Customers (And All Related ASUs)	The standard requires revenue recognition to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard also requires additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and assets recognized from costs incurred to obtain or fulfill a contract. The provisions of the standard, as well as all subsequently issued clarifications to the standard, are effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. The standard can be adopted using either a full retrospective or modified retrospective approach.	We are currently evaluating the alternative methods of adoption and the effect on our financial statements and related disclosures. Planned date of adoption: Q1 2019
ASU no. 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities	The standard requires most equity investments to be measured at fair value, with subsequent changes in fair value recognized in net income. The amendment also impacts the measurement of financial liabilities under the fair value option as well as certain presentation and disclosure requirements for financial instruments. The provisions of the standard are effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. Early adoption is permitted for some, but not all, provisions. The amendment requires certain provisions to be applied prospectively and others to be applied by means of a cumulative-effect adjustment.	We are currently evaluating the effect on our financial statements and related disclosures. Planned date of adoption: Q1 2019
ASU no. 2016-02 Leases	The standard requires most lease arrangements to be recognized in the balance sheet as lease assets and lease liabilities. The standard also requires additional disclosures about the leasing arrangements. The provisions of the standard are effective for fiscal years beginning after December 15, 2018 and interim periods within those years. Early adoption is permitted.	We are currently evaluating the effect on our financial statements and related disclosures. Planned date of adoption: Q1 2020

We consider the applicability and impact of all ASUs. ASUs not listed above were assessed and determined to be either not applicable, or had or are expected to have minimal impact on our financial statements and related disclosures.

Table of Contents

Note 2 - Acquisition, Divestiture and Assets Held for Sale

In 2016, we acquired a 70% ownership in Linear Mold and Engineering, a Livonia, Michigan-based company specializing in metal additive manufacturing that provides engineering, manufacturing and production consulting services to customers across a wide range of industries, including aerospace, defense, energy and industrial. The purchase price, net of acquired cash, was \$22,765 consisting of \$11,016 in cash, issuance of a \$1,280 unsecured note and assumption of \$10,469 of debt. The acquisition also includes a redeemable noncontrolling interest in the remaining 30%. This acquisition is included in our Space and Defense Controls segment. On January 25, 2017, we acquired the remaining 30% redeemable noncontrolling interest for \$1,656 in cash, which will also be reflected in additional paid-in capital.

In 2017, we recorded losses in other expense of \$8,936 related to selling the European space businesses of our Space and Defense Controls segment. We received \$1,307 in cash and reclassified \$7,213 in other current assets and \$2,751 in other current liabilities as held for sale. We expect the sale of the held for sale portion of these businesses to be completed during 2017.

Note 3 - Receivables

Receivables consist of:

	December 31, 2016	October 1, 2016
Accounts receivable	\$ 281,728	\$ 306,469
Long-term contract receivables:		
Amounts billed	128,904	130,429
Unbilled recoverable costs and accrued profits	260,469	245,376
Total long-term contract receivables	389,373	375,805
Other	10,924	10,652
Total receivables	682,025	692,926
Less allowance for doubtful accounts	(4,184) (4,538)
Receivables	\$ 677,841	\$ 688,388

We securitize certain trade receivables in transactions that are accounted for as secured borrowings (Securitization Program). We maintain a subordinated interest in a portion of the pool of trade receivables that are securitized. The retained interest, which is included in Receivables in the consolidated condensed balance sheets, is recorded at fair value, which approximates the total amount of the designated pool of accounts receivable. Refer to Note 6, Indebtedness, for additional disclosures related to the Securitization Program.

Note 4 - Inventories

Inventories, net of reserves, consist of:

	December 31, 2016	October 1, 2016
Raw materials and purchased parts	\$ 169,515	\$ 174,331
Work in progress	231,193	235,258
Finished goods	63,694	69,451
Inventories	\$ 464,402	\$ 479,040

There are no material inventoried costs relating to long-term contracts where revenue is accounted for using the percentage of completion, cost-to-cost method of accounting as of December 31, 2016 or October 1, 2016.

Table of Contents

Note 5 - Goodwill and Intangible Assets

The changes in the carrying amount of goodwill are as follows:

	Aircraft Controls	Space and Defense Controls	Industrial Systems	Components	Total
Balance at October 1, 2016	\$ 179,694	\$ 174,514	\$ 106,318	\$ 279,636	\$ 740,162
Divestiture and held for sale	—	(1,012)	—	—	(1,012)
Foreign currency translation	(2,618)	(510)	(3,934)	(1,817)	(8,879)
Balance at December 31, 2016	\$ 177,076	\$ 172,992	\$ 102,384	\$ 277,819	\$ 730,271

Goodwill in our Space and Defense Controls segment is net of a \$4,800 accumulated impairment loss at December 31, 2016.

Goodwill in our Medical Devices reporting unit, included in our Components segment, is net of a \$38,200 accumulated impairment loss at December 31, 2016.

The components of intangible assets are as follows:

		December 31, 2016		October 1, 2016	
	Weighted- Average Life (years)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Customer-related	11	\$ 160,092	\$ (115,978)	\$ 165,445	\$ (117,434)
Technology-related	9	68,014	(51,380)	70,277	(52,060)
Program-related	19	62,152	(25,754)	64,774	(26,018)
Marketing-related	9	24,462	(17,725)	25,031	(17,649)
Other	10	3,977	(2,920)	4,269	(3,075)
Intangible assets	12	\$ 318,697	\$ (213,757)	\$ 329,796	\$ (216,236)

Substantially all acquired intangible assets other than goodwill are being amortized. Customer-related intangible assets primarily consist of customer relationships. Technology-related intangible assets primarily consist of technology, patents, intellectual property and software. Program-related intangible assets consist of long-term programs represented by current contracts and probable follow on work. Marketing-related intangible assets primarily consist of trademarks, trade names and non-compete agreements.

Amortization of acquired intangible assets was \$4,477 for the three months ended December 31, 2016 and \$5,811 for the three months ended January 2, 2016. Based on acquired intangible assets recorded at December 31, 2016, amortization is expected to be approximately \$17,300 in 2017, \$16,300 in 2018, \$14,800 in 2019, \$12,900 in 2020 and \$7,600 in 2021.

Table of Contents

Note 6 - Indebtedness

Short-term borrowings consist of:

	December 31, October 1,	
	2016	2016
Lines of credit	\$ 86	\$ 99
Other short-term debt	1,280	1,280
Short-term borrowings	\$ 1,366	\$ 1,379

We maintain short-term line of credit facilities with banks throughout the world that are principally demand lines subject to revision by the banks.

Long-term debt consists of:

	December 31, October 1,	
	2016	2016
U.S. revolving credit facility	\$ 585,000	\$ 590,000
Senior notes	300,000	300,000
Securitization program	120,000	120,000
Obligations under capital leases	417	471
Senior debt	1,005,417	1,010,471
Less deferred debt issuance cost	(4,935)	(5,457)
Less current installments	(144)	(167)
Long-term debt	\$ 1,000,338	\$ 1,004,847

Our U.S. revolving credit facility matures on June 28, 2021. Our U.S. revolving credit facility has a capacity of \$1,100,000 and provides an expansion option, which permits us to request an increase of up to \$200,000 to the credit facility upon satisfaction of certain conditions. The credit facility is secured by substantially all of our U.S. assets. The loan agreement contains various covenants which, among others, specify interest coverage and maximum leverage and capital expenditures. We are in compliance with all covenants.

At December 31, 2016, we had \$300,000 aggregate principal amount of 5.25% senior notes due December 1, 2022 with interest paid semiannually on June 1 and December 1 of each year. The senior notes are unsecured obligations, guaranteed on a senior unsecured basis by certain subsidiaries and contain normal incurrence-based covenants and limitations such as the ability to incur additional indebtedness, pay dividends, make other restricted payments and investments, create liens and certain corporate acts such as mergers and consolidations.

The Securitization Program matures on April 13, 2018 and effectively increases our borrowing capacity by up to \$120,000. Under the Securitization Program, we sell certain trade receivables and related rights to an affiliate, which in turn sells an undivided variable percentage ownership interest in the trade receivables to a financial institution, while maintaining a subordinated interest in a portion of the pool of trade receivables. Interest for the Securitization Program is based on 30-day LIBOR plus an applicable margin. A commitment fee is also charged based on a percentage of the unused amounts available and is not material. The agreement governing the Securitization Program contains restrictions and covenants which include limitations on the making of certain restricted payments, creation of certain liens, and certain corporate acts such as mergers, consolidations and sale of substantially all assets. The Securitization Program has a minimum borrowing requirement equal to the lesser of either 80% of our borrowing capacity or 100% of our borrowing base, which is a subset of the trade receivables sold under this agreement. As of December 31, 2016, our minimum borrowing requirement was \$96,000.

Table of Contents

Note 7 - Product Warranties

In the ordinary course of business, we warrant our products against defects in design, materials and workmanship typically over periods ranging from twelve to sixty months. We determine warranty reserves needed by product line based on historical experience and current facts and circumstances. Activity in the warranty accrual is summarized as follows:

	Three Months Ended	
	December 31, 2016	January 2, 2016
Warranty accrual at beginning of period	\$21,363	\$ 18,660
Warranties issued during current year	3,414	2,418
Adjustments to pre-existing warranties	(265)	(134)
Reductions for settling warranties	(1,044)	(1,253)
Foreign currency translation	(585)	(300)
Warranty accrual at end of period	\$22,883	\$ 19,391

Note 8 - Derivative Financial Instruments

We principally use derivative financial instruments to manage interest rate risk associated with long-term debt and foreign exchange risk related to foreign operations and foreign currency transactions. We enter into derivative financial instruments with a number of major financial institutions to minimize counterparty credit risk.

Derivatives designated as hedging instruments

Interest rate swaps are used to adjust the proportion of total debt that is subject to variable and fixed interest rates. The interest rate swaps are designated as hedges of the amount of future cash flows related to interest payments on variable-rate debt that, in combination with the interest payments on the debt, convert a portion of the variable-rate debt to fixed-rate debt. At December 31, 2016, we had interest rate swaps with notional amounts totaling \$135,000. The interest rate swaps effectively convert this amount of variable-rate debt to fixed-rate debt at 2.47%, including the applicable margin of 1.63% as of December 31, 2016. The interest will revert back to variable rates based on LIBOR plus the applicable margin upon the maturity of the interest rate swaps. These interest rate swaps mature at various times through July 8, 2019.

We use foreign currency contracts as cash flow hedges to effectively fix the exchange rates on future payments and revenue. To mitigate exposure in movements between various currencies, including the Philippine peso and the British pound, we had outstanding foreign currency forwards with notional amounts of \$56,537 at December 31, 2016. These contracts mature at various times through November 29, 2018.

These interest rate swaps and foreign currency contracts are recorded in the consolidated condensed balance sheets at fair value and the related gains or losses are deferred in shareholders' equity as a component of Accumulated Other Comprehensive Income (Loss) (AOCIL). These deferred gains and losses are reclassified into the consolidated condensed statements of earnings during the periods in which the related payments or receipts affect earnings. However, to the extent the interest rate swaps and foreign currency contracts are not perfectly effective in offsetting the change in the value of the payments and revenue being hedged, the ineffective portion of these contracts is recognized in earnings immediately. Ineffectiveness was not material in the first three months of 2017 or 2016.

Table of Contents

Derivatives not designated as hedging instruments

We also have foreign currency exposure on balances, primarily intercompany, that are denominated in foreign currencies and are adjusted to current values using period-end exchange rates. The resulting gains or losses are recorded in the consolidated condensed statements of earnings. To minimize foreign currency exposure, we had foreign currency contracts with notional amounts of \$121,302 at December 31, 2016. The foreign currency contracts are recorded in the consolidated condensed balance sheets at fair value and resulting gains or losses are recorded in the consolidated condensed statements of earnings. We recorded the following gains or losses on foreign currency contracts which are included in other income or expense and generally offset the gains or losses from the foreign currency adjustments on the intercompany balances that are also included in other income or expense:

Three Months

Ended

December 31, 2016

January 2, 2016
Net gain
\$1,394 \$ 890

Summary of derivatives

The fair value and classification of derivatives is summarized as follows:

		December 31, 2016	October 1, 2016
Derivatives designated as hedging instruments:			
Foreign currency contracts	Other current assets	\$ 280	\$ 379
Foreign currency contracts	Other assets	1	56
Interest rate swaps	Other current assets	387	52
Interest rate swaps	Other assets	419	69
	Total asset derivatives	\$ 1,087	\$ 556
Foreign currency contracts	Other accrued liabilities	\$ 3,994	\$ 4,080
Foreign currency contracts	Other long-term liabilities	668	448
Interest rate swaps	Other accrued liabilities	59	201
	Total liability derivatives	\$ 4,721	\$ 4,729
Derivatives not designated as hedging instruments:			
Foreign currency contracts	Other current assets	\$ 1,124	\$ 422
Foreign currency contracts	Other accrued liabilities	\$ 398	\$ 76

Table of Contents

Note 9 - Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Depending on the nature of the asset or liability, various techniques and assumptions can be used to estimate fair value. The definition of the fair value hierarchy is as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs other than quoted prices in active markets for similar assets and liabilities.

Level 3 – Inputs for which significant valuation assumptions are unobservable in a market and therefore value is based on the best available data, some of which is internally developed and considers risk premiums that a market participant would require.

Our derivatives are valued using various pricing models or discounted cash flow analyses that incorporate observable market data, such as interest rate yield curves and currency rates, and are classified as Level 2 within the valuation hierarchy.

The following table presents the fair values and classification of our financial assets and liabilities measured on a recurring basis, all of which are classified as Level 2.

	Classification	December 31, 2016	October 1, 2016
Foreign currency contracts	Other current assets	\$ 1,404	\$ 801
Foreign currency contracts	Other assets	1	56
Interest rate swaps	Other current assets	387	52
Interest rate swaps	Other assets	419	69
	Total assets	\$ 2,211	\$ 978
Foreign currency contracts	Other accrued liabilities	\$ 4,392	\$ 4,156
Foreign currency contracts	Other long-term liabilities	668	448
Interest rate swaps	Other accrued liabilities	59	201
	Total liabilities	\$ 5,119	\$ 4,805

The carrying value of our financial instruments approximate their fair value, with the exception of our outstanding senior notes included in long-term debt. At December 31, 2016, the fair value of long-term debt was \$1,010,105 compared to its carrying value of \$1,005,417. The fair value of long-term debt is classified as Level 2 within the fair value hierarchy and was estimated based on quoted market prices.

Table of Contents

Note 10 - Employee Benefit Plans

Net periodic benefit costs for our defined benefit pension plans are as follows:

	Three Months Ended December 31, 2016		January 2, 2016	
U.S. Plans				
Service cost	\$6,022	\$ 5,909		
Interest cost	7,636	9,415		
Expected return on plan assets	(13,628)	(12,596)		
Amortization of prior service cost (credit)	47	47		
Amortization of actuarial loss	8,419	6,542		
Pension expense for U.S. defined benefit plans	\$8,496	\$ 9,317		
Non-U.S. Plans				
Service cost	\$1,532	\$ 1,313		
Interest cost	751	1,240		
Expected return on plan assets	(1,131)	(1,229)		
Amortization of prior service cost (credit)	(27)	(19)		
Amortization of actuarial loss	1,120	650		
Pension expense for non-U.S. defined benefit plans	\$2,245	\$ 1,955		

Pension expense for the defined contribution plans consists of:

	Three Months Ended December 31, 2016		January 2, 2016	
U.S. defined contribution plans	\$3,670	\$ 3,441		
Non-U.S. defined contribution plans	1,360	1,638		
Total pension expense for defined contribution plans	\$5,030	\$ 5,079		

Actual contributions for the three months ended December 31, 2016 and anticipated additional 2017 contributions to our defined benefit pension plans are as follows:

	U.S. Plans	Non-U.S. Plans	Total
Actual	\$10,857	\$ 1,179	\$12,036
Anticipated	52,671	6,091	58,762
Total expected contributions	\$63,528	\$ 7,270	\$70,798

Table of Contents

Note 11 - Restructuring

In 2016, we initiated restructuring actions in conjunction with exiting a product line within Aircraft Controls in the U.S. and a facility in the U.K. We have also taken actions as a result of the business outlook in specific markets and locations in Components and Industrial Systems. Those actions have resulted in workforce reductions in Canada, Europe and the U.S. for Components and will result in workforce reductions primarily in Europe for Industrial Systems.

Restructuring activity for severance and other costs by segment and reconciliation to consolidated amounts is as follows:

	Aircraft Controls	Space and Defense Controls	Industrial Systems	Components	Corporate	Total
Balance at October 1, 2016	\$ 1,474	\$ 665	\$ 3,611	\$ 369	\$ 1,727	\$ 7,846
Adjustments to provision	—	(44)	(20)	—	—	(64)
Cash payments - 2014 plan	—	(125)	—	—	—	(125)
Cash payments - 2015 plan	(110)	—	(91)	—	—	(201)
Cash payments - 2016 plan	(52)	—	(347)	(281)	(86)	(766)
Foreign currency translation	(58)	(3)	(98)	—	—	(159)
Balance at December 31, 2016	\$ 1,254	\$ 493	\$ 3,055	\$ 88	\$ 1,641	\$ 6,531

As of December 31, 2016, the restructuring accrual consists of \$433 for the 2014 plan, \$421 for the 2015 plan and \$5,677 for the 2016 plan. Restructuring for all plans is expected to be paid by September 30, 2017, except portions classified as long-term liabilities based on payment arrangements.

Note 12 - Income Taxes

The effective tax rates for the three months ended December 31, 2016 and January 2, 2016 were 17.6% and 26.6%, respectively. The effective tax rate for the three months ended December 31, 2016 is lower than would be expected by applying the U.S. federal statutory tax rate to earnings before income taxes primarily from the tax benefits associated with selling our European space businesses. The effective tax rate for the three months ended January 2, 2016 is lower than would be expected by applying the U.S. federal statutory tax rate to earnings before income taxes primarily due to a significant portion of our earnings that come from foreign operations with lower tax rates and included the benefit from the enactment of legislation reinstating the research and development tax credit in the U.S.

Table of Contents

Note 13 - Accumulated Other Comprehensive Income (Loss)

The changes in AOCIL, net of tax, by component for the three months ended December 31, 2016 are as follows:

	Accumulated foreign currency translation	Accumulated retirement liability	Accumulated gain (loss) on derivatives	Total
AOCIL at October 1, 2016	\$ (110,626)	\$ (321,094)	\$ (3,341)	\$ (435,061)
Other comprehensive income (loss) before reclassifications	(40,538)	2,563	(714)	(38,689)
Amounts reclassified from AOCIL	(971)	6,009	1,288	6,326
Other comprehensive income (loss)	(41,509)	8,572	574	(32,363)
AOCIL at December 31, 2016	\$ (152,135)	\$ (312,522)	\$ (2,767)	\$ (467,424)

The amounts reclassified from AOCIL into earnings are as follows:

	Three Months Ended	
Statement of earnings classification	December 2016	January 2, 2016
Retirement liability:		
Prior service cost	\$ 19	\$ 28
Actuarial losses	9,417	7,045
Reclassification from AOCIL into earnings	9,436	7,073
Tax effect	(3,427)	(2,597)
Net reclassification from AOCIL into earnings	\$ 6,009	\$ 4,476
Derivatives:		
Foreign currency contracts Sales	\$ 1,297	\$ 78
Foreign currency contracts Cost of sales	467	476
Interest rate swaps Interest	115	301
Reclassification from AOCIL into earnings	1,879	855
Tax effect	(591)	(294)
Net reclassification from AOCIL into earnings	\$ 1,288	\$ 561

The amounts deferred in AOCIL are as follows:

	Net deferral in AOCIL - effective portion Three Months Ended	
Statement of earnings classification	December 2016	January 2, 2016
Foreign currency contracts Sales	\$ (762)	\$ (234)
Foreign currency contracts Cost of sales	(1,024)	(268)
Interest rate swaps Interest	694	447
Net loss	(1,092)	(55)
Tax effect	378	(68)
Net deferral in AOCIL of derivatives	\$ (714)	\$ (123)

Table of Contents

Note 14 - Stock Employee Compensation Trust and Supplemental Retirement Plan Trust

The Stock Employee Compensation Trust (SECT) assists in administering and provides funding for equity-based compensation plans and benefit programs, including the Moog Inc. Retirement Savings Plan (RSP). The Supplemental Retirement Plan (SERP) Trust provides funding for benefits under the Moog Inc. SERP. Both the SECT and the SERP Trust hold shares as investments. The shares in the SECT and SERP Trust are not considered outstanding for purposes of calculating earnings per share. However, in accordance with the trust agreements governing the SECT and SERP Trust, the trustees vote all shares held by the SECT and SERP Trust on all matters submitted to shareholders.

Note 15 - Earnings per Share

Basic and diluted weighted-average shares outstanding are as follows:

	Three Months Ended	
	December 31,	January 2,
	2016	2016
Basic weighted-average shares outstanding	35,869,052	36,713,949
Dilutive effect of equity-based awards	403,715	314,382
Diluted weighted-average shares outstanding	36,272,767	37,028,331

For the three months ended December 31, 2016 and January 2, 2016, there were 111,574 and 31,819 common shares subject to equity-based awards, respectively, excluded from the calculation of diluted earning per share as they would be anti-dilutive.

Table of Contents

Note 16 - Segment Information

During 2016, we made changes to our segment reporting. Components now includes the Medical Devices product lines, which we previously reported as a separate segment. Space and Defense Controls now includes Linear, which we previously included in the Aircraft Controls segment. All amounts have been restated to present Medical Devices within Components, and Linear within Space and Defense Controls.

Below are sales and operating profit by segment for the three months ended December 31, 2016 and January 2, 2016 and a reconciliation of segment operating profit to earnings before income taxes. Operating profit is net sales less cost of sales and other operating expenses, excluding interest expense, equity-based compensation expense and other corporate expenses. Cost of sales and other operating expenses are directly identifiable to the respective segment or allocated on the basis of sales, number of employees or profit.

	Three Months Ended	
	December 31, 2016	January 2, 2016
Net sales:		
Aircraft Controls	\$268,450	\$253,957
Space and Defense Controls	92,930	83,518
Industrial Systems	112,399	125,179
Components	115,891	105,803
Net sales	\$589,670	\$568,457
Operating profit:		
Aircraft Controls	\$23,111	\$18,432
Space and Defense Controls	7,096	11,515
Industrial Systems	10,701	13,633
Components	11,454	7,979
Total operating profit	52,362	51,559
Deductions from operating profit:		
Interest expense	8,486	8,322
Equity-based compensation expense	2,168	936
Corporate and other expenses, net	5,220	6,646
Earnings before income taxes	\$36,488	\$35,655

Table of Contents

Note 17 - Commitments and Contingencies

From time to time, we are involved in legal proceedings. We are not a party to any pending legal proceedings which management believes will result in a material adverse effect on our financial condition, results of operations or cash flows.

We are engaged in administrative proceedings with governmental agencies and legal proceedings with governmental agencies and other third parties in the normal course of our business, including litigation under Superfund laws, regarding environmental matters. We believe that adequate reserves have been established for our share of the estimated cost for all currently pending environmental administrative or legal proceedings and do not expect that these environmental matters will have a material adverse effect on our financial condition, results of operations or cash flows.

In the ordinary course of business we could be subject to ongoing claims or disputes from our customers, the ultimate settlement of which could have a material adverse impact on our consolidated results of operations. While the receivables and any loss provisions recorded to date reflect management's best estimate of the projected costs to complete a given project, there may still be significant effort required to complete the ultimate deliverable. Future variability in internal cost as well as future profitability is dependent upon a number of factors including deliveries, performance and government budgetary pressures. The inability to achieve a satisfactory contractual solution, further unplanned delays, additional developmental cost growth or variations in any of the estimates used in the existing contract analysis could lead to further loss provisions. Additional losses could have a material adverse impact on our financial condition, results of operations or cash flows in the period in which the loss may be recognized.

We are contingently liable for \$19,959 of standby letters of credit issued by a bank to third parties on our behalf at December 31, 2016.

Table of Contents

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations contained in the Company's Annual Report filed on Form 10-K for the fiscal year ended October 1, 2016. All references to years in this Management's Discussion and Analysis of Financial Condition and Results of Operations are to fiscal years and amounts may differ from reported values due to rounding.

OVERVIEW

We are a worldwide designer, manufacturer and systems integrator of high performance precision motion and fluid controls and control systems for a broad range of applications in aerospace and defense and industrial markets.

Within the aerospace and defense market, our products and systems include:

• Defense market - primary and secondary flight controls for military aircraft, stabilization and automatic ammunition loading controls for armored combat vehicles, tactical and strategic missile steering controls and gun aiming controls.

• Commercial aircraft market - primary and secondary flight controls for commercial aircraft.

• Commercial space market - satellite positioning controls and thrust vector controls for space launch vehicles.

In the industrial market, our products are used in a wide range of applications including:

• Industrial automation market - injection molding, metal forming, heavy industry, material and automotive testing and pilot training simulators.

• Energy market - wind energy, power generation and oil and gas exploration.

• Medical market - enteral clinical nutrition and infusion therapy pumps, CT scanners and ultrasonic sensors and surgical handpieces.

We operate under four segments, Aircraft Controls, Space and Defense Controls, Industrial Systems and Components. Our principal manufacturing facilities are located in the United States, Philippines, United Kingdom, Germany, India, Costa Rica, China, Japan, Italy, Netherlands, Canada, Ireland and Luxembourg.

We have long-term contracts with some of our customers. These contracts are predominantly within Aircraft Controls and Space and Defense Controls and represent 34%, 33% and 34% of our sales in 2016, 2015 and 2014, respectively.

We recognize revenue on these contracts using the percentage of completion, cost-to-cost method of accounting as work progresses toward completion. The remainder of our sales are recognized when the risks and rewards of ownership and title to the product are transferred to the customer, principally as units are delivered or as service obligations are satisfied. This method of revenue recognition is predominantly used within the Industrial Systems and Components segments, as well as with aftermarket activity.

We concentrate on providing our customers with products designed and manufactured to the highest quality standards. Our products are applied in demanding applications, "When Performance Really Matters®." We believe we have achieved a leadership position in the high performance, precision controls market, by capitalizing on our strengths, which include:

• superior technical competence in delivering mission-critical solutions,

• a focused customer-intimacy approach,

• a diverse base of customers and end markets served by a broad product portfolio, and

• a well-established international presence serving customers worldwide.

These strengths afford us the ability to innovate our current solutions into new, complimentary technologies. They also provide us the opportunity to expand our control product franchise from one market to another, organically growing us from a high-performance components supplier to a high-performance systems supplier. In addition, we continually strive to achieve substantial content positions on the platforms on which we currently participate, seeking to be the dominant supplier in the current niche markets we serve. We also look for innovation in all aspects of our business, employing new technologies to improve productivity and to develop new business models.

Table of Contents

These activities will help us achieve our financial objectives of increasing our revenue base and improving our long term profitability and cash flow from operations. In doing so, we expect to maintain a balanced, diversified portfolio in terms of markets served, product applications, customer bases and geographic presence. Our fundamental strategies to achieve our goals center around talent, lean and innovation and include:

- maintaining our technological excellence by building upon our systems integration capabilities while solving our customers' most demanding technical problems in applications "When Performance Really Matters®,"
- utilizing our global capabilities and strong engineering heritage to expand our product offerings,
- maximizing customer value by implementing lean enterprise principles, and
- investing in talent development to strengthen our leadership capability and employee performance.

We focus on improving shareholder value through strategic revenue growth, both acquired and organic, through improving operating efficiencies and manufacturing initiatives and through utilizing low cost manufacturing facilities without compromising quality. Additionally, we take a balanced approach to capital deployment, which may include strategic acquisitions or further share buyback activity in order to maximize shareholder returns over the long-term. We face numerous challenges to improving shareholder value. These include, but are not limited to, adjusting to dynamic global economic conditions that are influenced by governmental, industrial and commercial factors, pricing pressures from customers, strong competition, foreign currency fluctuations and increases in employee benefit costs. We may also engage in restructuring and divesting activities, including reducing overhead, consolidating facilities and exiting some product lines if we deem the operations as non-strategic or underperforming.

Acquisition and Divestiture

All of our acquisitions are accounted for under the purchase method and, accordingly, the operating results for the acquired companies are included in the consolidated statements of earnings from the respective dates of acquisition. Under purchase accounting, we record assets and liabilities at fair value and such amounts are reflected in the respective captions on the consolidated balance sheets. The purchase price described for each acquisition below is net of any cash acquired, includes debt issued or assumed and the fair value of contingent consideration.

In 2016, we acquired a 70% ownership in Linear Mold and Engineering ("Linear"), a Livonia, Michigan-based company specializing in metal additive manufacturing that provides engineering, manufacturing and production consulting services to customers across a wide range of industries, including aerospace, defense, energy and industrial. We acquired our share in Linear Mold and Engineering for \$23 million. The acquisition also includes a redeemable noncontrolling interest in the remaining 30%. This acquisition is included in our Space and Defense Controls segment. On January 25, 2017, we acquired the remaining 30% redeemable noncontrolling interest for \$2 million in cash, which will also be reflected in additional paid-in capital.

In 2017, we recorded losses in other expense of \$9 million related to selling the European space businesses of our Space and Defense Controls segment. We received \$1 million in cash and reclassified \$7 million in other current assets and \$3 million in other current liabilities as held for sale. We expect the sale of the held for sale portion of these businesses to be completed during 2017.

CRITICAL ACCOUNTING POLICIES

On a regular basis, we evaluate the critical accounting policies used to prepare our consolidated financial statements, including, but not limited to, revenue recognition on long-term contracts, contract loss reserves, reserves for inventory valuation, reviews for impairment of goodwill, purchase price allocations for business combinations, pension assumptions and deferred tax asset valuation allowances.

There have been no material changes in critical accounting policies in the current year from those disclosed in our 2016 Annual Report on Form 10-K.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of the Consolidated Condensed Financial Statements included in Item 1, Financial Statements of this report for further information regarding Financial Accounting Standards Board issued Accounting Standards Updates

("ASU").

23

Table of Contents

CONSOLIDATED RESULTS OF OPERATIONS AND OUTLOOK

(dollars and shares in millions, except per share data)	Three Months Ended			
	December 2016	January 2017	Variance	% Variance
Net sales	\$590	\$ 568	\$ 21	4 %
Gross margin	29.3 %	28.4 %		
Research and development expenses	\$35	\$ 35	\$ —	(1 %)
Selling, general and administrative expenses as a percentage of sales	14.4 %	14.6 %		
Interest expense	\$8	\$ 8	\$ —	2 %
Other	\$8	\$ —	\$ 8	n/a
Effective tax rate	17.6 %	26.6 %		
Net earnings attributable to Moog	\$31	\$ 26	\$ 4	16 %
Diluted average common shares outstanding	36	37	(1)	(2 %)
Diluted earnings per share attributable to Moog	\$0.84	\$ 0.71	\$ 0.13	18 %

Net sales increased in the first quarter of 2017 compared to the first quarter of 2016. Sales increased in Aircraft Controls, Components and Space and Defense Controls, and decreased in Industrial Systems. Weaker foreign currencies, primarily the British Pound relative to the U.S. Dollar, decreased sales \$8 million.

Gross margin increased in the first quarter of 2017 compared to the same period of 2016. We benefited from a favorable sales mix, primarily in Space and Defense Controls and Components, due to higher defense controls and medical program sales, respectively. In addition, the restructuring benefits from actions taken in 2016 increased profitability \$1 million from reduced costs.

Research and development expenses were unchanged in the first quarter of 2017 compared to the same period of 2016. Within Aircraft Controls, research and development expenses decreased \$2 million, as we had lower activity on the Embraer E-2 and the Airbus A350 programs. The reduced spend was offset by small increases in research and development activities across our remaining three segments.

In the first quarter of 2017 compared to the first quarter of 2016, selling, general and administrative expenses as a percentage of sales decreased slightly. Most of the decline is attributable to our continued focus on expense reduction, primarily in Aircraft Controls. Additionally, we benefited \$2 million from our 2016 restructuring activities.

Other expense in the first quarter of 2017 includes \$9 million of losses associated with selling our European space businesses.

Our effective tax rates in both 2017 and 2016 are lower than the U.S. statutory tax rate. The effective tax rate in the first quarter of 2017 includes the tax benefits associated with selling our European space businesses. The effective tax rate in the first quarter of 2016 included the benefit from the enactment of legislation reinstating the research and development tax credit in the U.S.

Average common shares outstanding decreased in the first quarter of 2017 compared to the same period of 2016 due to our share buyback program. Since the Board of Directors amended the program in January 2014, we have repurchased ten million shares, and have three million additional shares available for repurchase under this program.

Table of Contents

Other comprehensive loss in the first quarter of 2017 includes \$42 million of foreign currency translation loss. In the first quarter of 2016, other comprehensive loss included \$23 million of foreign currency translation loss. Foreign currency translation adjustments decreased \$18 million during this period, primarily attributable to the changes in the Euro, the British Pound and the Japanese Yen.

2017 Outlook – We expect sales in 2017 to increase 1% from fiscal 2016 to \$2.4 billion, driven primarily by higher OEM sales for the Airbus A350 program in Aircraft Controls. We also expect sales in Components will increase due to higher medical pump sales. Partially offsetting the sales growth is an expected decline in Industrial Systems across our major markets. We expect operating margin will remain flat at 10.0% in 2017 compared with 9.9% in 2016. The absence of the 2016 restructuring expense and goodwill impairment charge, as well as the associated restructuring benefits, will help drive margin expansion. These will be offset by an unfavorable sales mix and the losses associated with selling our European space businesses. We expect net earnings attributable to Moog will remain flat with 2016 at \$127 million. Average diluted shares outstanding will decrease 1% to 36 million due to shares already repurchased under our current share buyback program. We expect diluted earnings per share will range between \$3.30 and \$3.70, with a midpoint of \$3.50, an increase of 1% compared to 2016.

Table of Contents

SEGMENT RESULTS OF OPERATIONS AND OUTLOOK

During 2016, we made changes to our segment reporting. Components now includes the Medical Devices product lines, which we previously reported as a separate segment. Space and Defense Controls now includes Linear, which we previously included in the Aircraft Controls segment. All amounts have been restated to present Medical Devices within Components, and Linear within Space and Defense Controls.

Operating profit, as presented below, is net sales less cost of sales and other operating expenses, excluding interest expense, equity-based compensation expense and other corporate expenses. Cost of sales and other operating expenses are directly identifiable to the respective segment or allocated on the basis of sales, manpower or profit. Operating profit is reconciled to earnings before income taxes in Note 16 of the Notes to Consolidated Condensed Financial Statements included in this report.

Aircraft Controls

(dollars in millions)	Three Months Ended				
	December 31, 2016	January 2, 2016	\$ Variance	% Variance	
Net sales - military aircraft	\$ 128	\$ 120	\$ 8	6	%
Net sales - commercial aircraft	141	134	7	5	%
	\$ 268	\$ 254	\$ 14	6	%
Operating profit	\$ 23	\$ 18	\$ 5	25	%
Operating margin	8.6	% 7.3	%		
Backlog	\$ 610	\$ 639	\$ (29)	(5	%)

Aircraft Controls' net sales increased in both military and commercial aircraft programs the first quarter of 2017 compared to the first quarter of 2016. Weaker foreign currencies, primarily the British Pound relative to the U.S. Dollar, decreased sales \$5 million.

In the first quarter of 2017 compared to the first quarter of 2016, military OEM sales increased \$9 million while military aftermarket sales declined \$2 million. Military OEM sales for the F-35 increased \$5 million due to higher production volumes. Also, higher levels of military funded development jobs offset lower foreign military sales. The decreased military aftermarket sales was driven primarily by lower B-2 spares purchases. Additionally in the first quarter of 2017, commercial OEM sales increased \$8 million while commercial aftermarket sales decreased \$1 million. Commercial OEM sales for the Airbus A350 program increased \$10 million due to the program's production volume ramp up. The decreased commercial aftermarket sales was due to lower Boeing 787 and A350 initial provisioning sales.

Operating margin increased in the first quarter of 2017 compared to the first quarter of 2016. Research and development expenses decreased \$2 million, as we had lower activity on the Embraer E-2 and the Airbus A350 programs. Additionally, operating profit benefited \$1 million from the restructuring benefits associated with exiting a product line in the second quarter of 2016, and are in line with our total expected return.

The decrease of twelve-month backlog for Aircraft Controls at December 31, 2016 compared to January 2, 2016 is primarily due to lower orders for legacy commercial OEM programs, but is partially offset by higher orders for the F-35.

2017 Outlook for Aircraft Controls – We expect sales in Aircraft Controls to increase 4% from 2016 driven primarily by the continued ramp up of the Airbus A350 program. Partially offsetting the growth is expected lower commercial aftermarket sales on lower initial provisioning for the Boeing 787 program. We expect military sales will increase marginally, as higher F-35 sales are mostly offset by lower sales in other military programs. We expect operating margin will increase to 9.5% in 2017 from 9.3% in 2016. We expect that research and development costs will decrease \$10 million, our restructuring expenses will not repeat and we will continue to realize the benefits of cost saving activities. However, partially offsetting these positive effects on operating margin is an expected negative sales mix. Sales from our newer military cost plus development jobs and higher sales on newer, lower margin commercial OEM platforms are replacing sales from higher-margin foreign military programs, and we expect lower commercial

aftermarket sales.

26

Table of Contents

Space and Defense Controls

(dollars in millions)	Three Months Ended			
	December 2016	January 2017	\$	%
			Variance	Variance
Net sales	\$93	\$ 84	\$ 9	11 %
Operating profit	\$7	\$ 12	\$ (4)	(38 %)
Operating margin	7.6 %	13.8 %		
Backlog	\$278	\$ 238	\$ 41	17 %

Space and Defense Controls' net sales increased in our space and our defense markets in the first quarter of 2017 compared to the same period of 2016.

Sales in our space market increased \$5 million in the first quarter of 2017 compared to the first quarter of 2016, due in part to new satellite propulsion customers. Within our defense market, sales increased \$4 million in the first quarter of 2017, driven by higher LAV turret upgrade program sales in defense controls and by higher naval program sales.

Operating margin decreased in the first quarter of 2017 compared to the first quarter of 2016, due to losses associated with selling our European space businesses. Operating margin excluding the losses would have been 17.3% in the first quarter of 2017, reflecting a favorable sales mix in our defense markets.

The higher level of twelve-month backlog for Space and Defense Controls at December 31, 2016 compared to January 2, 2016 is due to higher orders for defense controls programs and satellites programs.

2017 Outlook for Space and Defense Controls – We expect sales in Space and Defense Controls to remain flat from fiscal 2016. We expect sales in our space market will remain flat as higher satellite component sales are offset by slightly lower launch vehicle sales. Additionally, we expect sales in our defense market will remain flat as higher sales for products on U.S. defense vehicles are offset by lower missile sales. We expect operating margin will decrease to 10.7% in 2017 from 11.3% in 2016, due to the impact of losses associated with selling our European space businesses. Excluding these losses, we expect operating margin to increase to 13.2% in 2017. This increase is driven by the lack of the prior year's goodwill impairment charge and by the continued realized savings from our cost containment actions.

Table of Contents

Industrial Systems

(dollars in millions)	Three Months Ended			
	December 31, 2016	January 2, 2016	\$ Variance	% Variance
Net sales	\$112	\$125	\$ (13)	(10 %)
Operating profit	\$11	\$14	\$ (3)	(22 %)
Operating margin	9.5 %	10.9 %		
Backlog	\$134	\$166	\$ (31)	(19 %)

Industrial Systems' net sales decreased across our three markets in the first quarter of 2017 compared to the first quarter of 2016.

In our industrial automation market, sales decreased \$6 million in the first quarter of 2017 compared to the first quarter of 2016. The decrease is due to lower U.S. sales, primarily related to lower levels of aftermarket support activity, as well as the absence of prior year's orders. Also, sales in our test and simulation market decreased \$5 million, due to the absence of last year's large sales volumes in material testing and simulation programs.

Additionally, sales in our energy market decreased \$2 million, mainly as a result of lost sales to a key customer in Brazil who was acquired.

Operating margin decreased in the first quarter of 2017 compared to the first quarter of 2016, due in part to lower sales volumes across our three markets. Also, operating expenses, including research and development and selling, general and administrative, increased \$1 million. Partly offsetting these impacts was \$1 million of benefits from our 2016 restructuring activities, which are in line with our total expected return.

The lower level of twelve-month backlog in Industrial Systems at December 31, 2016 compared to January 2, 2016 is due to lower energy orders related to the decline in that market and the completion of simulation orders.

2017 Outlook for Industrial Systems – We expect sales in Industrial Systems to decline 9% from 2016 across all of our major markets. Approximately half of the decline is due to lower demand. Specifically, we expect that wind energy sales will decrease as a result of lost sales to a key customer who was acquired. Also, we expect that simulation and test sales will decrease from the high level of sales in 2016. Additionally, we expect lower industrial automation sales as the global economic conditions continue to negatively impact our sales. The other half of the expected sales decline is due to the strengthening U.S. Dollar relative to our other currencies. We expect operating margin will increase to 10.4% in 2017 from 9.4% in 2016, as we will benefit from both our restructuring actions in 2016 and our continued cost containment actions.

Table of Contents

Components

(dollars in millions)	Three Months Ended			
	December 31, 2016	January 2, 2016	\$ Variance	% Variance
Net sales	\$116	\$106	\$ 10	10 %
Operating profit	\$11	\$8	\$ 3	44 %
Operating margin	9.9 %	7.5 %		
Backlog	\$168	\$171	\$ (3)	(2 %)

Components' net sales increased across all of our markets in the first quarter of 2017 compared to the first quarter of 2016.

Sales in our medical market increased \$5 million in the first quarter of 2017 compared to the same period of 2016, as we had higher sales on medical pumps, sets and sensors and handpieces. Also, sales increased \$4 million in our aerospace and defense market, primarily related to higher shipments on the Guardian program.

Operating margin increased in the first quarter of 2017 compared to the same period of 2016. In the first quarter of 2017, we benefited from an improved sales mix, primarily in our medical market. Additionally, we had \$1 million of restructuring benefits associated with the 2016 restructuring activities, which are in line with our total expected return.

The twelve-month backlog at December 31, 2016 is comparable to the level at January 2, 2016, as lower orders for our defense and marine energy products are offset by higher orders for our medical and industrial products.

2017 Outlook for Components – We expect sales in Components to increase 2% from 2016. We expect that our medical market will contribute all of the growth due to higher sales volumes of pumps and sets. We expect that our aerospace and defense sales and our industrial sales will remain flat. We expect operating margin will decrease to 10.4% in 2017 from 10.7% in 2016, as we continue to be affected by the negative sales mix in our industrial and our aerospace and defense markets.

Table of Contents

FINANCIAL CONDITION AND LIQUIDITY

(dollars in millions)	Three Months Ended			
	December 2016	January 2017	Variance	%
Net cash provided (used) by:				
Operating activities	\$51	\$ —	\$ 51	n/a
Investing activities	(16)	(22)	6	(29 %)
Financing activities	(13)	44	(57)	(129 %)

Our available borrowing capacity and our cash flow from operations provide us with the financial resources needed to run our operations, reinvest in our business and make strategic acquisitions.

At December 31, 2016, our cash balance was \$332 million, which is primarily held outside of the U.S. Cash flow from our U.S. operations, together with borrowings on our credit facility, fund on-going activities, debt service requirements and future growth investments. We reinvest the cash generated from foreign operations locally and such international balances are not available to pay down debt in the U.S. unless we decide to repatriate such amounts.

During 2016, we repatriated \$91 million of earnings from various foreign subsidiaries and used the funds to pay down our U.S. revolving credit facility. If we determine further repatriation of foreign funds is necessary, we would then be required to pay U.S. income taxes on those funds.

Operating activities

Net cash provided by operating activities increased in the first quarter of 2017 compared to the same period of 2016. Cash provided by accounts payable increased \$29 million due to favorable timing across all of our segments. Also, cash provided by inventory increased \$18 million, primarily in Aircraft Controls across a variety of programs. In addition, cash increased \$9 million due to higher net earnings adjusted for non-cash losses.

Investing activities

Net cash used by investing activities in the first quarter of 2017 included \$15 million for capital expenditures. Net cash used by investing activities in the first quarter of 2016 included \$12 million for capital expenditures and \$11 million as partial payment for the Linear acquisition.

We expect our 2017 capital expenditures to be approximately \$80 million, as we support the increased production of commercial aircraft.

Financing activities

Cash used by financing activities in the first quarter of 2017 includes net payments on our credit facility, while cash provided by financing activities in the first quarter of 2016 includes net proceeds from our credit facility.

Off Balance Sheet Arrangements

We do not have any material off balance sheet arrangements that have or are reasonably likely to have a material future effect on our results of operations or financial condition.

Contractual Obligations and Commercial Commitments

Our contractual obligations and commercial commitments have not changed materially from the disclosures in our 2016 Annual Report on Form 10-K.

Table of Contents

CAPITAL STRUCTURE AND RESOURCES

We maintain bank credit facilities to fund our short and long-term capital requirements, including for acquisitions. From time to time, we also sell debt and equity securities to fund acquisitions or take advantage of favorable market conditions.

Our U.S. revolving credit facility matures on June 28, 2021. The U.S. revolving credit facility has a capacity of \$1.1 billion and also provides an expansion option, which permits us to request an increase of up to \$200 million to the credit facility upon satisfaction of certain conditions. The U.S. revolving credit facility had an outstanding balance of \$585 million at December 31, 2016. Interest on the outstanding credit facility borrowings is based on LIBOR plus the applicable margin, which was 1.63% at December 31, 2016. The credit facility is secured by substantially all of our U.S. assets.

The U.S. revolving credit facility contains various covenants. The covenant for minimum interest coverage ratio, defined as the ratio of EBITDA to interest expense for the most recent four quarters, is 3.0. The covenant for the maximum leverage ratio, defined as the ratio of net debt, including letters of credit, to EBITDA for the most recent four quarters, is 3.5. We are in compliance with all covenants. EBITDA is defined in the loan agreement as (i) the sum of net income, interest expense, income taxes, depreciation expense, amortization expense, other non-cash items reducing consolidated net income and non-cash equity-based compensation expenses minus (ii) other non-cash items increasing consolidated net income.

We are generally not required to obtain the consent of lenders of the U.S. revolving credit facility before raising significant additional debt financing; however, certain limitations and conditions may apply that would require consent to be obtained. In recent years, we have demonstrated our ability to secure consents to access debt markets. We have also been successful in accessing equity markets from time to time. We believe that we will be able to obtain additional debt or equity financing as needed.

At December 31, 2016, we had \$506 million of unused capacity, including \$495 million from the U.S. revolving credit facility after considering standby letters of credit. However, our leverage ratio covenant limits our total borrowing capacity to \$459 million as of December 31, 2016.

We have \$300 million aggregate principal amount of 5.25% senior notes due December 1, 2022 with interest paid semiannually on June 1 and December 1 of each year. The senior notes are unsecured obligations, guaranteed on a senior unsecured basis by certain subsidiaries and contain normal incurrence-based covenants and limitations such as the ability to incur additional indebtedness, pay dividends, make other restricted payments and investments, create liens and certain corporate acts such as mergers and consolidations.

We have a trade receivables securitization facility (the "Securitization Program"), which terminates on April 13, 2018. Under the Securitization Program, we sell certain trade receivables and related rights to an affiliate, which in turn sells an undivided variable percentage ownership interest in the trade receivables to a financial institution, while maintaining a subordinated interest in a portion of the pool of trade receivables. The Securitization Program effectively increases our borrowing capacity by up to \$120 million and lowers our cost to borrow funds as compared to the U.S. revolving credit facility. We had an outstanding balance of \$120 million at December 31, 2016. The Securitization Program has a minimum borrowing requirement, which was \$96 million at December 31, 2016. Interest on the secured borrowings under the Securitization Program was 1.65% at December 31, 2016 and is based on 30-day LIBOR plus an applicable margin.

Net debt to capitalization was 41% at both December 31, 2016 and October 1, 2016.

We believe that our cash on hand, cash flows from operations and available borrowings under short and long-term arrangements will continue to be sufficient to meet our operating needs.

The Board of Directors has authorized a share repurchase program. This program has been amended from time to time to authorize additional repurchases that includes both Class A and Class B common shares, and allows us to buy up to an aggregate 13 million common shares. Under this program, we have purchased approximately 9.6 million shares for \$650 million as of December 31, 2016.

Table of Contents

ECONOMIC CONDITIONS AND MARKET TRENDS

We operate within the aerospace and defense and industrial markets. Our aerospace and defense markets are affected by market conditions and program funding levels, while our industrial markets are influenced by general capital investment trends and economic conditions. A common factor throughout our markets is the continuing demand for technologically advanced products.

Aerospace and Defense

Approximately 65% of our 2016 sales were generated in aerospace and defense markets. Within aerospace and defense, we serve three end markets: defense, commercial aircraft and space.

The defense market is dependent on military spending for development and production programs. Aircraft production programs are typically long-term in nature, offering predictability as to capacity needs and future revenues. We maintain positions on numerous high priority programs, including the Lockheed Martin F-35 Joint Strike Fighter, FA-18E/F Super Hornet and V-22 Osprey. The large installed base of our products leads to attractive aftermarket sales and service opportunities. The tactical and strategic missile, missile defense and defense controls markets are dependent on many of the same market conditions as military aircraft, including overall military spending and program funding levels. Our security and surveillance product line is dependent on government funding at federal and local levels, as well as private sector demand.

Reductions in the U.S. Department of Defense's mandatory and discretionary budgeted spending, which became effective on March 1, 2013, resulting from the Budget Control Act of 2011, has had and will continue to have ongoing ramifications for the domestic aerospace and defense market for the near future. As originally passed, the Budget Control Act provided that, in addition to an initial significant reduction in future domestic defense spending, further automatic cuts to defense spending authorization (which is generally referred to as sequestration) of approximately \$500 billion through the Federal Government's 2021 fiscal year would be triggered by the failure of Congress to produce a deficit reduction bill. The sequestration spending cuts were intended to be uniform by category for programs, projects and activities within accounts. The Bipartisan Budget Act of 2013 and the Bipartisan Budget Act of 2015 provided stability and modest growth in the Department of Defense spending through 2017. However, future budgets beyond 2017 are uncertain with respect to the overall levels of defense spending. As a result of this uncertainty, we expect we will continue to face significant challenges over the next decade. We believe that our military sales remain likely to be most affected due to lower defense spending. Currently, we expect approximately \$670 million of U.S. defense sales in 2017.

The commercial aircraft market is dependent on a number of factors, including global demand for air travel, which generally follows underlying economic growth. As such, the commercial aircraft market has historically exhibited cyclical swings which tend to track the overall economy. In recent years, the development of new, more fuel-efficient commercial air transports has helped drive increased demand in the commercial aircraft market, as airlines replace older, less fuel-efficient aircraft with newer models in an effort to reduce operating costs. The aftermarket is driven by usage of the existing aircraft fleet and the age of the installed fleet, and is impacted by fleet re-sizing programs for passenger and cargo aircraft. Changes in aircraft utilization rates affect the need for maintenance and spare parts and impact aftermarket sales. Boeing and Airbus have historically adjusted production in line with air traffic volume. Demand for our commercial aircraft products is in large part dependent on new aircraft production, which is increasing as Boeing and Airbus work to fulfill large backlogs of unfilled orders.

The commercial space market is comprised of large satellite customers, traditionally communications companies. Trends for this market, as well as for commercial launch vehicles, follow demand for increased capacity. This, in turn tends to track with underlying demand for increased consumption of telecommunication services, satellite replacement and global navigation needs. The space market is also partially dependent on the governmental-authorized levels of funding for satellite communications, as well as investment for commercial and exploration activities.

Table of Contents

Industrial

Approximately 35% of our 2016 sales were generated in industrial markets. Within industrial, we serve three end markets: industrial automation, energy and medical.

The industrial automation market we serve is influenced by several factors including capital investment, product innovation, economic growth, cost-reduction efforts and technology upgrades. We experience challenges from the need to react to the demands of our customers, who are in large part sensitive to international and domestic economic conditions.

The energy market we serve is affected by changing oil and natural gas prices, global urbanization, the resulting change in supply and demand for global energy and the political climate and corresponding public support for investments in renewable energy generation capacity. Historically, drivers for global growth include investments in power generation infrastructure, including renewable energy, and exploration in search of new oil and gas resources. However, the significant decline in the price of crude oil has reduced investment in exploration activities. This reduced investment has directly affected our energy business in Components and in Industrial Systems. Currently, we expect approximately \$33 million of oil exploration-related sales in 2017, down from approximately \$100 million in 2014.

The medical market we serve is influenced by economic conditions, regulatory environments, hospital and outpatient clinic spending on equipment, population demographics, medical advances, patient demands and the need for precision control components and systems. Advances in medical technology and medical treatments have had the effect of extending the average life spans, in turn resulting in greater need for medical services. These same technology and treatment advances also drive increased demand from the general population as a means to improve quality of life. Access to medical insurance, whether through government funded health care plans or private insurance, also affects the demand for medical services.

Foreign Currencies

We are affected by the movement of foreign currencies compared to the U.S. dollar, particularly in Industrial Systems. About one-quarter of our 2016 sales were denominated in foreign currencies. During the first three months of 2017, average foreign currency rates generally weakened against the U.S. dollar compared to 2016. The translation of the results of our foreign subsidiaries into U.S. dollars decreased sales by \$8 million compared to the same period one year ago.

Table of Contents

Cautionary Statement

Information included or incorporated by reference in this report that does not consist of historical facts, including statements accompanied by or containing words such as “may,” “will,” “should,” “believes,” “expects,” “expected,” “intends,” “projects,” “approximate,” “estimates,” “predicts,” “potential,” “outlook,” “forecast,” “anticipates,” “presume” and “assume,” forward-looking statements. Such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance and are subject to several factors, risks and uncertainties, the impact or occurrence of which could cause actual results to differ materially from the expected results described in the forward-looking statements. These important factors, risks and uncertainties include:

- the markets we serve are cyclical and sensitive to domestic and foreign economic conditions and events, which may cause our operating results to fluctuate;
- we operate in highly competitive markets with competitors who may have greater resources than we possess;
- we depend heavily on government contracts that may not be fully funded or may be terminated, and the failure to receive funding or the termination of one or more of these contracts could reduce our sales and increase our costs;
- we make estimates in accounting for long-term contracts, and changes in these estimates may have significant impacts on our earnings;
- we enter into fixed-price contracts, which could subject us to losses if we have cost overruns;
- we may not realize the full amounts reflected in our backlog as revenue, which could adversely affect our future revenue and growth prospects;
- if our subcontractors or suppliers fail to perform their contractual obligations, our prime contract performance and our ability to obtain future business could be materially and adversely impacted;
- contracting on government programs is subject to significant regulation, including rules related to bidding, billing and accounting kickbacks and false claims, and any non-compliance could subject us to fines and penalties or possible debarment;
- the loss of The Boeing Company as a customer or a significant reduction in sales to The Boeing Company could adversely impact our operating results;
- our new product research and development efforts may not be successful which could reduce our sales and earnings;
- our inability to adequately enforce and protect our intellectual property or defend against assertions of infringement could prevent or restrict our ability to compete;
- our business operations may be adversely affected by information systems interruptions, intrusions or new software implementations;
- our indebtedness and restrictive covenants under our credit facilities could limit our operational and financial flexibility;
- significant changes in discount rates, rates of return on pension assets, mortality tables and other factors could adversely affect our earnings and equity and increase our pension funding requirements;
- a write-off of all or part of our goodwill or other intangible assets could adversely affect our operating results and net worth;
- our sales and earnings may be affected if we cannot identify, acquire or integrate strategic acquisitions, or if we engage in divesting activities;
- our operations in foreign countries expose us to political and currency risks and adverse changes in local legal and regulatory environments;
- unforeseen exposure to additional income tax liabilities may affect our operating results;
- government regulations could limit our ability to sell our products outside the United States and otherwise adversely affect our business;
- governmental regulations and customer demands related to conflict minerals may adversely impact our operating results;
-

the failure or misuse of our products may damage our reputation, necessitate a product recall or result in claims against us that exceed our insurance coverage, thereby requiring us to pay significant damages;

- future terror attacks, war, natural disasters or other catastrophic events beyond our control could negatively impact our business;
- our operations are subject to environmental laws, and complying with those laws may cause us to incur significant costs; and
- we are involved in various legal proceedings, the outcome of which may be unfavorable to us.

Table of Contents

These factors are not exhaustive. New factors, risks and uncertainties may emerge from time to time that may affect the forward-looking statements made herein. Given these factors, risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictive of future results. We disclaim any obligation to update the forward-looking statements made in this report.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Refer to the Company's Annual Report on Form 10-K for the year ended October 1, 2016 for a complete discussion of our market risk. There have been no material changes in the current year regarding this market risk information.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures. We carried out an evaluation, under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Exchange Act Rules 13a-15(e) and 15d-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures are effective as of the end of the period covered by this report, to ensure that (a) information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Changes in Internal Control over Financial Reporting. There have been no changes in our internal control over (b) financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II OTHER INFORMATION

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

(c) The following table summarizes our purchases of our common stock for the quarter ended December 31, 2016.

Period	(a) Total Number of Shares Purchased (1)(2)	(b) Average Price Paid Per Share	(c) Total number of Shares Purchased as Part of Publicly Announced Plans or Programs (3)	(d) Maximum Number (or Approx. Dollar Value) of Shares that May Yet Be Purchased Under Plans or Programs (3)
October 2, 2016 - October 31, 2016	9,808	\$ 57.50	—	3,352,009
November 1, 2016 - November 30, 2016	126,972	67.86	—	3,352,009
December 1, 2016 - December 31, 2016	25,711	67.77	412	3,351,597
Total	162,491	\$ 67.22	412	3,351,597

(1) Reflects purchases by the Moog Inc. Stock Employee Compensation Trust Agreement ("SECT") of shares of Class B common stock from the Moog Inc. Retirement Savings Plan ("RSP") at average prices as follows: 9,808 shares at \$57.50 per share during October; 64,522 shares at \$69.33 per share during November; and 10,111 shares at \$66.44 per share during December.

(2) In connection with the exercise of equity-based compensation awards, we accept delivery of shares to pay for the exercise price and withhold shares for tax withholding obligations. In November, we accepted delivery of 47,450 shares at \$69.04 per share and in December, we accepted delivery of 15,188 shares at \$68.69 per share, in connection with the exercise of equity-based awards. To administratively accommodate equity awards issued in November, we purchased 15,000 Class B shares from the SECT at \$57.82 per share.

(3) The Board of Directors has authorized a share repurchase program. This program has been amended from time to time to authorize additional repurchases up to an aggregate 13 million common shares. The program permits the purchase of shares of Class A or Class B common stock in open market or privately negotiated transactions at the discretion of management. In December, we purchased 412 Class B shares at an average price of \$66.57 per share.

Table of Contents

Item 6. Exhibits.

(a) Exhibits

311
302 Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

312
302 Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

311
2002. Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101 Interactive Data files (submitted electronically herewith)

(101.INS) XBRL Instance Document

(101.SCH) XBRL Taxonomy Extension Schema Document

(101.CAL) XBRL Taxonomy Extension Calculation Linkbase Document

(101.DEF) XBRL Taxonomy Extension Definition Linkbase Document

(101.LAB) XBRL Taxonomy Extension Label Linkbase Document

(101.PRE) XBRL Taxonomy Extension Presentation Linkbase Document

In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Quarterly Report on Form 10-Q shall not be deemed to be “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section and shall not be part of any registration or other document filed under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Moog Inc.

(Registrant)

Date: January 31, 2017 By/s/ John R. Scannell
John R. Scannell
Chairman Chief Executive Officer
(Principal Executive Officer)

Date: January 31, 2017 By/s/ Donald R. Fishback
Donald R. Fishback
Vice President
Chief Financial Officer
(Principal Financial Officer)

Date: January 31, 2017 By/s/ Jennifer Walter
Jennifer Walter
Controller (Principal Accounting Officer)