

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

FORM 10-Q

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

For the quarterly period ended March 31, 2020

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 000-08408

WOODWARD, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

36-1984010

(I.R.S. Employer Identification No.)

1081 Woodward Way, Fort Collins, Colorado

(Address of principal executive offices)

80524

(Zip Code)

(970) 482-5811

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Trading Symbol(s)

Name of each exchange on which registered

Common Stock, par value \$0.001455 per share

WWD

NASDAQ Global Select Market

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 **T** No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files).

Yes **T** No ☐

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

Large Accelerated Filer **T** Accelerated Filer ☐ Non-accelerated Filer ☐ Smaller Reporting Company ☐

Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

Yes ☐ No **T**

As of May 7, 2020, 62,289,570 shares of the registrant's common stock with a par value of \$0.001455 per share were outstanding.

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

WOODWARD, INC. CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS (In thousands, except per share amounts) (Unaudited)

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Net sales	\$ 720,220	\$ 758,844	\$ 1,440,575	\$ 1,411,655
Costs and expenses:				
Cost of goods sold	517,514	566,841	1,052,431	1,059,015
Selling, general and administrative expenses	57,629	54,857	119,674	106,784
Research and development costs	34,661	43,831	71,507	82,698
Impairment of assets held for sale (Note 10)	-	-	37,902	-
Interest expense	8,756	11,480	17,765	23,358
Interest income	(476)	(294)	(963)	(665)
Other (income) expense, net (Note 18)	(5,063)	(8,039)	(26,488)	(11,218)
Total costs and expenses	613,021	668,676	1,271,828	1,259,972
Earnings before income taxes	107,199	90,168	168,747	151,683
Income tax expense	15,881	12,589	24,056	24,984
Net earnings	\$ 91,318	\$ 77,579	\$ 144,691	\$ 126,699
Earnings per share (Note 4):				
Basic earnings per share	\$ 1.47	\$ 1.25	\$ 2.33	\$ 2.04
Diluted earnings per share	\$ 1.41	\$ 1.20	\$ 2.24	\$ 1.97
Weighted Average Common Shares Outstanding (Note 4):				
Basic	62,266	62,175	62,128	61,995
Diluted	64,564	64,564	64,622	64,307

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS
(In thousands)
(Unaudited)

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Net earnings	\$ 91,318	\$ 77,579	\$ 144,691	\$ 126,699
Other comprehensive earnings:				
Foreign currency translation adjustments	(13,355)	323	(2,202)	(1,411)
Net gain (loss) on foreign currency transactions designated as hedges of net investments in foreign subsidiaries (Note 8)	650	925	(395)	1,574
Taxes on changes in foreign currency translation adjustments	130	(280)	(210)	103
Foreign currency translation and transactions adjustments, net of tax	<u>(12,575)</u>	<u>968</u>	<u>(2,807)</u>	<u>266</u>
Unrealized gain on fair value adjustment of derivative instruments				
(Note 8)	45,298	9,609	34,004	28,172
Reclassification of net realized (gain) loss on derivatives to earnings (Note 8)	(7,262)	(10,895)	4,394	(18,721)
Taxes on changes in derivative transactions	<u>(790)</u>	<u>32</u>	<u>(772)</u>	<u>(176)</u>
Derivative adjustments, net of tax	<u>37,246</u>	<u>(1,254)</u>	<u>37,626</u>	<u>9,275</u>
Amortization of pension and other postretirement plan:				
Net prior service cost	240	176	481	352
Net loss	628	242	1,259	481
Foreign currency exchange rate changes on pension and other postretirement benefit plan liabilities	1,225	(301)	(277)	2
Taxes on changes in pension and other postretirement benefit plan liability adjustments, net of foreign currency exchange rate changes	<u>(592)</u>	<u>6</u>	<u>(352)</u>	<u>(203)</u>
Pension and other postretirement benefit plan adjustments, net of tax	<u>1,501</u>	<u>123</u>	<u>1,111</u>	<u>632</u>
Total comprehensive earnings	<u>\$ 117,490</u>	<u>\$ 77,416</u>	<u>\$ 180,621</u>	<u>\$ 136,872</u>

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)
(Unaudited)

	March 31,	September 30,
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents, including restricted cash of \$2,880 and \$1,500, respectively	\$ 102,849	\$ 99,073
Accounts receivable, less allowance for uncollectible amounts of \$4,053 and \$7,908, respectively	601,224	591,529
Inventories	530,906	516,836
Income taxes receivable	37,406	8,099
Other current assets	67,421	55,691
Total current assets	1,339,806	1,271,228
Property, plant and equipment, net	1,019,078	1,058,775
Goodwill	792,024	797,853
Intangible assets, net	596,190	611,992
Deferred income tax assets	17,905	18,161
Other assets	295,273	198,517
Total assets	\$ 4,060,276	\$ 3,956,526
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings	\$ 100,000	\$ 220,000
Current portion of long-term debt	101,643	-
Accounts payable	218,721	240,460
Income taxes payable	19,911	18,849
Accrued liabilities	154,559	228,127
Total current liabilities	594,834	707,436
Long-term debt, less current portion	869,223	864,899
Deferred income tax liabilities	153,904	151,362
Other liabilities	534,621	506,088
Total liabilities	2,152,582	2,229,785
Commitments and contingencies (Note 22)		
Stockholders' equity:		
Preferred stock, par value \$0.003 per share, 10,000 shares authorized, no shares issued	-	-
Common stock, par value \$0.001455 per share, 150,000 shares authorized, 72,960 shares issued	106	106
Additional paid-in capital	227,494	207,120
Accumulated other comprehensive losses	(67,376)	(103,306)
Deferred compensation	9,963	9,382
Retained earnings	2,342,340	2,224,919
	2,512,527	2,338,221
Treasury stock at cost, 10,677 shares and 11,040 shares, respectively	(594,870)	(602,098)
Treasury stock held for deferred compensation, at cost, 216 shares and 211 shares, respectively	(9,963)	(9,382)
Total stockholders' equity	1,907,694	1,726,741
Total liabilities and stockholders' equity	\$ 4,060,276	\$ 3,956,526

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six-Months Ended March 31, 2020	2019
Cash flows from operating activities:		
Net earnings	\$ 144,691	\$ 126,699
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	65,476	75,498
Impairment of assets held for sale	37,902	-
Net (gain) loss on sales of assets	(13,557)	200
Stock-based compensation	13,475	13,166
Deferred income taxes	135	(7,271)
Changes in operating assets and liabilities:		
Trade accounts receivable	(521)	(32,758)
Unbilled receivables (contract assets)	(50,624)	(21,312)
Costs to fulfill a contract	(15,064)	(15,256)
Inventories	(28,982)	(43,517)
Accounts payable and accrued liabilities	(78,878)	34,292
Contract liabilities	13,673	24,500
Income taxes	(30,331)	(10,830)
Retirement benefit obligations	(2,152)	(2,148)
Other	(3,064)	(309)
Net cash provided by operating activities	52,179	140,954
Cash flows from investing activities:		
Payments for purchase of property, plant, and equipment	(29,361)	(54,341)
Proceeds from sale of assets	18,831	271
Proceeds from sales of short-term investments	12,684	10,259
Payments for purchases of short-term investments	(23)	(970)
Net cash provided by (used in) investing activities	2,131	(44,781)
Cash flows from financing activities:		
Cash dividends paid	(27,525)	(18,914)
Proceeds from sales of treasury stock	12,726	24,150
Payments for repurchases of common stock	(13,346)	(39,049)
Borrowings on revolving lines of credit and short-term borrowings	788,306	865,617
Payments on revolving lines of credit and short-term borrowings	(807,869)	(844,262)
Payments of long-term debt and finance lease obligations	(754)	(100,265)
Net cash used in financing activities	(48,462)	(112,723)
Effect of exchange rate changes on cash and cash equivalents	(2,072)	(1,741)
Net change in cash and cash equivalents	3,776	(18,291)
Cash and cash equivalents, including restricted cash, at beginning of year	99,073	83,594
Cash and cash equivalents, including restricted cash, at end of period	\$ 102,849	\$ 65,303

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Number of shares			Stockholders' equity										
				Accumulated other comprehensive (loss) earnings										
	Common stock	Treasury stock	Treasury stock held for deferred compensation	Common stock	Additional paid-in capital	Foreign currency translation adjustments	Unrealized derivative gains (losses)	Minimum retirement benefit liability adjustments	Total accumulated other comprehensive (loss) earnings	Deferred compensation	Retained earnings	Treasury stock at cost	Treasury stock held for deferred compensation	Total stockholders' equity
Balances as of January 1, 2019	72,960	(11,096)	(209)	\$ 106	\$ 195,894	\$ (40,541)	\$ (10,413)	\$ (13,697)	\$ (64,651)	\$ 9,015	\$2,044,695	\$ (535,362)	\$ (9,015)	\$ 1,640,682
Net earnings	-	-	-	-	-	-	-	-	-	-	77,579	-	-	77,579
Other comprehensive earnings (loss), net of tax	-	-	-	-	-	968	(1,254)	123	(163)	-	-	-	-	(163)
Cash dividends paid (\$0.1625 per share)	-	-	-	-	-	-	-	-	-	-	(10,106)	-	-	(10,106)
Purchases of treasury stock	-	(457)	-	-	-	-	-	-	-	-	-	(43,253)	-	(43,253)
Sales of treasury stock	-	638	-	-	(2,489)	-	-	-	-	-	-	23,256	-	20,767
Common shares issued from treasury stock for benefit plans	-	158	-	-	9,173	-	-	-	-	-	-	5,673	-	14,846
Stock-based compensation	-	-	-	-	2,314	-	-	-	-	-	-	-	-	2,314
Purchases and transfers of stock by/to deferred compensation plan	-	-	-	-	-	-	-	-	-	34	-	-	(34)	-
Distribution of stock from deferred compensation plan	-	-	3	-	-	-	-	-	-	(173)	-	-	173	-
Balances as of March 31, 2019	72,960	(10,757)	(206)	\$ 106	\$ 204,892	\$ (39,573)	\$ (11,667)	\$ (13,574)	\$ (64,814)	\$ 8,876	\$2,112,168	\$ (549,686)	\$ (8,876)	\$ 1,702,666
Balances as of January 1, 2020	72,960	(10,814)	(215)	\$ 106	\$ 216,158	\$ (43,467)	\$ (4,575)	\$ (45,506)	\$ (93,548)	\$ 9,911	\$2,268,483	\$ (592,596)	\$ (9,911)	\$ 1,798,603
Net earnings	-	-	-	-	-	-	-	-	-	-	91,318	-	-	91,318
Other comprehensive earnings (loss), net of tax	-	-	-	-	-	(12,575)	37,246	1,501	26,172	-	-	-	-	26,172
Cash dividends paid (\$0.2800 per share)	-	-	-	-	-	-	-	-	-	-	(17,461)	-	-	(17,461)
Purchases of treasury stock	-	(124)	-	-	-	-	-	-	-	-	-	(13,346)	-	(13,346)
Sales of treasury stock	-	137	-	-	(577)	-	-	-	-	-	-	5,744	-	5,167
Common shares issued from treasury stock for benefit plans	-	124	-	-	9,420	-	-	-	-	-	-	5,328	-	14,748
Stock-based compensation	-	-	-	-	2,493	-	-	-	-	-	-	-	-	2,493
Purchases and transfers of stock by/to deferred compensation plan	-	-	(1)	-	-	-	-	-	-	81	-	-	(81)	-
Distribution of stock from deferred compensation plan	-	-	-	-	-	-	-	-	-	(29)	-	-	29	-
Balances as of March 31, 2020	72,960	(10,677)	(216)	\$ 106	\$ 227,494	\$ (56,042)	\$ 32,671	\$ (44,005)	\$ (67,376)	\$ 9,963	\$2,342,340	\$ (594,870)	\$ (9,963)	\$ 1,907,694

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Number of shares			Stockholders' equity												
	Common stock	Treasury stock	Treasury stock held for deferred compensation	Common stock	Additional paid-in capital	Foreign currency translation adjustments	Unrealized derivative gains (losses)	Minimum retirement benefit liability	Total accumulated other comprehensive (loss) earnings	Deferred compensation	Retained earnings	Treasury stock at cost	Treasury stock held for deferred compensation	Total stockholders' equity		
Balances as of September 30, 2018	72,960	(11,203)	(202)	\$ 106	\$ 185,705	\$ (39,794)	\$ (20,942)	\$ (14,206)	\$ (74,942)	\$ 8,431	\$ 1,966,643	\$ (539,408)	\$ (8,431)	\$ 1,538,104		
Cumulative effect from adoption of ASC 606	-	-	-	-	-	(45)	-	-	(45)	-	38,745	-	-	38,700		
Cumulative effect from adoption of ASU 2016-16	-	-	-	-	-	-	-	-	-	-	(1,005)	-	-	(1,005)		
Net earnings	-	-	-	-	-	-	-	-	-	-	126,699	-	-	126,699		
Other comprehensive earnings (loss), net of tax	-	-	-	-	-	266	9,275	632	10,173	-	-	-	-	10,173		
Cash dividends paid (\$0.3050 per share)	-	-	-	-	-	-	-	-	-	-	(18,914)	-	-	(18,914)		
Purchases of treasury stock	-	(457)	-	-	-	-	-	-	-	-	-	(43,253)	-	(43,253)		
Sales of treasury stock	-	745	-	-	(3,152)	-	-	-	-	-	-	27,302	-	24,150		
Common shares issued from treasury stock for benefit plans	-	158	-	-	9,173	-	-	-	-	-	-	5,673	-	14,846		
Stock-based compensation	-	-	-	-	13,166	-	-	-	-	-	-	-	-	13,166		
Purchases and transfers of stock by/to deferred compensation plan	-	-	(8)	-	-	-	-	-	-	625	-	-	(625)	-		
Distribution of stock from deferred compensation plan	-	-	4	-	-	-	-	-	-	(180)	-	-	180	-		
Balances as of March 31, 2019	72,960	(10,757)	(206)	\$ 106	\$ 204,892	\$ (39,573)	\$ (11,667)	\$ (13,574)	\$ (64,814)	\$ 8,876	\$ 2,112,168	\$ (549,686)	\$ (8,876)	\$ 1,702,666		
Balances as of September 30, 2019	72,960	(11,040)	(211)	\$ 106	\$ 207,120	\$ (53,235)	\$ (4,955)	\$ (45,116)	\$ (103,306)	\$ 9,382	\$ 2,224,919	\$ (602,098)	\$ (9,382)	\$ 1,726,741		
Cumulative effect from adoption of ASC 842 (Note 5)	-	-	-	-	-	-	-	-	-	-	255	-	-	255		
Net earnings	-	-	-	-	-	-	-	-	-	-	144,691	-	-	144,691		
Other comprehensive earnings (loss), net of tax	-	-	-	-	-	(2,807)	37,626	1,111	35,930	-	-	-	-	35,930		
Cash dividends paid (\$0.4425 per share)	-	-	-	-	-	-	-	-	-	-	(27,525)	-	-	(27,525)		
Purchases of treasury stock	-	(124)	-	-	-	-	-	-	-	-	-	(13,346)	-	(13,346)		
Sales of treasury stock	-	363	-	-	(2,521)	-	-	-	-	-	-	15,246	-	12,725		
Common shares issued from treasury stock for benefit plans	-	124	-	-	9,420	-	-	-	-	-	-	5,328	-	14,748		
Stock-based compensation	-	-	-	-	13,475	-	-	-	-	-	-	-	-	13,475		
Purchases and transfers of stock by/to deferred compensation plan	-	-	(6)	-	-	-	-	-	-	624	-	-	(624)	-		
Distribution of stock from deferred compensation plan	-	-	1	-	-	-	-	-	-	(43)	-	-	43	-		
Balances as of March 31, 2020	72,960	(10,677)	(216)	\$ 106	\$ 227,494	\$ (56,042)	\$ 32,671	\$ (44,005)	\$ (67,376)	\$ 9,963	\$ 2,342,340	\$ (594,870)	\$ (9,963)	\$ 1,907,694		

See accompanying Notes to Condensed Consolidated Financial Statements

WOODWARD, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except per share amounts)
(Unaudited)

Note 1. Basis of presentation

The Condensed Consolidated Financial Statements of Woodward, Inc. (“Woodward” or the “Company”) as of March 31, 2020 and for the three and six-months ended March 31, 2020 and March 31, 2019, included herein, have not been audited by an independent registered public accounting firm. These Condensed Consolidated Financial Statements reflect all normal recurring adjustments that, in the opinion of management, are necessary to present fairly Woodward’s financial position as of March 31, 2020, and the statements of earnings, comprehensive earnings, cash flows, and changes in stockholders’ equity for the periods presented herein. The results of operations for the three and six-months ended March 31, 2020 are not necessarily indicative of the operating results to be expected for other interim periods or for the full fiscal year. Dollar and share amounts contained in these Condensed Consolidated Financial Statements are in thousands, except per share amounts, unless otherwise noted.

The Condensed Consolidated Financial Statements included herein have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”) for interim reporting. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) have been condensed or omitted pursuant to such rules and regulations.

These unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and Notes thereto included in Woodward’s most recent Annual Report on Form 10-K filed with the SEC and other financial information filed with the SEC.

Management is required to use estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported revenues and expenses recognized during the reporting period, and certain financial statement disclosures, in the preparation of the Condensed Consolidated Financial Statements included herein. Significant estimates in these Condensed Consolidated Financial Statements include allowances for uncollectible amounts, net realizable value of inventories, variable consideration including customer rebates earned and payable and early payment discounts, warranty reserves, useful lives of property and identifiable intangible assets, the evaluation of impairments of property and goodwill, the provision for income tax and related valuation reserves, the valuation of derivative instruments, assumptions used in the determination of the funded status and annual expense of pension and postretirement employee benefit plans, the valuation of stock compensation instruments granted to employees, board members and any other eligible recipients, estimates of incremental borrowing rates used when estimating the present value of future lease payments, assumptions used when including renewal options or non-exercise of termination options in lease terms, estimates of total lifetime sales used in the recognition of revenue of deferred material rights and balance sheet classification of the related contract liability, estimates of total sales contract costs when recognizing revenue under the cost-to-cost method, and contingencies. Actual results could vary from Woodward’s estimates.

In March 2020, the World Health Organization (“WHO”) declared the novel coronavirus (“COVID-19”) outbreak a global pandemic. When combined with the various measures enacted by governments and private organizations to contain COVID-19 or slow its spread, the pandemic has adversely impacted global activity and contributed to significant declines and volatility in financial markets. The COVID-19 pandemic could continue to have a material adverse impact on economic and market conditions and trigger an extended period of global economic slowdown. Although the Company has already been impacted by the global emergence of the COVID-19 pandemic, the full extent of its impact on the Company’s future business is currently unknown. The rapid development and fluidity of this situation precludes any prediction as to the ultimate material adverse impact of the COVID-19 outbreak, including impacts to estimates and assumptions used by management for the reported amounts of assets and liabilities. Nevertheless, the outbreak presents uncertainty and risk with respect to the Company and its performance and financial results. See Note 24, *Subsequent events*, for specific actions taken by the Company related to the COVID-19 pandemic.

Note 2. New accounting standards

From time to time, the Financial Accounting Standards Board (“FASB”) or other standards setting bodies issue new accounting pronouncements. Updates to the FASB Accounting Standards Codification (“ASC”) are communicated through issuance of an Accounting Standards Update (“ASU”).

In March 2020, the FASB issued ASU 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.” The purpose of ASU 2020-04 is to provide optional guidance for a limited time to ease the potential burden in accounting for, or recognizing the effects of, reference rate reform on financial reporting. In response to concerns about structural risks of interbank offered rates, and, in particular, the risk of cessation of the London Interbank Offered Rate (LIBOR), reference rate reform refers to a global initiative to identify alternative reference rates that are more observable or transaction-based and less susceptible to manipulation. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. An entity may elect to apply the amendments in ASU 2020-04 for contract modifications by topic or industry subtopic as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020, or prospectively from a date within an interim period that includes or is subsequent to March 12, 2020, up to the date that the financial statements are available to be issued. Once elected for a topic or an industry subtopic, the amendments in ASU 2020-04 must be applied prospectively for all eligible contract modifications for that topic or industry subtopic.

An entity may elect to apply the amendments in ASU 2020-04 to eligible hedging relationships existing as of the beginning of the interim period that includes March 12, 2020 and to new eligible hedging relationships entered into after the beginning of the interim period that includes March 12, 2020. If an entity elects to apply any of the amendments for an eligible hedging relationship existing as of the beginning of the interim period that includes March 12, 2020, any adjustments as a result of those elections must be reflected as of the beginning of that interim period and recognized in accordance with the guidance in reference rate reform subtopics 848-30, 848-40, and 848-50 (as applicable). If an entity elects to apply any of the amendments for a new hedging relationship entered into between the beginning of the interim period that includes March 12, 2020, any adjustments as a result of those elections must be reflected as of the beginning of the hedging relationship and recognized in accordance with the guidance in reference rate reform subtopics 848-30, 848-40, and 848-50 (as applicable).

Woodward is currently assessing the accounting and financial impact of reference rate reform, particularly the impact it may have on its hedging relationships, and will consider applying the optional guidance of ASU 2020-04 accordingly.

In December 2019, the FASB issued ASU 2019-12, “Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes.” ASU 2019-12 amends ASC 740 to simplify the accounting for income taxes by removing certain exceptions for investments, intraperiod allocations and interim calculations, and adding guidance to reduce complexity in the accounting standard under the FASB’s simplification initiative. ASU 2019-12 is effective for public entities for fiscal years beginning after December 15, 2020 (fiscal year 2022 for Woodward). Upon adoption, the amendments in ASU 2019-12 should be applied on a prospective basis to all periods presented. Early adoption is permitted. Woodward is currently assessing the impact of the adoption of the new guidance. Woodward expects to adopt the new guidance under ASU 2019-12 in fiscal year 2022.

In August 2018, the FASB issued ASU 2018-14, “Compensation – Retirement Benefits – Defined Benefit Plans – General (Topic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans.” ASU 2018-14 amends ASC 715 to add, remove, and modify disclosure requirements related to defined benefit pension and other postretirement plans. The ASU’s changes to disclosures aim to improve the effectiveness of ASC 715’s disclosure requirements under the FASB’s disclosure framework project. ASU 2018-14 is effective for public entities for fiscal years beginning after December 15, 2020 (fiscal year 2022 for Woodward). ASU 2018-14 does not impact the interim disclosure requirements of ASC 715. Upon adoption, the amendments in ASU 2018-14 should be applied on a retrospective basis to all periods presented. Early adoption is permitted. Woodward expects to adopt the new and modified disclosures requirements of this new guidance in fiscal year 2022.

In June 2016, the FASB issued ASU 2016-13, “Measurement of Credit Losses on Financial Instruments.” ASU 2016-13 adds a current expected credit loss (“CECL”) impairment model to U.S. GAAP that is based on expected losses rather than incurred losses. Modified retrospective adoption is required with any cumulative-effect adjustment recorded to retained earnings as of the beginning of the period of adoption. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019 (fiscal year 2021 for Woodward), including interim periods within the year of adoption. Early adoption is permitted for fiscal years beginning after December 15, 2018 (fiscal year 2020 for Woodward), including interim periods within those fiscal years. Woodward expects to adopt ASU 2016-13 in fiscal year 2021. Woodward is currently assessing the impact of the application of the CECL impairment model on Woodward’s allowance for uncollectible amounts for accounts receivable and notes receivable from municipalities and unbilled receivables.

In May 2019, the FASB issued ASU 2019-05, “Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief,” which provides transition relief for entities adopting ASU 2016-13. Specifically, ASU 2019-05 amends ASU 2016-13 to allow companies to irrevocably elect, upon adoption of ASU 2016-13, the fair value option for financial instruments. For entities that have adopted ASU 2016-13, the amendments in ASU 2019-05 are effective for fiscal years beginning after December 15, 2019, including interim periods therein. Woodward expects to adopt ASU 2019-05 in fiscal year 2021. Woodward does not expect to elect the fair value option for its financial instruments upon the adoption of both ASU 2016-13 and ASU 2019-05.

In February 2018, the FASB issued ASU 2018-02, “Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.” ASU 2018-02 allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the enactment of tax reform under H.R.1, “An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018” (the “Tax Act”) (also known as “The Tax Cuts and Jobs Act”), and provides guidance on the disclosure requirements regarding the stranded tax effects. Woodward adopted ASU 2018-02 on October 1, 2019 and has elected not to reclassify the income tax effects of the Tax Act from accumulated other comprehensive income to retained earnings.

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842)” and has subsequently issued supplemental and/or clarifying ASUs (collectively “ASC 842”). The purpose of ASC 842 is to increase transparency and comparability among organizations by recognizing lease right-of-use (“ROU”) assets and lease liabilities for substantially all leases on the balance sheet, and provide additional disclosure information about leasing arrangements. ASC 842 modifies the definition of a lease to clarify that an arrangement contains a lease when such arrangement conveys the right to control the use of an identified asset.

Woodward adopted ASC 842 on October 1, 2019 using the modified retrospective transition method under which prior periods were not restated and the cumulative effect of initial adoption was recognized in retained earnings on the date of initial application, October 1, 2019. Consequently, financial information will not be updated and the disclosures required under ASC 842 will not be provided for dates and periods before October 1, 2019.

The new guidance under ASC 842 provides a number of optional practical expedients in transition. Woodward elected the “package of practical expedients,” which allowed Woodward not to reassess under the new guidance our prior conclusions about lease identification, lease classification and initial direct costs. Accordingly, Woodward carried forward its existing conclusions on lease classification for leases existing as of the adoption date. Additionally, embedded lease arrangements were assessed under the prior guidance of ASC 840 lease framework for transition on October 1, 2019 in accordance with the leases policy outlined below. The new lease accounting guidance under ASC 842 has been applied for all arrangements commencing or modified on or after October 1, 2019.

Woodward also elected as a practical expedient to not record qualifying short-term leases with a term of twelve months or less (inclusive of reasonably certain renewals and termination options) at the inception of the contract on the balance sheet and instead recognizes those lease payments in the Condensed Consolidated Statements of Comprehensive Earnings on a straight-line basis over the lease term. This practical expedient may not be applied to short-term leases that contain a purchase option that is reasonably certain of exercise.

Woodward has also elected the practical expedient to not separate lease and non-lease components for its lease arrangements when it is the lessee. The application of this practical expedient is discussed at Note 5, *Leases*.

The adoption of ASC 842 resulted in recognition of additional operating ROU assets and operating lease liabilities on the Condensed Consolidated Balance Sheet as of October 1, 2019 of \$18,894 and \$18,851, respectively.

See Note 5, *Leases*, for disclosures and further information related to implementation and adoption of ASC 842.

Note 3. Revenue

Sales of Products

Revenue from manufactured products and from maintenance, repair and overhaul (“MRO”) represented 86% and 13%, respectively, of Woodward’s net sales for the three-months ended March 31, 2020, and 86% and 12%, respectively, of Woodward’s net sales for the six-months ended March 31, 2020. Revenue from manufactured products and from MRO represented 87% and 12%, respectively, of Woodward’s net sales for both the three and six-months ended March 31, 2019.

The amount of revenue recognized as point in time or over time follows:

	Three-Months Ended March 31, 2020			Three-Months Ended March 31, 2019		
	Aerospace	Industrial	Consolidated	Aerospace	Industrial	Consolidated
Point in time	\$ 178,325	\$ 157,052	\$ 335,377	\$ 208,183	\$ 163,623	\$ 371,806
Over time	295,911	88,932	384,843	274,771	112,267	387,038
Total net sales	<u>\$ 474,236</u>	<u>\$ 245,984</u>	<u>\$ 720,220</u>	<u>\$ 482,954</u>	<u>\$ 275,890</u>	<u>\$ 758,844</u>

	Six-Months Ended March 31, 2020			Six-Months Ended March 31, 2019		
	Aerospace	Industrial	Consolidated	Aerospace	Industrial	Consolidated
Point in time	\$ 365,840	\$ 324,994	\$ 690,834	\$ 372,197	\$ 335,785	\$ 707,982
Over time	582,321	167,420	749,741	503,644	200,029	703,673
Total net sales	<u>\$ 948,161</u>	<u>\$ 492,414</u>	<u>\$ 1,440,575</u>	<u>\$ 875,841</u>	<u>\$ 535,814</u>	<u>\$ 1,411,655</u>

Contract assets

Customer receivables include amounts billed and currently due from customers as well as unbilled amounts (contract assets) and are included in “Accounts receivable” in Woodward’s Condensed Consolidated Balance Sheets. Amounts are billed in accordance with contractual terms, which are generally tied to shipment of the products to the customer, or as work progresses in accordance with contractual terms. Billed accounts receivable are typically due within 60 days.

Unbilled amounts arise when the timing of billing differs from the timing of revenue recognized, such as when contract provisions require revenue to be recognized over time rather than at a point in time. Unbilled amounts primarily relate to performance obligations satisfied over time when the cost-to-cost method is utilized and the revenue recognized exceeds the amount billed to the customer as there is not yet a right to payment in accordance with contractual terms. Unbilled amounts are recorded as a contract asset when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract.

Woodward’s contracts with customers generally have no financing components.

Accounts receivable consisted of the following:

	March 31, 2020	September 30, 2019
Billed receivables		
Trade accounts receivable	\$ 363,661	\$ 381,942
Other (Chinese financial institutions)	40,030	42,171
Less: Allowance for uncollectible amounts	(4,053)	(7,908)
Net billed receivables	399,638	416,205
Current unbilled receivables (contract assets), net	<u>201,586</u>	<u>175,324</u>
Total accounts receivable, net	<u>\$ 601,224</u>	<u>\$ 591,529</u>

As of March 31, 2020, “Other assets” on the Condensed Consolidated Balance Sheets includes \$22,111 of unbilled receivables not expected to be invoiced and collected within a period of twelve months, compared to \$1,573 as of September 30, 2019. Unbilled receivables not expected to be invoiced and collected within a period of twelve months are primarily attributable to customer delays for deliveries on firm orders in the Aerospace segment due to the impacts of the COVID-19 pandemic.

In coordination with its customers and when terms are considered favorable, Woodward transfers ownership to collect amounts due for outstanding accounts receivable to third parties in exchange for cash. When the transfer of accounts receivable meets the criteria of FASB ASC Topic 860-10, “Transfers and Servicing”, and are without recourse, the transaction is recognized as a sale and the accounts receivable is derecognized.

Contract liabilities

Contract liabilities consisted of the following:

	March 31, 2020		September 30, 2019	
	Current	Noncurrent	Current	Noncurrent
Deferred revenue from material rights from GE joint venture formation	\$ 4,712	\$ 235,558	\$ 8,317	\$ 230,588
Deferred revenue from advanced invoicing and/or prepayments from customers	4,572	129	4,554	141
Liability related to customer supplied inventory	13,884	-	13,396	-
Deferred revenue from material rights related to engineering and development funding	2,433	116,753	1,624	106,436
Net contract liabilities	<u>\$ 25,601</u>	<u>\$ 352,440</u>	<u>\$ 27,891</u>	<u>\$ 337,165</u>

Woodward recognized revenue of \$15,962 in the three-months and \$19,932 in the six-months ended March 31, 2020 from contract liabilities balances recorded as of October 1, 2019, compared to \$10,552 in the three-months and \$20,312 in the six-months ended March 31, 2019 from contract liabilities balances recorded as of October 1, 2018.

Remaining performance obligations

Remaining performance obligations related to the aggregate amount of the total contract transaction price of firm orders for which the performance obligation has not yet been recognized in revenue as of March 31, 2020 was \$1,728,437, compared to \$1,527,437 as of September 30, 2019, the majority of which in both periods relate to Woodward's Aerospace segment. Woodward expects to recognize almost all of these remaining performance obligations within two years after March 31, 2020.

Remaining performance obligations related to material rights that have not yet been recognized in revenue as of March 31, 2020 was \$454,471, of which \$4,666 is expected to be recognized in the remainder of fiscal year 2020, \$7,595 is expected to be recognized in fiscal year 2021, and the balance is expected to be recognized thereafter. Woodward expects to recognize revenue from performance obligations related to material rights over the life of the underlying programs, which may be as long as forty years.

Disaggregation of Revenue

Woodward designs, produces and services reliable, efficient, low-emission, and high-performance energy control products for diverse applications in markets throughout the world. Woodward reports financial results for each of its Aerospace and Industrial reportable segments. Woodward further disaggregates its revenue from contracts with customers by primary market and by geographical area as Woodward believes this best depicts how the nature, amount, timing and uncertainty of its revenue and cash flows are affected by economic factors.

Revenue by primary market for the Aerospace reportable segment was as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Commercial OEM	\$ 144,610	\$ 174,343	\$ 303,276	\$ 314,851
Commercial aftermarket	134,042	139,708	259,970	251,056
Defense OEM	139,901	123,006	280,827	224,842
Defense aftermarket	55,683	45,897	104,088	85,092
Total Aerospace segment net sales	<u>\$ 474,236</u>	<u>\$ 482,954</u>	<u>\$ 948,161</u>	<u>\$ 875,841</u>

Revenue by primary market for the Industrial reportable segment was as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Reciprocating engines	\$ 163,555	\$ 209,257	\$ 338,208	\$ 405,387
Industrial turbines	59,678	52,187	111,177	101,699
Renewables ¹	22,751	14,446	43,029	28,728
Total Industrial segment net sales	<u>\$ 245,984</u>	<u>\$ 275,890</u>	<u>\$ 492,414</u>	<u>\$ 535,814</u>

- 1) Sales in the renewables market will be discontinued as of May 1, 2020 following the closing of the divestiture of the disposal groups (see Note 10, *Impairment of assets held for sale*).

The customers who account for approximately 10% or more of net sales of each of Woodward's reportable segments for the three and six-months ended March 31, 2020 are as follow:

	Customer
Aerospace	The Boeing Company, General Electric Company, United Technologies Corporation
Industrial	Rolls-Royce PLC, Weichai Westport, General Electric Company

Net sales by geographic area, as determined based on the location of the customer, were as follows:

	Three-Months Ended March 31, 2020			Three-Months Ended March 31, 2019		
	Aerospace	Industrial	Consolidated	Aerospace	Industrial	Consolidated
United States	\$ 356,109	\$ 52,907	\$ 409,016	\$ 351,763	\$ 53,564	\$ 405,327
Germany	21,111	52,941	74,052	25,068	63,725	88,793
Europe, excluding Germany	40,600	65,402	106,002	48,782	65,131	113,913
China	11,487	37,548	49,035	9,502	53,897	63,399
Asia, excluding China	10,582	29,668	40,250	13,790	31,566	45,356
Other countries	34,347	7,518	41,865	34,049	8,007	42,056
Total net sales	<u>\$ 474,236</u>	<u>\$ 245,984</u>	<u>\$ 720,220</u>	<u>\$ 482,954</u>	<u>\$ 275,890</u>	<u>\$ 758,844</u>

	Six-Months Ended March 31, 2020			Six-Months Ended March 31, 2019		
	Aerospace	Industrial	Consolidated	Aerospace	Industrial	Consolidated
United States	\$ 720,021	\$ 104,000	\$ 824,021	\$ 638,508	\$ 103,456	\$ 741,964
Germany	38,389	104,379	142,768	37,817	127,089	164,906
Europe, excluding Germany	79,587	115,903	195,490	88,394	124,479	212,873
China	21,698	91,424	113,122	25,140	104,147	129,287
Asia, excluding China	17,563	61,580	79,143	22,158	60,734	82,892
Other countries	70,903	15,128	86,031	63,824	15,909	79,733
Total net sales	<u>\$ 948,161</u>	<u>\$ 492,414</u>	<u>\$ 1,440,575</u>	<u>\$ 875,841</u>	<u>\$ 535,814</u>	<u>\$ 1,411,655</u>

Note 4. Earnings per share

Basic earnings per share is computed by dividing net earnings available to common stockholders by the weighted-average number of shares of common stock outstanding for the period.

Diluted earnings per share reflects the weighted-average number of shares outstanding after consideration of the dilutive effect of stock options and restricted stock.

The following is a reconciliation of net earnings to basic earnings per share and diluted earnings per share:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Numerator:				
Net earnings	\$ 91,318	\$ 77,579	\$ 144,691	\$ 126,699
Denominator:				
Basic shares outstanding	62,266	62,175	62,128	61,995
Dilutive effect of stock options and restricted stock	2,298	2,389	2,494	2,312
Diluted shares outstanding	64,564	64,564	64,622	64,307
Income per common share:				
Basic earnings per share	\$ 1.47	\$ 1.25	\$ 2.33	\$ 2.04
Diluted earnings per share	\$ 1.41	\$ 1.20	\$ 2.24	\$ 1.97

The following stock option grants were outstanding but were excluded from the computation of diluted earnings per share because their inclusion would have been anti-dilutive.

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Options	686	239	686	1,493
Weighted-average option price	\$ 104.51	\$ 76.07	\$ 104.47	\$ 79.07

The weighted-average shares of common stock outstanding for basic and diluted earnings per share included the weighted-average treasury stock shares held for deferred compensation obligations of the following:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Weighted-average treasury stock shares held for deferred compensation obligations	216	208	214	206

Note 5. Leases

Woodward adopted ASC 842 on October 1, 2019 using the modified retrospective transition method under which prior periods were not restated and the cumulative effect of initial adoption was recognized in retained earnings on the date of initial application, October 1, 2019.

Woodward is primarily a lessee in lease arrangements but has some embedded lessor arrangements.

Lessee arrangements

Woodward has entered into operating leases for certain facilities and equipment with terms in excess of one year under agreements that expire at various dates. Some leases require the payment of property taxes, insurance, maintenance costs, or other similar costs in addition to rental payments. Woodward has also entered into finance leases for equipment with terms in excess of one year under agreements that expire at various dates.

Woodward determines if an arrangement for the use of property, plant and equipment is a lease at inception. Under ASC 842, an arrangement contains a lease if the arrangement conveys the right to control the use of plant, property or equipment (identified asset) for a period of time in exchange for consideration. For arrangements determined to be a lease under this criteria, Woodward assesses lease classification as either an operating or finance lease whenever the new lease is executed or an existing lease requires reclassification based on changes in the lease's terms and conditions. Lease classification impacts the treatment of the lease on the income statement and amortization of the lease ROU asset. In determining lease classification, Woodward considers both qualitative and quantitative factors when performing the following classification tests: (i) transfer of ownership at the end of the lease term, (ii) existence of a bargain purchase option, (iii) the lease term, (iv) minimum lease payments, and (v) whether the leased asset is so customized to Woodward's needs as to effectively have utility only to Woodward.

Woodward applies the following thresholds when performing the classification tests: (i) 75% or greater is considered to be the majority of the asset's remaining economic life, (ii) the exercise of the renewal option or the non-exercise of a termination option is reasonably certain if it has at least a 75% likelihood of occurring (in arriving at the percentage likelihood, Woodward considers its plans as to whether to renew the lease and the economic factors that may impact the decision to renew and Woodward will include a renewal option or non-exercise of a termination option in the lease term only if the Company has an economic incentive to extend the lease), (iii) the present value of the future minimum lease payments is considered to exceed substantially all of the fair value of the underlying asset if the payments exceed 90% of the asset's fair value. Woodward considers the exercise of the option to purchase a leased asset as reasonably certain if it has at least a 75% likelihood of being exercised or, among other things, a significant economic incentive exists for exercising the option.

Lease components are elements of an arrangement that provide the customer with the right to use an identified asset. The right to use an underlying asset is a separate lease component if: (i) the lessee can benefit from the right to use the underlying asset either on its own or together with other resources that are readily available, and (ii) the right to use the underlying asset is neither highly dependent on nor highly interrelated with other rights to use other underlying assets in the arrangement. Woodward may enter into lessee arrangements that contain a lease component but also contain other non-lease components. When the non-lease component in an arrangement relates to inventory, as inventory is outside the scope of ASC 842, the payment Woodward makes for inventory is accounted for and expensed separately and apart from lease expense, rather than as a lease component. For all other classes of underlying assets in lessee arrangements, Woodward has elected to combine lease and non-lease components and to account for them as lease expense.

ROU assets represent Woodward's right to use an underlying asset for the lease term, and lease liabilities represent Woodward's obligation to make lease payments arising from the lease. ROU assets include any initial direct costs (incremental costs of a lease that would not have been incurred had the lease not been executed) and lease prepayments made, and are reduced by any lease incentives received. Leases with an initial term of 12 months or less and leases with only variable lease payments are not recorded on the balance sheet.

ROU assets and lease liabilities are recognized at the lease commencement date based on the estimated present value of the remaining fixed lease payments over the lease term. In determining the estimated present value of lease payments, Woodward discounts the fixed lease payments using the rate implicit in the agreement or, if the implicit rate is not known, using the incremental borrowing rate. As of March 31, 2020, none of Woodward's leases have been discounted using the implicit rate as it could not be readily determined. Woodward's incremental borrowing rate is based on the information available at the lease commencement date, with consideration given to Woodward's recent debt issuances as well as publicly available data for instruments with similar characteristics.

When measuring lease liabilities, Woodward only uses lease payments remaining throughout the remainder of the lease term and only includes the amount that is probable of being owed under significant residual value guarantees, if any. Lease liabilities are subject to the same considerations as Woodward's debt instruments in classifying them as current or noncurrent in the Condensed Consolidated Balance Sheets.

For operating leases, lease expense is recognized over the expected lease term and classified as a cost of goods sold or selling, general and administrative expense based on the nature of the underlying leased asset. For finance leases, the ROU asset is recognized over the shorter of the useful life of the asset, consistent with Woodward's normal depreciation policy, or the lease term, and is classified as a cost of goods sold, selling, general and administrative expense, or research and development expense, based on the nature and use of the underlying leased asset. Interest expense is recorded in connection with the finance lease liability using the effective interest rate method and is classified as interest expense.

Certain of Woodward's operating lease agreements include variable payments that are passed through by the landlord, such as insurance, taxes, and common area maintenance, payments based on the usage of the asset, and rental payments adjusted periodically for inflation. Pass-through charges, payments due to changes in usage of the asset, and payments due to

changes in indexation are included within variable rent expense and are recognized in the period in which the variable obligation for the payments was incurred.

None of Woodward's lease agreements contain significant residual value guarantees, restrictions, or covenants. As of March 31, 2020, Woodward has not entered into any lease arrangements that have not yet commenced but would create significant rights and obligations. Woodward does not have any lease transactions between related parties.

Lease-related assets and liabilities follows:

Classification on the Condensed Consolidated Balance Sheets		March 31, 2020
Assets:		
Operating lease assets	Other assets	\$ 20,507
Finance lease assets	Property, plant and equipment, net	1,467
Total lease assets		<u>21,974</u>
Current liabilities:		
Operating lease liabilities	Accrued liabilities	4,757
Finance lease liabilities	Current portion of long-term debt	1,643
Noncurrent liabilities:		
Operating lease liabilities	Other liabilities	15,706
Finance lease liabilities	Long-term debt, less current portion	1,974
Total lease liabilities		<u>\$ 24,080</u>

In the first quarter of fiscal year 2020, Woodward determined that the approved plan to divest of the renewable power systems portfolio (as described more fully in Note 10, *Impairment of assets held for sale*, and defined therein as the "disposal groups") represented a triggering event requiring the long-lived assets attributable to the disposal groups be assessed for impairment. Given the current facts and circumstances, Woodward determined that the remaining value of the ROU assets of the disposal groups were not recoverable and a \$1,110 non-cash impairment charge was recorded during the six-months ended March 31, 2020.

Supplemental lease-related information follows:

	March 31, 2020
Weighted average remaining lease term	
Operating leases	6.1 years
Finance leases	2.5 years
Weighted average discount rate	
Operating leases	3.4 %
Finance leases	3.0 %

Lease-related expenses for the three and six-months ended March 31, 2020 were as follows:

	Three-Months Ended March 31, 2020	Six-Months Ended March 31, 2020
Operating lease expense	\$ 1,532	\$ 3,051
Amortization of financing lease assets	101	248
Interest on financing lease liabilities	20	40
Variable lease expense	288	595
Short-term lease expense	162	337
Sublease income ¹	(200)	(325)
Total lease expense	<u>\$ 1,903</u>	<u>\$ 3,946</u>

1) Relates to two separate subleases Woodward has entered into for a leased manufacturing building in Niles, Illinois.

Lease-related supplemental cash flow information for the six-months ended March 31, 2020 follows:

	Six-Months Ended March 31, 2020
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows for operating leases	\$ 2,701
Operating cash flows for finance leases	40
Financing cash flows for finance leases	787
Right-of-use assets obtained in exchange for recorded lease obligations:	
Operating leases	5,345
Finance leases	1,244

Maturities of lease liabilities as of March 31, 2020 follows:

Year Ending September 30:	Operating Leases	Finance Leases
2020 (remaining)	2,509	853
2021	5,078	1,687
2022	3,904	738
2023	3,084	325
2024	2,397	137
Thereafter	6,184	-
Total lease payments	23,156	3,740
Less: imputed interest	(2,693)	(123)
Total lease obligations	<u>\$ 20,463</u>	<u>\$ 3,617</u>

Comparable future minimum rental payment under operating and finance leases that have initial or remaining non-cancelable lease terms in excess of one year as previously disclosed under ASC 840 as of September 30, 2019 follows:

Year Ending September 30:	Operating Leases	Finance Leases
2020 (full twelve months)	\$ 6,667	\$ 213
2021	5,119	98
2022	3,823	33
2023	2,899	3
2024	2,378	-
Thereafter	6,033	-
Total minimum lease payments under ASC 840	<u>\$ 26,919</u>	<u>\$ 347</u>

In the three and six months ended March 31, 2019, total rental payments charged to expense for operating leases under ASC 840 were \$2,533 and \$4,820, respectively.

Lessor arrangements

Woodward enters into various customer supply agreements, customer sales agreements, and/or product development agreements (collectively, “manufacturing contracts”) with customers to provide highly specialized products. In certain of these manufacturing contracts, the property, plant and equipment used to manufacture the products is used only for the benefit of one customer. This is primarily driven by the demand for customer products, which can be so great that it is economically beneficial to dedicate the plant and equipment to just one customer. Additionally, this can be driven by the set-up of the property, plant and equipment required to produce specified product and/or the specialized nature of the property, plant and equipment such that it is not economically feasible to use the plant, property and equipment to manufacture other products.

Woodward has assessed its manufacturing contracts and concluded that certain of the contracts for the manufacture of customer products met the criteria to be considered a leasing arrangement (“embedded leases”) with Woodward as the lessor. The specific manufacturing contracts that met the criteria were those that utilized Woodward property, plant and equipment and which is substantially (more than 90%) dedicated to the manufacturing of the product(s) for a single customer. Woodward has dedicated manufacturing lines with three of its customers representing embedded leases, all of which qualified as operating leases with undefined quantities of future customer purchase commitments. Woodward’s customers for which embedded lessor arrangements have been identified do not have contractual long-term commitments to purchase specified quantities of related products or services from Woodward, although Woodward expects to continue selling to such customers into the future and is presently unaware of any economic penalties, or other factors, which would further define a lease term on such arrangements. Although Woodward expects to allocate some portion of future net sales to these customers to embedded lessor arrangements, it cannot provide expected future undiscounted lease payments from property, plant and equipment leased to customers as of March 31, 2020. If in the future customers reduce purchases of related products from Woodward, the Company believes it will derive additional value from the underlying equipment by repurposing its use to support other customer arrangements. Woodward will continue to assess its future manufacturing contracts and monitor its current manufacturing contracts for changes which may trigger additional embedded leases under ASC 842.

A manufacturing contract with a customer that contains an embedded lease will generally include lease components, such as the equipment, and non-lease components, such as other inputs used in the manufacture of the customer’s product. In evaluating its embedded leases, Woodward first identified and separated its lease and non-lease components. Woodward has determined that for its current embedded leases, the property, plant and equipment used by Woodward represents lease components and all other inputs that Woodward uses to develop, manufacture and sell the customer product represents non-lease components. Woodward allocates revenue from contracts with customers between lease and non-lease components by imputing a reasonable rate of return based on the estimated fair value of the dedicated property, plant and equipment.

Under ASC 842, consistent with the previous guidance, Woodward will continue to recognize property, plant and equipment in embedded lessor arrangements on its Condensed Consolidated Balance Sheets in property, plant and equipment, net. The property, plant and equipment will continue to be depreciated as normal.

Woodward recognizes revenue from the embedded lessor arrangements based on the value of the underlying dedicated property, plant, and equipment. There are no fixed payments that the customers under the embedded lessor arrangements are obligated to pay. Therefore, all the customer payments under the embedded lessor arrangements are considered variable with the associated leasing revenue recognized when the revenue from underlying product sale related to variable lease payment is recognized. Revenue from contracts with customers that included embedded operating leases, which is included in “Net sales” at the Condensed Consolidated Statements of Earnings, was \$1,561 for the three-months and \$3,125 for the six-months ended March 31, 2020.

Other than the embedded leases identified, Woodward is not the lessor in any other leasing arrangements. None of the embedded leases identified by Woodward qualify as a sales-type or direct finance lease. None of the operating leases for which Woodward is the lessor include options for the lessee to purchase the underlying asset at the end of the lease term or residual value guarantees, nor are any such operating leases with related parties.

The carrying amount of property, plant and equipment leased to others through embedded leasing arrangements, included in “Property, plant and equipment, net” at the Condensed Consolidated Balance Sheets, follows:

	March 31, 2020
Property, plant and equipment leased to others through embedded leasing arrangements	\$ 67,941
Less accumulated depreciation	(25,454)
Property, plant and equipment leased to others through embedded leasing arrangements, net	<u>\$ 42,487</u>

Note 6. Joint venture

On January 4, 2016, Woodward and General Electric Company (“GE”), acting through its GE Aviation business unit, consummated the formation of a strategic joint venture between Woodward and GE (the “JV”) to develop, manufacture and support fuel systems for specified existing and all future GE commercial aircraft engines that produce thrust in excess of fifty thousand pounds.

Unamortized deferred revenue from material rights in connection with the JV formation included:

	March 31, 2020	September 30, 2019
Accrued liabilities	\$ 4,712	\$ 8,317
Other liabilities	235,558	230,588

Amortization of the deferred revenue (material right) recognized as an increase to sales was \$1,821 for the three-months and \$3,529 for the six-months ended March 31, 2020, and \$1,922 for the three-months and \$3,699 for the six-months ended March 31, 2019.

Woodward and GE jointly manage the JV and any significant decisions and/or actions of the JV require the mutual consent of both parties. Neither Woodward nor GE has a controlling financial interest in the JV, but both Woodward and GE do have the ability to significantly influence the operating and financial decisions of the JV. Therefore, Woodward is accounting for its 50% ownership interest in the JV using the equity method of accounting. The JV is a related party to Woodward. In addition, GE will continue to pay contingent consideration to Woodward consisting of fifteen annual payments of \$4,894 per year, which began on January 4, 2017, subject to certain claw-back conditions. Woodward received its third and fourth annual payments of \$4,894 during the three-months ended March 31, 2019 and March 31, 2020, respectively, which were recorded as deferred income and included in Net cash provided by operating activities on the Condensed Consolidated Statements of Cash Flows. Neither Woodward nor GE contributed any tangible assets to the JV.

Other income related to Woodward’s equity interest in the earnings of the JV was as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Other income	\$ 4,681	\$ 3,006	\$ 7,893	\$ 4,471

Cash distributions to Woodward from the JV, recognized in Net cash provided by operating activities on the Consolidated Statements of Cash Flows, from the JV include:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Cash distributions	\$ -	\$ 3,000	\$ 3,000	\$ 7,500

Net sales to the JV were as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Net sales ¹	\$ 16,606	\$ 14,294	\$ 31,484	\$ 27,127

- 1) Net sales include a reduction of \$9,779 for the three-months and \$17,013 for the six-months ended March 31, 2020 related to royalties owed to the JV by Woodward on sales by Woodward directly to third party aftermarket customers, compared to a reduction to sales of \$9,069 for the three-months and \$18,251 for the six-months ended March 31, 2019.

The Condensed Consolidated Balance Sheets include “Accounts receivable” related to amounts the JV owed Woodward, “Accounts payable” related to amounts Woodward owed the JV, and “Other assets” related to Woodward’s net investment in the JV, as follows:

	March 31, 2020	September 30, 2019
Accounts receivable	\$ 4,376	\$ 5,906
Accounts payable	2,429	4,270
Other assets	12,436	7,543

Woodward records in “Other liabilities” amounts invoiced to the JV for support of the JV’s engineering and development projects as an increase to contract liabilities, and records in “Other assets” related incurred expenditures as costs to fulfill a contract. Woodward’s contract liabilities classified as “Other liabilities” included amounts invoiced to the JV as of March 31, 2020 of \$72,783 compared to \$69,079 as of fiscal year ended September 30, 2019. Woodward’s costs to fulfill a contract included in “Other assets” related to JV activities were \$72,783 as of March 31, 2020 and \$69,079 as of fiscal year ended September 30, 2019.

Note 7. Financial instruments and fair value measurements

Financial assets and liabilities recorded at fair value in the Condensed Consolidated Balance Sheets are categorized based upon a fair value hierarchy established by U.S. GAAP, which prioritizes the inputs used to measure fair value into the following levels:

Level 1: Inputs based on quoted market prices in active markets for identical assets or liabilities at the measurement date.

Level 2: Quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable and can be corroborated by observable market data.

Level 3: Inputs that reflect management’s best estimates and assumptions of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and are significant to the valuation of the instruments.

The table below presents information about Woodward’s financial assets that are measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation techniques Woodward utilized to determine such fair value.

	At March 31, 2020				At September 30, 2019			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets:								
Cash	\$ 63,306	\$ -	\$ -	\$ 63,306	\$ 52,971	\$ -	\$ -	\$ 52,971
Investments in reverse repurchase agreements	-	-	-	-	886	-	-	886
Investments in term deposits with foreign banks	39,543	-	-	39,543	45,216	-	-	45,216
Equity securities	20,654	-	-	20,654	20,504	-	-	20,504
Net assets held for sale (Note 10)	-	-	9,667	9,667	-	-	-	-
Cross currency interest rate swaps	-	58,763	-	58,763	-	24,758	-	24,758
Total financial assets	\$ 123,503	\$ 58,763	\$ 9,667	\$ 191,933	\$ 119,577	\$ 24,758	\$ -	\$ 144,335

Investments in reverse repurchase agreements: Woodward sometimes invests excess cash in reverse repurchase agreements. Under the terms of Woodward’s reverse repurchase agreements, Woodward purchases an interest in a pool of securities and is granted a security interest in those securities by the counterparty to the reverse repurchase agreement. At an agreed upon date, generally the next business day, the counterparty repurchases Woodward’s interest in the pool of securities at a price equal to what Woodward paid to the counterparty plus a rate of return determined daily per the terms of the reverse repurchase agreement. Woodward believes that the investments in these reverse repurchase agreements are with creditworthy financial institutions and that the funds invested are highly liquid. The investments in reverse repurchase agreements are reported at fair value, with realized gains from interest income recognized in earnings, and are included in “Cash and cash equivalents” in the Condensed Consolidated Balance Sheets. Since the investments are generally overnight, the carrying value is considered to be equal to the fair value as the amount is deemed to be a cash deposit with no risk of change in value as of the end of each fiscal quarter. During the second quarter of fiscal year 2020, the Company terminated its existing investments in reverse repurchase agreements.

Investments in term deposits with foreign banks: Woodward's foreign subsidiaries sometimes invest excess cash in various highly liquid financial instruments that Woodward believes are with creditworthy financial institutions. Such investments are reported in "Cash and cash equivalents" at fair value, with realized gains from interest income recognized in earnings. The carrying value of Woodward's investments in term deposits with foreign banks are considered equal to the fair value given the highly liquid nature of the investments.

Equity securities: Woodward holds marketable equity securities, through investments in various mutual funds, related to its deferred compensation program. Based on Woodward's intentions regarding these instruments, marketable equity securities are classified as trading securities. The trading securities are reported at fair value, with realized gains and losses recognized in "Other (income) expense, net" on the Condensed Consolidated Statements of Earnings. The trading securities are included in "Other assets" in the Condensed Consolidated Balance Sheets. The fair values of Woodward's trading securities are based on the quoted market prices for the net asset value of the various mutual funds.

Cross-currency interest rate swaps: Woodward holds cross-currency interest rate swaps, which are accounted for at fair value. The swaps in an asset position are included in "Other assets," and swaps in a liability position are included in "Other liabilities" in the Condensed Consolidated Balance Sheets. The fair values of Woodward's cross-currency interest rate swaps are determined using a market approach that is based on observable inputs other than quoted market prices, including contract terms, interest rates, currency rates, and other market factors. As of March 31, 2020, swaps in an asset position in the amount of \$58,763 were included in "Other assets" in the Condensed Consolidated Balance Sheets, compared to \$24,758 as of September 30, 2019. As of March 31, 2020 and September 30, 2019, there were no swaps in a liability position that were included in "Other liabilities" in the Condensed Consolidated Balance Sheets.

Trade accounts receivable, accounts payable, and short-term borrowings are not remeasured to fair value, as the carrying cost of each approximates its respective fair value. The estimated fair values and carrying costs of other financial instruments that are not required to be remeasured at fair value in the Condensed Consolidated Balance Sheets were as follows:

		At March 31, 2020		At September 30, 2019	
	Fair Value Hierarchy Level	Estimated Fair Value	Carrying Cost	Estimated Fair Value	Carrying Cost
Assets:					
Notes receivable from municipalities	2	\$ 13,100	\$ 12,130	\$ 13,100	\$ 12,346
Investments in short-term time deposits	2	90	88	13,468	13,509
Liabilities:					
Long-term debt	2	\$ 1,016,377	\$ 973,165	\$ 928,618	\$ 867,377

In connection with certain economic incentives related to Woodward's development of a second campus in the greater-Rockford, Illinois area for its Aerospace segment and Woodward's development of a new campus at its corporate headquarters in Fort Collins, Colorado, Woodward received long-term notes from municipalities within the states of Illinois and Colorado. The fair value of the long-term notes was estimated based on a model that discounted future principal and interest payments received at an interest rate available to the Woodward at the end of the period for similarly rated municipal notes of similar maturity, which is a level 2 input as defined by the U.S. GAAP fair value hierarchy. The interest rates used to estimate the fair value of the long-term notes were 1.5% at March 31, 2020 and 1.7% at September 30, 2019.

From time to time, certain of Woodward's foreign subsidiaries will invest excess cash in short-term time deposits with a fixed maturity date of longer than three months but less than one year from the date of the deposit. Woodward believes that the investments are with creditworthy financial institutions. The fair value of the investments in short-term time deposits was estimated based on a model that discounted future principal and interest payments to be received at an interest rate available to the foreign subsidiary entering into the investment for similar short-term time deposits of similar maturity. This was determined to be a level 2 input as defined by the U.S. GAAP fair value hierarchy. The interest rates used to estimate the fair value of the short-term time deposits were 3.7% at March 31, 2020 and 5.7% at September 30, 2019.

The fair value of long-term debt was estimated based on a model that discounted future principal and interest payments at interest rates available to the Woodward at the end of the period for similar debt of the same maturity, which is a level 2 input as defined by the U.S. GAAP fair value hierarchy. The weighted-average interest rate used to estimate the fair value of long-term debt was 2.7% at March 31, 2020 and 2.5% at September 30, 2019.

Note 8. Derivative instruments and hedging activities

Derivative instruments not designated or qualifying as hedging instruments

In May 2018, Woodward entered into cross-currency interest rate swap agreements that synthetically convert \$167,420 of floating-rate debt under Woodward's then existing revolving credit agreement to Euro denominated floating-rate debt in conjunction with the L'Orange acquisition (the "Floating-Rate Cross-Currency Swap"). Also in May 2018, Woodward entered into cross-currency interest rate swap agreements that synthetically convert an aggregate principal amount of \$400,000 of fixed-rate debt associated with the 2018 Note Purchase Agreement (as defined in Note 15, *Credit facilities short-term borrowings and long-term debt*) to Euro denominated fixed-rate debt (the "Fixed-Rate Cross-Currency Swaps"). The cross-currency interest rate swaps, which effectively reduce the interest rate on the underlying fixed and floating-rate debt under the 2018 Notes (as defined in Note 15, *Credit facilities short-term borrowings and long-term debt*) and Woodward's then existing revolving credit agreement, respectively, is recorded as a reduction to "Interest expense" in Woodward's Condensed Consolidated Statements of Earnings.

Derivatives instruments in fair value hedging relationships

Concurrent with the entry into the Floating-Rate Cross-Currency Swap, a corresponding Euro denominated intercompany loan receivable with identical terms and notional amount as the underlying Euro denominated floating-rate debt, with a reciprocal cross-currency interest rate swap, was entered into by Woodward Barbados Financing SRL ("Barbados"), a wholly owned subsidiary of Woodward, and is designated as a fair value hedge under the criteria prescribed in ASC Topic 815, "*Derivatives and Hedging*" ("ASC 815"). The objective of the derivative instrument is to hedge against the foreign currency exchange risk attributable to the spot remeasurement of the Euro denominated intercompany loan.

Only the change in the fair value related to the cross-currency basis spread, or excluded component, of the derivative instrument is recognized in accumulated other comprehensive (losses) earnings ("accumulated OCI"). The remaining change in the fair value of the derivative instrument is recognized in foreign currency transaction gain or loss included in "Selling, general and administrative costs" in Woodward's Condensed Consolidated Statements of Earnings. The change in the fair value of the derivative instrument in foreign currency transaction gain or loss offsets the change in the spot remeasurement of the intercompany Euro denominated loan. Hedge effectiveness is assessed based on the fair value changes of the derivative instrument, after excluding any fair value changes related to the cross-currency basis spread. The initial cost of the cross-currency basis spread is recorded in earnings each period through the swap accrual process. There are no credit-risk-related contingent features associated with the floating-rate cross-currency interest rate swap.

Derivative instruments in cash flow hedging relationships

In conjunction with the entry into the Fixed-Rate Cross-Currency Swaps, five corresponding intercompany loans receivable, with identical terms and amounts of each tranche of the underlying aggregate principal amount of \$400,000 of fixed-rate debt, and reciprocal cross-currency interest rate swaps were entered into by Barbados, which are designated as cash flow hedges under the criteria prescribed in ASC 815. The objective of these derivative instruments is to hedge the risk of variability in cash flows attributable to the foreign currency exchange risk of cash flows for future principal and interest payments associated with the Euro denominated intercompany loans over a fifteen-year period.

Changes in the fair values of the derivative instruments are recognized in accumulated OCI and reclassified to foreign currency transaction gain or loss included in "Selling, general and administrative costs" in Woodward's Condensed Consolidated Statements of Earnings. Reclassifications out of accumulated OCI of the change in fair value occur each reporting period based upon changes in the spot rate remeasurement of the Euro denominated intercompany loans, including associated interest. Hedge effectiveness is assessed based on the fair value changes of the derivative instruments and deemed to be highly effective in offsetting exposure to variability in foreign exchange rates. There are no credit-risk-related contingent features associated with these fixed-rate cross-currency interest rate swaps.

Derivatives instruments in net investment hedging relationships

On September 23, 2016, Woodward and Woodward International Holding B.V., a wholly owned subsidiary of Woodward organized under the laws of The Netherlands (the “BV Subsidiary”), each entered into a note purchase agreement (the “2016 Note Purchase Agreement”) relating to the sale by Woodward and the BV Subsidiary of an aggregate principal amount of €160,000 of senior unsecured notes in a series of private placement transactions. Woodward issued €40,000 aggregate principal amount of Woodward’s Series M Senior Notes due September 23, 2026 (the “Series M Notes”). Woodward designated the Series M Notes as a hedge of a foreign currency exposure of Woodward’s net investment in its Euro denominated functional currency subsidiaries. Related to the Series M Notes, included in foreign currency translation adjustments within total comprehensive (losses) earnings are net foreign exchange gains of \$650 for the three-months and foreign exchange losses of \$395 for the six-months ended March 31, 2020, compared to net foreign exchange gains of \$925 for the three-months and \$1,574 for the six-months ended March 31, 2019.

Impact of derivative instruments designated as qualifying hedging instruments

The following table discloses the impact of derivative instruments designated as qualifying hedging instruments on Woodward’s Condensed Consolidated Statements of Earnings:

		Three-Months Ended March 31, 2020		
Derivatives in:	Location	Amount of (Income) Expense Recognized in Earnings on Derivative	Amount of (Gain) Loss Recognized in Accumulated OCI on Derivative	Amount of (Gain) Loss Reclassified from Accumulated OCI into Earnings
Cross currency interest rate swap agreement designated as fair value hedges	Selling, general and administrative expenses	\$ (2,043)	\$ (1,523)	\$ (1,646)
Cross currency interest rate swap agreements designated as cash flow hedges	Selling, general and administrative expenses	(5,598)	(43,775)	(5,598)
Treasury lock agreement designated as cash flow hedge	Interest expense	(18)	-	(18)
		<u>\$ (7,659)</u>	<u>\$ (45,298)</u>	<u>\$ (7,262)</u>

		Three-Months Ended March 31, 2019		
Derivatives in:	Location	Amount of (Income) Expense Recognized in Earnings on Derivative	Amount of (Gain) Loss Recognized in Accumulated OCI on Derivative	Amount of (Gain) Loss Reclassified from Accumulated OCI into Earnings
Cross currency interest rate swap agreement designated as fair value hedges	Selling, general and administrative expenses	\$ (3,033)	\$ (3,030)	\$ (2,883)
Cross currency interest rate swap agreements designated as cash flow hedges	Selling, general and administrative expenses	(7,994)	(6,579)	(7,994)
Treasury lock agreement designated as cash flow hedge	Interest expense	(18)	-	(18)
		<u>\$ (11,045)</u>	<u>\$ (9,609)</u>	<u>\$ (10,895)</u>

		Six-Months Ended March 31, 2020		
Derivatives in:	Location	Amount of (Income) Expense Recognized in Earnings on Derivative	Amount of (Gain) Loss Recognized in Accumulated OCI on Derivative	Amount of (Gain) Loss Reclassified from Accumulated OCI into Earnings
Cross-currency interest rate swap agreement designated as fair value hedges	Selling, general and administrative expenses	\$ 233	\$ 2,075	\$ 1,037
Cross-currency interest rate swap agreements designated as cash flow hedges	Selling, general and administrative expenses	3,393	(36,079)	3,393
Treasury lock agreement designated as cash flow hedge	Interest expense	(36)	-	(36)
		<u>\$ 3,590</u>	<u>\$ (34,004)</u>	<u>\$ 4,394</u>

		Six-Months Ended March 31, 2019		
Derivatives in:	Location	Amount of (Income) Expense Recognized in Earnings on Derivative	Amount of (Gain) Loss Recognized in Accumulated OCI on Derivative	Amount of (Gain) Loss Reclassified from Accumulated OCI into Earnings
Cross-currency interest rate swap agreement designated as fair value hedges	Selling, general and administrative expenses	\$ (5,422)	\$ (5,535)	\$ (5,135)
Cross-currency interest rate swap agreements designated as cash flow hedges	Selling, general and administrative expenses	(13,550)	(22,637)	(13,550)
Treasury lock agreement designated as cash flow hedge	Interest expense	(36)	-	(36)
		<u>\$ (19,008)</u>	<u>\$ (28,172)</u>	<u>\$ (18,721)</u>

The remaining unrecognized gains and losses in Woodward's Condensed Consolidated Balance Sheets associated with derivative instruments that were previously entered into by Woodward, which are classified in accumulated OCI, were net gains of \$33,394 as of March 31, 2020 and net losses of \$5,004 as of September 30, 2019.

Note 9. Supplemental statement of cash flows information

	Six-Months Ended March 31,	
	2020	2019
Interest paid, net of amounts capitalized	\$ 14,146	\$ 22,173
Income taxes paid	65,283	44,661
Income tax refunds received	11,012	1,294
Non-cash activities:		
Purchases of property, plant and equipment on account	2,325	8,081
Impact of the adoption of ASC 606	-	38,700
Impact of the adoption of ASC 842 (Note 5)	255	-
Impact of the adoption of ASU 2016-16	-	1,005
Common shares issued from treasury to settle benefit obligations (Note 21)	14,748	14,846
Purchases of treasury stock on account	-	4,204

Note 10. Impairment of assets held for sale

In the first quarter of fiscal year 2020, Woodward's board of directors ("the Board") approved a plan to divest Woodward's renewable power systems business, protective relays business, and other businesses within the Company's Industrial segment (collectively, the "disposal groups").

Woodward determined that the approved plan to divest the disposal groups represented a triggering event requiring the long-lived assets attributable to the disposal groups be assessed for impairment. Given the current facts and circumstances, Woodward determined that the value of the long-lived assets of the disposal groups, including goodwill, intangible assets, ROU assets and property, plant, and equipment, were not recoverable and a \$24,092 non-cash impairment charge was recorded during the six-months ended March 31, 2020. The non-cash impairment charge removed all the goodwill, intangible assets, ROU assets and property, plant, and equipment associated with the disposal groups from the Condensed Consolidated Balance Sheets as of March 31, 2020.

Further, on the approval of the divestiture plan and subsequent marketing of the disposal groups, Woodward determined that based on the current market conditions, the carrying value of the disposal groups' remaining held for sale net assets exceeded the fair value. As a result, Woodward recorded a valuation allowance to reduce the carrying value of the net assets of the disposal groups to their fair value.

In determining the amount by which the carrying value of the disposal groups' remaining net assets exceeded their fair value, Woodward considered primarily the market value of the assets held for sale based on negotiations it had entered into with affiliates of the AURELIUS Group for the sale of the majority of the disposal groups. On January 31, 2020, Woodward entered into definitive agreements to sell the majority of the disposal groups to affiliates of the AURELIUS Group for \$23,400, subject to customary purchase price adjustments, consisting of cash and a \$6,000 promissory note. The assets are primarily located in Germany, Poland and Bulgaria and accounted for approximately \$80,000 of sales in fiscal year 2019. The \$9,667 estimated fair value of the net assets held for sale as of March 31, 2020 shown in the table below was based on the estimated selling price pursuant to the definitive agreements reduced by the estimated working capital adjustments, transaction costs, and anticipated losses on assets held for sale that were not included in the disposal groups to be sold to the AURELIUS Group, which are level 3 inputs as defined by the U.S. GAAP fair value hierarchy.

Based on this estimate of the fair market value of the disposal groups' net assets, Woodward recorded a valuation allowance against the assets and liabilities held for sale as follows:

	March 31, 2020
Assets:	
Accounts receivable	\$ 21,680
Inventories	15,313
Other current assets	704
Other assets	54
Total assets	37,751
Valuation, allowance	(13,810)
Total assets, net	23,941
Liabilities:	
Accounts payable	7,866
Accrued liabilities	5,407
Other liabilities	1,001
Total liabilities	\$ 14,274

The total assets held for sale, net of valuation allowance, associated with the disposal groups in the amount of \$23,941 are included in "Other current assets" at the Condensed Consolidated Balance Sheet as of March 31, 2020. The total liabilities held for sale associated with the disposal groups in the amount of \$14,274 are included in "Accrued liabilities" at the Condensed Consolidated Balance Sheet as of March 31, 2020. The total non-cash charge of \$37,902 consisting of the valuation allowance recognized for the disposal groups' net assets held for sale and the charge recognized for the impairment of the goodwill, intangibles, ROU assets and property, plant and equipment associated with the disposal groups has been recorded as "Impairment of assets held for sale" in the Condensed Consolidated Statements of Earnings for the six-months ended March 31, 2020.

The transactions consummating the sale of the disposal groups were completed on April 30, 2020 (see Note 24, *Subsequent events*)

Note 11. Inventories

	March 31, 2020	September 30, 2019
Raw materials	\$ 143,165	\$ 134,878
Work in progress	131,479	133,885
Component parts (1)	303,149	287,128
Finished goods	81,765	59,051
Customer supplied inventory	13,884	13,396
On-hand inventory for which control has transferred to the customer	(142,536)	(111,502)
	<u>\$ 530,906</u>	<u>\$ 516,836</u>

(1) Component parts include items that can be sold separately as finished goods or included in the manufacture of other products.

Note 12. Property, plant, and equipment

	March 31, 2020	September 30, 2019
Land and land improvements	\$ 89,142	\$ 94,976
Buildings and building improvements	576,123	587,541
Leasehold improvements	17,957	17,446
Machinery and production equipment	746,128	731,159
Computer equipment and software	122,488	124,201
Office furniture and equipment	39,734	39,934
Other	19,767	19,346
Construction in progress	40,156	57,624
	<u>1,651,495</u>	<u>1,672,227</u>
Less accumulated depreciation	(632,417)	(613,452)
Property, plant, and equipment, net	<u>\$ 1,019,078</u>	<u>\$ 1,058,775</u>

In the second quarter of fiscal year 2018, the Company announced its decision to relocate its Duarte, California operations to the Company's newly renovated Drake Campus in Fort Collins, Colorado, and in fiscal year 2019, Woodward finalized the relocation. On December 30, 2019 the Company closed on the sale of one of two parcels of real property at Woodward's former Duarte operations and recorded a pre-tax gain on sale of assets of \$13,522 (see Note 18, *Other (income) expense, net*). The carrying value of the remaining parcel of Duarte real property is \$2,520 as of March 31, 2020, all of which the Company has identified as an asset held for sale and is included in "Land and land improvements". The asset held for sale is included in unallocated corporate property, plant, and equipment. Based on an existing real property purchase agreement and current market conditions, the Company expects to record an additional gain on the subsequent sale of the remaining parcel of real property, which is expected to close by September 30, 2020. The Company assessed whether the decision to relocate from its Duarte facility could indicate a potential impairment of the assets at the Duarte facility and concluded that the assets were not impaired as of March 31, 2020 and September 30, 2019.

In the first quarter of fiscal year 2020, Woodward determined that the approved plan to divest of the disposal groups (see Note 10, *Impairment of assets held for sale*) represented a triggering event requiring the long-lived assets attributable to the disposal groups be assessed for impairment. Given the facts and circumstances at that time, Woodward determined that the remaining value of the plant, property and equipment of the disposal groups was not recoverable and a \$13,813 non-cash impairment charge was recorded during the six-months ended March 31, 2020.

For the three and six-months ended March 31, 2020 and 2019, Woodward had depreciation expense as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Depreciation expense	<u>\$ 23,177</u>	<u>\$ 20,164</u>	<u>\$ 45,723</u>	<u>\$ 41,333</u>

Note 13. Goodwill

	September 30, 2019	Impairment Charges	Effects of Foreign Currency Translation	March 31, 2020
Aerospace	\$ 455,423	\$ -	\$ -	\$ 455,423
Industrial	342,430	(8,777)	2,948	336,601
Consolidated	<u>\$ 797,853</u>	<u>\$ (8,777)</u>	<u>\$ 2,948</u>	<u>\$ 792,024</u>

Woodward tests goodwill for impairment during the fourth quarter of each fiscal year, and at any time there is an indication goodwill is more-likely-than-not impaired, commonly referred to as triggering events. Woodward's fourth quarter of fiscal year 2019 impairment test resulted in no impairment.

In the first quarter of fiscal year 2020, Woodward determined that the approved plan to divest of the disposal groups (see Note 10, *Impairment of assets held for sale*) represented a triggering event requiring the long-lived assets attributable to the disposal groups be assessed for impairment. Given the facts and circumstances at the time, Woodward determined that the remaining value of the goodwill of the disposal groups was not recoverable and an \$8,777 non-cash impairment charge was recorded during the six-months ended March 31, 2020.

During the second quarter of fiscal year 2020, Woodward determined the economic uncertainty and global disruption caused by the COVID-19 pandemic will significantly impact future sales of all business units. Management concluded the overall economic disruption triggered by the COVID-19 pandemic generated a series of factors to consider relative to possible triggering events. However, management further concluded these factors do not individually or collectively represent triggering events that would indicate it was more likely than not that the fair value of a reporting unit is below its carrying amount as of March 31, 2020. Woodward will continue to monitor the impacts of the COVID-19 pandemic on earnings that may impact the carrying value of goodwill and long-lived assets in future periods.

Note 14. Intangible assets, net

	March 31, 2020			September 30, 2019		
	Gross Carrying Value	Accumulated Amortization	Net Carrying Amount	Gross Carrying Value	Accumulated Amortization	Net Carrying Amount
Intangible assets with finite lives:						
Customer relationships and contracts:						
Aerospace	\$ 281,683	\$ (189,258)	\$ 92,425	\$ 281,683	\$ (181,995)	\$ 99,688
Industrial	406,087	(47,589)	358,498	407,683	(43,986)	363,697
Total	<u>\$ 687,770</u>	<u>\$ (236,847)</u>	<u>\$ 450,923</u>	<u>\$ 689,366</u>	<u>\$ (225,981)</u>	<u>\$ 463,385</u>
Intellectual property:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial	15,703	(15,513)	190	19,201	(18,705)	496
Total	<u>\$ 15,703</u>	<u>\$ (15,513)</u>	<u>\$ 190</u>	<u>\$ 19,201</u>	<u>\$ (18,705)</u>	<u>\$ 496</u>
Process technology:						
Aerospace	\$ 76,371	\$ (61,933)	\$ 14,438	\$ 76,371	\$ (59,913)	\$ 16,458
Industrial	86,537	(19,996)	66,541	92,820	(24,926)	67,894
Total	<u>\$ 162,908</u>	<u>\$ (81,929)</u>	<u>\$ 80,979</u>	<u>\$ 169,191</u>	<u>\$ (84,839)</u>	<u>\$ 84,352</u>
Backlog:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial	40,860	(40,860)	-	40,500	(40,500)	-
Total	<u>\$ 40,860</u>	<u>\$ (40,860)</u>	<u>\$ -</u>	<u>\$ 40,500</u>	<u>\$ (40,500)</u>	<u>\$ -</u>
Other intangibles:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial	205	(141)	64	1,541	(1,249)	292
Total	<u>\$ 205</u>	<u>\$ (141)</u>	<u>\$ 64</u>	<u>\$ 1,541</u>	<u>\$ (1,249)</u>	<u>\$ 292</u>
Intangible asset with indefinite life:						
Tradename:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial	64,034	-	64,034	63,467	-	63,467
Total	<u>\$ 64,034</u>	<u>\$ -</u>	<u>\$ 64,034</u>	<u>\$ 63,467</u>	<u>\$ -</u>	<u>\$ 63,467</u>
Total intangibles:						
Aerospace	\$ 358,054	\$ (251,191)	\$ 106,863	\$ 358,054	\$ (241,908)	\$ 116,146
Industrial	613,426	(124,099)	489,327	625,212	(129,366)	495,846
Consolidated Total	<u>\$ 971,480</u>	<u>\$ (375,290)</u>	<u>\$ 596,190</u>	<u>\$ 983,266</u>	<u>\$ (371,274)</u>	<u>\$ 611,992</u>

Woodward tests the indefinite lived tradename intangible asset for impairment during the fourth quarter of each fiscal year, or at any time there is an indication the indefinite lived tradename intangible asset is more-likely-than-not impaired, commonly referred to as triggering events.

In the first quarter of fiscal year 2020, Woodward determined that the approved plan to divest of the disposal groups (see Note 10, *Impairment of assets held for sale*) represented a triggering event requiring the long-lived assets attributable to the disposal groups be assessed for impairment. Given the current facts and circumstances, Woodward determined that the remaining value of the intangible assets of the disposal groups was not recoverable and a \$392 non-cash impairment charge was recorded for the six-months ended March 31, 2020.

For the three and six-months ended March 31, 2020 and 2019, Woodward recorded amortization expense associated with intangibles of the following:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Amortization expense	\$ 9,848	\$ 16,693	\$ 19,753	\$ 34,165

Future amortization expense associated with intangibles is expected to be:

Year Ending September 30:

2020 (remaining)	\$ 19,284
2021	40,133
2022	38,025
2023	36,974
2024	33,197
Thereafter	364,543
	<u>\$ 532,156</u>

Note 15. Credit facilities, short-term borrowings and long-term debt

Revolving credit facility

Woodward maintains a \$1,000,000 revolving credit facility established under a revolving credit agreement among Woodward, a syndicate of lenders and Wells Fargo Bank, National Association, as administrative agent (the "Revolving Credit Agreement"). The Revolving Credit Agreement provides for the option to increase available borrowings up to \$1,500,000, subject to lenders' participation. Borrowings under the Revolving Credit Agreement can be made by Woodward and certain of its foreign subsidiaries in U.S. dollars or in foreign currencies other than the U.S. dollar and generally bear interest at LIBOR plus 0.875% to 1.75%. The Revolving Credit Agreement matures on June 19, 2024. Under the Revolving Credit Agreement, there were \$242,901 in principal amount of borrowings outstanding as of March 31, 2020, at an effective interest rate of 2.01%, and \$262,297 in principal amount of borrowings outstanding as of September 30, 2019, at an effective interest rate of 3.01%. As of March 31, 2020, \$100,000 of borrowings under the Revolving Credit Agreement were classified as short-term borrowings based on Woodward's intent and ability to pay this amount in the next twelve months. As of September 30, 2019, \$220,000 of the borrowings under the Revolving Credit Agreement were classified as short-term borrowings.

Short-term borrowings

Woodward has other foreign lines of credit and foreign overdraft facilities at various financial institutions, which are generally reviewed annually for renewal and are subject to the usual terms and conditions applied by the financial institutions. Pursuant to the terms of the related facility agreements, Woodward's foreign performance guarantee facilities are limited in use to providing performance guarantees to third parties. There were no borrowings outstanding on Woodward's foreign lines of credit and foreign overdraft facilities as of both March 31, 2020 and September 30, 2019.

Long-term debt

	March 31, 2020	September 30, 2019
Long-term portion of revolving credit facility - Floating rate (LIBOR plus 0.875% - 1.75%), due June 19, 2024; unsecured	\$ 142,901	\$ 42,297
Series G notes – 3.42%, due November 15, 2020; unsecured	50,000	50,000
Series H notes – 4.03%, due November 15, 2023; unsecured	25,000	25,000
Series I notes – 4.18%, due November 15, 2025; unsecured	25,000	25,000
Series J notes – Floating rate (LIBOR plus 1.25%), due November 15, 2020; unsecured	50,000	50,000
Series K notes – 4.03%, due November 15, 2023; unsecured	50,000	50,000
Series L notes – 4.18%, due November 15, 2025; unsecured	50,000	50,000
Series M notes – 1.12% due September 23, 2026; unsecured	44,162	43,770
Series N notes – 1.31% due September 23, 2028; unsecured	85,011	84,257
Series O notes – 1.57% due September 23, 2031; unsecured	47,474	47,053
Series P notes – 4.27% due May 30, 2025; unsecured	85,000	85,000
Series Q notes – 4.35% due May 30, 2027; unsecured	85,000	85,000
Series R notes – 4.41% due May 30, 2029; unsecured	75,000	75,000
Series S notes – 4.46% due May 30, 2030; unsecured	75,000	75,000
Series T notes – 4.61% due May 30, 2033; unsecured	80,000	80,000
Finance leases (Note 5)	3,617	-
Unamortized debt issuance costs	(2,299)	(2,478)
Total long-term debt	970,866	864,899
Less: Current portion of long-term debt	101,643	-
Long-term debt, less current portion	\$ 869,223	\$ 864,899

The Notes

On October 1, 2013, Woodward entered into a note purchase agreement relating to the sale by Woodward of an aggregate principal amount of \$250,000 of its senior unsecured notes in a series of private placement transactions. Woodward issued the Series G, H and I Notes (the “First Closing Notes”) on October 1, 2013. Woodward issued the Series J, K and L Notes (the “Second Closing Notes” and together with the First Closing Notes, collectively the “USD Notes”) on November 15, 2013. The current portion of long-term debt as of March 31, 2020 includes the aggregate principal amount of the Series G and Series J notes, both of which mature on November 15, 2020, and the current portion of finance lease liabilities.

On September 23, 2016, Woodward and the BV Subsidiary each entered into note purchase agreements (the “2016 Note Purchase Agreements”) relating to the sale by Woodward and the BV Subsidiary of an aggregate principal amount of €160,000 of senior unsecured notes in a series of private placement transactions. Woodward issued €40,000 Series M Notes. The BV Subsidiary issued (a) €77,000 aggregate principal amount of the BV Subsidiary’s Series N Senior Notes (the “Series N Notes”) and (b) €43,000 aggregate principal amount of the BV Subsidiary’s Series O Senior Notes (the “Series O Notes” and together with the Series M Notes and the Series N Notes, the “2016 Notes”).

On May 31, 2018, Woodward entered into a note purchase agreement (the “2018 Note Purchase Agreement”) relating to the sale by Woodward of an aggregate principal amount of \$400,000 of senior unsecured notes comprised of (a) \$85,000 aggregate principal amount of its Series P Senior Notes (the “Series P Notes”), (b) \$85,000 aggregate principal amount of its Series Q Senior Notes (the “Series Q Notes”), (c) \$75,000 aggregate principal amount of its Series R Senior Notes (the “Series R Notes”), (d) \$75,000 aggregate principal amount of its Series S Senior Notes (the “Series S Notes”), and (e) \$80,000 aggregate principal amount of its Series T Senior Notes (the “Series T Notes”, and together with the Series P Notes, the Series Q Notes, the Series R Notes, the Series S Notes, the “2018 Notes,” and, together with the USD Notes and 2016 Notes, the “Notes”), in a series of private placement transactions.

In connection with the issuance of the 2018 Notes, the Company entered into cross-currency swap transactions in respect of each tranche of the 2018 Notes, which effectively reduced the interest rates on the Series P Notes to 1.82% per annum, the Series Q Notes to 2.15% per annum, the Series R Notes to 2.42% per annum, the Series S Notes to 2.55% per annum and the Series T Notes to 2.90% per annum (see Note 8, *Derivative instruments and hedging activities*).

Interest on the First Closing Notes, and the Series K and L Notes is payable semi-annually on April 1 and October 1 of each year until all principal is paid. Interest on the Series F Notes is payable semi-annually on April 15 and October 15 of each year until all principal is paid. Interest on the 2016 Notes is payable semi-annually on March 23 and September 23 of each year, until all principal is paid. Interest on the Series J Notes is payable quarterly on January 1, April 1, July 1 and October 1 of each year until all principal is paid. As of March 31, 2020, the Series J Notes bore interest at an effective rate of 2.94%. Interest on the 2018 Notes is payable semi-annually on May 30 and November 30 of each year until all principal is paid.

Debt Issuance Costs

Unamortized debt issuance costs associated with the Notes of \$2,299 as of March 31, 2020 and \$2,478 as of September 30, 2019 were recorded as a reduction in “Long-term debt, less current portion” in the Condensed Consolidated Balance Sheets. Unamortized debt issuance costs associated with Woodward’s existing and previous revolving credit agreements of \$2,541 as of March 31, 2020 and \$2,840 as of September 30, 2019 were recorded as “Other assets” in the Condensed Consolidated Balance Sheets. Amortization of debt issuance costs is included in operating activities in the Condensed Consolidated Statements of Cash Flows.

Note 16. Accrued liabilities

	March 31, 2020	September 30, 2019
Salaries and other member benefits	\$ 37,514	\$ 115,649
Warranties	21,770	27,309
Interest payable	13,735	13,808
Accrued retirement benefits	3,596	3,587
Current portion of loss reserve on contractual lease commitments ⁽¹⁾	-	1,245
Restructuring charges	-	507
Taxes, other than income	15,740	15,708
Net current contract liabilities (Note 3)	25,601	27,891
Liabilities held for sale (Note 10)	14,273	-
Other	22,330	22,423
	<u>\$ 154,559</u>	<u>\$ 228,127</u>

(1) See Note 17, *Other liabilities*, for more information on loss reserve on contractual lease commitments.

Warranties

Provisions of Woodward’s sales agreements include product warranties customary to these types of agreements. Accruals are established for specifically identified warranty issues that are probable to result in future costs. Warranty costs are accrued as revenue is recognized on a non-specific basis whenever past experience indicates a normal and predictable pattern exists. Changes in accrued product warranties were as follows:

	Three-Months Ended March 31, 2020	2019	Six-Months Ended March 31, 2020	2019
Warranties, beginning of period	\$ 18,927	\$ 20,156	\$ 27,309	\$ 20,130
Impact from adoption of ASC 606	-	-	-	594
Expense, net of recoveries	8,115	3,695	3,782	5,767
Reductions for settlement of previous warranty liabilities	(5,177)	(2,012)	(9,454)	(4,549)
Foreign currency exchange rate changes	(95)	(159)	133	(262)
Warranties, end of period	<u>\$ 21,770</u>	<u>\$ 21,680</u>	<u>\$ 21,770</u>	<u>\$ 21,680</u>

Restructuring charges

In the second quarter of fiscal year 2018, the Company recorded restructuring charges totaling \$17,013, the majority of which relate to the Company’s decision to relocate its Duarte, California operations to the Company’s newly renovated Drake Campus in Fort Collins, Colorado. The Duarte facility, which manufactures thrust reverser actuation systems, is part of the Company’s Aerospace segment. The remaining restructuring charges recognized during the fiscal year ended September 30, 2018 consist of workforce management costs related to aligning the Company’s industrial turbomachinery business, which is part of the Company’s Industrial segment, with the then current market conditions. All of the restructuring charges recorded during the fiscal year ended September 30, 2018 were recorded as nonsegment expenses.

In response to the ongoing global economic challenges resulting from COVID-19, the Company committed to a plan of termination that will result in restructuring charges, see Note 24, *Subsequent events*.

The summary of activity in accrued restructuring charges during the six-months ended March 31, 2020 and March 31, 2019 are as follows:

	Balances as of October 1, 2019	Charges (reductions)	Period Activity Cash receipts (payments)	Non-cash activity	Balances as of March 31, 2020
Workforce management costs associated with:					
Duarte plant relocation	\$ 440	\$ -	\$ (440)	\$ -	\$ -
Industrial turbomachinery business realignment	67	-	(24)	(43)	-
Total	<u>\$ 507</u>	<u>\$ -</u>	<u>\$ (464)</u>	<u>\$ (43)</u>	<u>\$ -</u>

	Balances as of October 1, 2018	Charges (reductions)	Period Activity Cash receipts (payments)	Non-cash activity	Balances as of March 31, 2019
Workforce management costs associated with:					
Duarte plant relocation	\$ 12,504	\$ -	\$ (648)	\$ -	\$ 11,856
Industrial turbomachinery business realignment	4,018	-	(2,249)	-	1,769
Total	<u>\$ 16,522</u>	<u>\$ -</u>	<u>\$ (2,897)</u>	<u>\$ -</u>	<u>\$ 13,625</u>

Note 17. Other liabilities

	March 31, 2020	September 30, 2019
Net accrued retirement benefits, less amounts recognized within accrued liabilities	\$ 109,294	\$ 111,257
Total unrecognized tax benefits	12,030	10,644
Noncurrent income taxes payable	18,322	20,251
Deferred economic incentives ⁽¹⁾	9,451	11,535
Loss reserve on contractual lease commitments ⁽²⁾	-	1,754
Net noncurrent contract liabilities ⁽³⁾	352,440	337,165
Other	33,084	13,482
	<u>\$ 534,621</u>	<u>\$ 506,088</u>

- (1) Woodward receives certain economic incentives from various state and local authorities related to capital expansion projects. Such amounts are initially recorded as deferred credits and are being recognized as a reduction to pre-tax expense over the economic lives of the related capital expansion projects.
- (2) In connection with the construction of a new production facility in Niles, Illinois, Woodward vacated a lease facility in Skokie, Illinois, and recorded a loss reserve on the estimated remaining contractual lease commitment, net of anticipated sublease income. As of September 30, 2019, the current portion of the accrued loss reserve on contractual lease commitments was included in "accrued liabilities" (see Note 16, *Accrued liabilities*). Woodward adopted ASC 842 on October 1, 2019, which requires that any pre-adoption liabilities related to exit or disposal cost obligations reduce the amount of the ROU asset recognized upon adoption. Accordingly, as of October 1, 2019, Woodward recognized a finance lease liability of \$2,688 consisting of the future lease component payments, with no corresponding ROU asset recognized, and reduced the current and noncurrent portions of the loss reserve on contractual lease commitments to zero. The amount of the finance lease liability will be reduced in an amount equal to the lease payments made over the remaining term of the lease, which ends in 2022. Future non-lease component payments on the lease and future sublease income received will be recognized in the periods in which they are earned.
- (3) See Note 3, *Revenue*, for more information on net noncurrent contract liabilities.

Note 18. Other (income) expense, net

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Equity interest in the earnings of the JV (Note 6)	\$ (4,681)	\$ (3,006)	\$ (7,893)	\$ (4,471)
Net (gain) loss on sales of assets ⁽¹⁾	(10)	121	(13,557)	200
Rent income	(324)	(77)	(575)	(144)
Net (gain) loss on investments in deferred compensation program	3,021	(1,656)	1,776	73
Other components of net periodic pension and other postretirement benefit, excluding service cost and interest expense	(2,926)	(3,251)	(5,973)	(6,494)
Other	(143)	(170)	(266)	(382)
	<u>\$ (5,063)</u>	<u>\$ (8,039)</u>	<u>\$ (26,488)</u>	<u>\$ (11,218)</u>

(1) Included in net (gain) loss on sale of assets for the six-months ended March 31, 2020 was the pre-tax gain on sale of Duarte real property in the amount of \$13,522 recognized in the first quarter of fiscal year 2020.

Note 19. Income taxes

U.S. GAAP requires the interim tax provision be determined as follows:

- At the end of each quarter, Woodward estimates the tax that will be provided for the current fiscal year stated as a percentage of estimated “ordinary income.” The term ordinary income refers to earnings from continuing operations before income taxes, excluding significant unusual or infrequently occurring items.

The estimated annual effective rate is applied to the year-to-date ordinary income at the end of each quarter to compute the estimated year-to-date tax applicable to ordinary income. The tax expense or benefit related to ordinary income in each quarter is equal to the difference between the most recent year-to-date and the prior quarter year-to-date computations.

- The tax effects of significant unusual or infrequently occurring items are recognized as discrete items in the interim period in which the events occur. The impact of changes in tax laws or rates on deferred tax amounts, the effects of changes in judgment about beginning of the year valuation allowances, and changes in tax reserves resulting from the finalization of tax audits or reviews are examples of significant unusual or infrequently occurring items that are recognized as discrete items in the interim period in which the events occur.

The determination of the annual effective tax rate is based upon a number of significant estimates and judgments. In addition, as a global commercial enterprise, Woodward’s tax expense can be impacted by changes in tax rates or laws, the finalization of tax audits and reviews, changes in the estimate of the amount of undistributed foreign earnings that Woodward considers indefinitely reinvested, and other factors that cannot be predicted with certainty. As such, there can be significant volatility in interim tax provisions.

Within the calculation of Woodward’s annual effective tax rate, Woodward has used assumptions and estimates that may change as a result of future guidance, interpretation, and rule-making from the IRS, the SEC, and the FASB and/or various other tax jurisdictions. Changes in corporate tax rates, the net deferred tax assets and/or liabilities relating to Woodward’s U.S. operations, the taxation of foreign earnings, and the deductibility of expenses contained in the Tax Act or other future tax reform legislation could have a material impact on Woodward’s future income tax expense.

The following table sets forth the tax expense and the effective tax rate for Woodward’s earnings before income taxes:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Earnings before income taxes	\$ 107,199	\$ 90,168	\$ 168,747	\$ 151,683
Income tax expense	15,881	12,589	24,056	24,984
Effective tax rate	14.8%	14.0%	14.3%	16.5%

The increase in the effective tax rate for the three-months ended March 31, 2020, compared to the three-months ended March 31, 2019 is primarily attributable to smaller favorable net excess income tax benefits from stock-based compensation. This increase is partially offset by a reduction of India's tax on dividend distributions, decreased foreign earnings in higher taxed jurisdictions, and the effects of lower full-year projected earnings in the second quarter of fiscal year 2020 compared to the full-year projected earnings in the first quarter of fiscal year 2020.

The decrease in the effective tax rate for the six-months ended March 31, 2020 compared to the six-months ended March 31, 2019 is primarily attributable to a reduction of India's tax on dividend distributions, a decrease to foreign earnings in higher taxed jurisdictions, and the tax benefit with the impairment of assets held for sale. This decrease is partially offset by a smaller favorable increase in the net excess income tax benefits from stock-based compensation.

Gross unrecognized tax benefits were \$11,613 as of March 31, 2020, and \$10,305 as of September 30, 2019. At March 31, 2020, the amount of the liability for unrecognized tax benefits that, if recognized, would impact Woodward's effective tax rate was \$5,022. At this time, Woodward does not believe it is reasonably possible that the liability for unrecognized tax benefits will decrease in the next twelve months. Woodward accrues for potential interest and penalties related to unrecognized tax benefits and all other interest and penalties related to tax payments in tax expense. Woodward had accrued gross interest and penalties of \$541 as of March 31, 2020 and \$437 as of September 30, 2019.

In March 2020, the U.S. Congress passed the "Coronavirus Aid, Relief, and Economic Security Act" (the "CARES Act"). The CARES Act provides relief from the certain economic impacts of COVID-19 to companies and individuals. Non-income tax impacts of the CARES Act include (i) extension of payment deadlines for certain U.S. payroll taxes and (ii) tax credits for certain qualifying costs incurred by the Company in connection with certain facility closures due to COVID-19. Non-income tax credits are generally recognized as a reduction to costs in the period in which the related costs the credits are intended to compensate are incurred. The non-income tax impacts of the CARES Act were insignificant to the results of operations for the three and six-months ended March 31, 2020.

Woodward's tax returns are subject to audits by U.S. federal, state, and foreign tax authorities, and these audits are at various stages of completion at any given time. Reviews of tax matters by authorities and lapses of the applicable statutes of limitation may result in changes to tax expense. Woodward's fiscal years remaining open to examination for U.S. Federal income taxes include fiscal years 2017 and thereafter. Woodward is currently under examination by the Internal Revenue Service ("IRS") for fiscal year 2017, which included a foreign tax credit carryback to fiscal year 2016. Woodward's fiscal years remaining open to examination for significant U.S. state income tax jurisdictions include fiscal years 2015 and thereafter. Woodward's fiscal years remaining open to examination in significant foreign jurisdictions include 2016 and thereafter.

Note 20. Retirement benefits

Woodward provides various retirement benefits to eligible members of the Company, including contributions to various defined contribution plans, pension benefits associated with defined benefit plans, postretirement medical benefits and postretirement life insurance benefits. Eligibility requirements and benefit levels vary depending on employee location.

Defined contribution plans

Most of the Company's U.S. employees are eligible to participate in the U.S. defined contribution plan. The U.S. defined contribution plan allows employees to defer part of their annual income for income tax purposes into their personal 401(k) accounts. The Company makes matching contributions to eligible employee accounts, which are also deferred for employee personal income tax purposes. Certain non-U.S. employees are also eligible to participate in similar non-U.S. plans.

Most of Woodward's U.S. employees with at least two years of service receive an annual contribution of Woodward stock, equal to 5% of their eligible prior year wages, to their personal Woodward Retirement Savings Plan accounts. Woodward fulfilled its annual Woodward stock contribution obligation using shares held in treasury stock by issuing a total of 124 shares of common stock for a value of \$14,748 in the second quarter of fiscal year 2020, compared to a total of 158 shares of common stock for a value of \$14,846 in the second quarter of fiscal year 2019.

The amount of expense associated with defined contribution plans was as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Company costs	\$ 8,910	\$ 9,086	\$ 17,614	\$ 17,457

Defined benefit plans

Woodward has defined benefit plans that provide pension benefits for certain retired employees in the United States, the United Kingdom, Japan, and Germany. Woodward also provides other postretirement benefits to its employees including postretirement medical benefits and life insurance benefits. Postretirement medical benefits are provided to certain current and retired employees and their covered dependents and beneficiaries in the United States and the United Kingdom. Life insurance benefits are provided to certain retirees in the United States under frozen plans, which are no longer available to current employees. A September 30 measurement date is utilized to value plan assets and obligations for all of Woodward's defined benefit pension and other postretirement benefit plans.

On October 26, 2018, the High Court of Justice in the United Kingdom (the "High Court") issued a ruling (the "Court Ruling") requiring defined benefit plan sponsors in the United Kingdom to equalize benefits payable to men and women under its United Kingdom defined benefit pension plans by amending those plans to increase the pension benefits payable to participants that accrued such benefits during the period from 1990 to 1997. In the Court Ruling, the High Court also provided details on acceptable alternative methods of amending plans to equalize the pension benefits. Although final guidance around the appropriate equalization methodology to be used has not yet been issued, Woodward has concluded that Court Ruling is applicable to its defined benefit pension plan in the United Kingdom and has made the necessary plan amendments. Woodward's current estimate of the impact of the Court Ruling in the amount of \$601 has been reflected in the United Kingdom defined benefit pension plan's obligation and assets as of September 30, 2019 and is being amortized as a net prior service cost beginning in fiscal year 2020. Woodward does not expect that any changes to the estimate resulting from final guidance around the appropriate equalization methodology to be used will be material to the United Kingdom defined benefit pension plan's obligation.

U.S. GAAP requires that, for obligations outstanding as of September 30, 2019, the funded status reported in interim periods shall be the same asset or liability recognized in the previous year end statement of financial position adjusted for (a) subsequent accruals of net periodic benefit cost that exclude the amortization of amounts previously recognized in other comprehensive income (for example, subsequent accruals of service cost, interest cost, and return on plan assets) and (b) contributions to a funded plan or benefit payments. However, U.S. GAAP further requires an interim re-measurement of plan assets and obligations when there are substantial plan amendments, settlements, or curtailments. Many variables, such as changes in interest rates, mortality rates, health care costs, investment returns and/or the market value of plan assets, can affect the funded status of our defined benefit pension and other postretirement benefit plans and cause volatility in the net periodic benefit cost and future funding requirements of the plans. Woodward has concluded that the changes in the market conditions as a result of the COVID-19 pandemic do not require an interim re-measurement as Woodward believes that the assumptions, such as the discount rate and expected return on plan assets, used to project the plans' assets and pension benefit liabilities are conservative, therefore resulting in a proper projection of Woodward's benefit obligations. Woodward further believes that as a result of the known impacts of the COVID-19 pandemic there are not any significant changes in plan assets, plan amendments, settlements, or curtailments that would result in an interim re-measurement.

The components of the net periodic retirement pension costs recognized are as follows:

	Three-Months Ended March 31,					
	United States		Other Countries		Total	
	2020	2019	2020	2019	2020	2019
Service cost	\$ 415	\$ 362	\$ 708	\$ 512	\$ 1,123	\$ 874
Interest cost	1,397	1,596	319	485	1,716	2,081
Expected return on plan assets	(3,086)	(2,997)	(708)	(672)	(3,794)	(3,669)
Amortization of:						
Net actuarial loss	357	155	260	73	617	228
Prior service cost	234	178	6	-	240	178
Net periodic retirement pension (benefit) cost	\$ (683)	\$ (706)	\$ 585	\$ 398	\$ (98)	\$ (308)
Contributions paid	\$ -	\$ -	\$ 601	\$ 509	\$ 601	\$ 509

	Six-Months Ended March 31,					
	United States		Other Countries		Total	
	2020	2019	2020	2019	2020	2019
Service cost	\$ 830	\$ 725	\$ 1,418	\$ 1,024	\$ 2,248	\$ 1,749
Interest cost	2,795	3,192	640	965	3,435	4,157
Expected return on plan assets	(6,173)	(5,993)	(1,540)	(1,334)	(7,713)	(7,327)
Amortization of:						
Net actuarial loss	715	309	521	144	1,236	453
Prior service cost	468	355	12	-	480	355
Net periodic retirement pension (benefit) cost	\$ (1,365)	\$ (1,412)	\$ 1,051	\$ 799	\$ (314)	\$ (613)
Contributions paid	\$ -	\$ -	\$ 1,732	\$ 1,063	\$ 1,732	\$ 1,063

The components of net periodic retirement pension costs other than the service cost and interest cost components are included in the line item “Other (income) expense, net” in the Condensed Consolidated Statements of Earnings. The interest cost component is included in the line item “Interest expense” in the Condensed Consolidated Statements of Earnings.

The components of the net periodic other postretirement benefit costs recognized are as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Service cost	\$ -	\$ 2	\$ 1	\$ 3
Interest cost	196	289	391	577
Amortization of:				
Net actuarial loss	11	14	23	28
Prior service cost (benefit)	-	(2)	1	(3)
Net periodic other postretirement cost	\$ 207	\$ 303	\$ 416	\$ 605
Contributions paid	\$ 176	\$ 704	\$ 521	\$ 1,077

The components of net periodic other postretirement benefit costs other than the service cost and interest cost components are included in the line item “Other (income) expense, net” in the Condensed Consolidated Statements of Earnings. The interest cost component is included in the line item “Interest expense” in the Condensed Consolidated Statements of Earnings.

The amount of cash contributions made to these plans in any year is dependent upon a number of factors, including minimum funding requirements in the jurisdictions in which Woodward operates and arrangements made with trustees of certain foreign plans. As a result, the actual funding in fiscal year 2020 may differ from the current estimate. Woodward estimates its remaining cash contributions in fiscal year 2020 will be as follows:

Retirement pension benefits:	
United States	\$ -
United Kingdom	199
Japan	-
Germany	481
Other postretirement benefits	2,716

Multiemployer defined benefit plans

Woodward operates multiemployer defined benefit plans for certain employees in both the Netherlands and Japan. The amounts of contributions associated with the multiemployer defined benefit plans were as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Company contributions	\$ 128	\$ 61	\$ 198	\$ 138

Note 21. Stockholders' equity

Stock repurchase program

In the first quarter of fiscal year 2017, Woodward's board of directors terminated the Company's prior stock repurchase program and replaced it with a new program for the repurchase of up to \$500,000 of Woodward's outstanding shares of common stock on the open market or in privately negotiated transactions over a three year period that ended in November 2019 (the "2017 Authorization"). Effective upon the expiration of the 2017 Authorization in November 2019, Woodward's board of directors approved a new program for the repurchase of up to \$500,000 of Woodward's outstanding shares of common stock on the open market or in privately negotiated transactions over a three year period that will end in 2022 (the "2019 Authorization"). In the first half of fiscal year 2020, Woodward purchased 124 shares of its common stock for \$13,346 under the 2019 Authorization. Woodward repurchased 456 shares of common stock for \$43,253 under the 2017 Authorization in the first half of fiscal year 2019.

Stock-based compensation

Provisions governing outstanding stock option awards are included in the 2017 Omnibus Incentive Plan, as amended from time to time (the "2017 Plan") and the 2006 Omnibus Incentive Plan (the "2006 Plan"), as applicable.

The 2017 Plan was approved by Woodward's stockholders in January 2017 and is a successor plan to the 2006 Plan. As of September 14, 2016, the effective date of the 2017 Plan, Woodward's board of directors delegated authority to administer the 2017 Plan to the compensation committee of the board of directors (the "Committee"), including, but not limited to, the power to determine the recipients of awards and the terms of those awards. On January 29, 2020, Woodward's stockholders approved an additional 1,000 shares of Woodward's common stock to be made available for future grants. Under the 2017 Plan, there were approximately 2,185 shares of Woodward's common stock available for future grants as of March 31, 2020 and 1,783 shares as of September 30, 2019.

Stock options

Woodward believes that stock options align the interests of its employees and directors with the interests of its stockholders. Stock option awards are granted with an exercise price equal to the market price of Woodward's stock at the date the grants are awarded, a ten year term, and generally have a four year vesting schedule at a rate of 25% per year.

The fair value of options granted is estimated as of the grant date using the Black-Scholes-Merton option-valuation model using the assumptions in the following table. Woodward calculates the expected term, which represents the average period of time that stock options granted are expected to be outstanding, based upon historical experience of plan participants. Expected volatility is based on historical volatility using daily stock price observations. The estimated dividend yield is based upon Woodward's historical dividend practice and the market value of its common stock. The risk-free rate is based on the U.S. treasury yield curve, for periods within the contractual life of the stock option, at the time of grant.

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Weighted-average exercise price per share	\$ 127.84	\$ 77.12	\$ 104.91	\$ 79.12
Weighted-average grant date market value of Woodward stock	\$ 127.84	\$ 77.12	\$ 104.91	\$ 79.12
Expected term (years)	6.5	6.5	6.4 - 8.7	6.5 - 8.7
Estimated volatility	25.7%	25.8% - 26.0%	25.7% - 30.1%	25.7% - 31.0%
Estimated dividend yield	0.9%	0.7% - 0.8%	0.6% - 0.9%	0.7% - 0.8%
Risk-free interest rate	1.7%	2.6%	1.6% - 1.7%	2.6% - 3.1%

The following is a summary of the activity for stock option awards during the three and six-months ended March 31, 2020:

	Three-Months Ended March 31, 2020		Six-Months Ended March 31, 2020	
	Number of options	Weighted-Average Exercise Price per Share	Number of options	Weighted-Average Exercise Price per Share
Options, beginning balance	5,766	\$ 59.97	5,387	\$ 53.73
Options granted	3	\$127.84	629	104.91
Options exercised	(137)	\$37.72	(363)	35.05
Options forfeited	(9)	\$86.77	(30)	83.20
Options, ending balance	5,623	\$60.50	5,623	60.50

Changes in non-vested stock options during the three and six-months ended March 31, 2020 were as follows:

	Three-Months Ended March 31, 2020		Six-Months Ended March 31, 2020	
	Number of options	Weighted-Average Grant Date Fair Value per Share	Number of options	Weighted-Average Grant Date Fair Value Per Share
Non-vested options outstanding, beginning balance	1,905	\$ 25.90	2,068	\$ 23.43
Options granted	3	\$33.44	629	28.57
Options vested	(32)	\$23.79	(800)	21.52
Options forfeited	(9)	\$25.68	(30)	25.34
Non-vested options outstanding, ending balance	1,867	\$25.95	1,867	25.95

Information about stock options that have vested, or are expected to vest, and are exercisable at March 31, 2020 was as follows:

	Number	Weighted- Average Exercise Price	Weighted- Average Remaining Life in Years	Aggregate Intrinsic Value
Options outstanding	5,623	\$ 60.50	6.0	\$ 56,006
Options vested and exercisable	3,755	47.67	4.8	56,006
Options vested and expected to vest	5,515	59.92	5.9	56,006

Restricted stock units

Restricted stock units have been granted to certain employees of L'Orange (at acquisition) and other current Woodward members in key management positions. Each restricted stock unit entitles the holder to one share of the Company's common stock upon vesting. The restricted stock units were granted with a two year vesting schedule and vest on the one and two year anniversaries of the grant date at a rate of 50% per year. The restricted stock units do not participate in dividends during the vesting period. The fair value of restricted stock units granted were estimated using the closing price of Woodward common stock on the grant date.

A summary of the activity for restricted stock units for the three and six-months ended March 31, 2020:

	Three-Months Ended March 31, 2020		Six-Months Ended March 31, 2020	
	Number	Weighted-Average Grant Date Fair Value per Unit	Number	Fair Value per Share
Beginning balance	9	\$ 91.55	9	\$ 91.55
Units granted	-	-	-	-
Units vested	-	-	-	-
Units forfeited	-	-	-	-
Ending balance	9	91.55	9	91.55

Stock-based compensation expense

Woodward recognizes stock-based compensation expense on a straight-line basis over the requisite service period. Pursuant to form stock option agreements used by the Company, with terms approved by the administrator of the applicable plan, the requisite service period can be less than the four year vesting period based on grantee's retirement eligibility. As such, the recognition of stock-based compensation expense associated with some stock option grants can be accelerated to a period of less than four years, including immediate recognition of stock-based compensation expense on the date of grant.

At March 31, 2020, there was approximately \$15,590 of total unrecognized compensation expense related to non-vested stock-based compensation arrangements, including both stock options and restricted stock awards. The pre-vesting forfeiture rates for purposes of determining stock-based compensation expense recognized were estimated to be 0% for members of Woodward's board of directors and 9% for all others. The remaining unrecognized compensation cost is expected to be recognized over a weighted-average period of approximately 2.2 years.

Note 22. Commitments and contingencies

Woodward is currently involved in claims, pending or threatened litigation or other legal proceedings, investigations and/or regulatory proceedings arising in the normal course of business, including, among others, those relating to product liability claims, employment matters, worker's compensation claims, contractual disputes, product warranty claims and alleged violations of various laws and regulations. Woodward accrues for known individual matters using estimates of the most likely amount of loss where it believes that it is probable the matter will result in a loss when ultimately resolved and such loss is reasonably estimable.

Legal costs are expensed as incurred and are classified in "Selling, general and administrative expenses" on the Condensed Consolidated Statements of Earnings.

Woodward is partially self-insured in the United States for healthcare and worker's compensation up to predetermined amounts, above which third party insurance applies. Management regularly reviews the probable outcome of related claims and proceedings, the expenses expected to be incurred, the availability and limits of the insurance coverage, and the established accruals for liabilities.

While the outcome of pending claims, legal and regulatory proceedings, and investigations cannot be predicted with certainty, management believes that any liabilities that may result from these claims, proceedings and investigations will not have a material effect on Woodward's liquidity, financial condition, or results of operations.

Note 23. Segment information

Woodward serves the aerospace and industrial markets through its two reportable segments – Aerospace and Industrial. When appropriate, Woodward's reportable segments are aggregations of Woodward's operating segments. Woodward uses operating segment information internally to manage its business, including the assessment of operating segment performance and decisions for the allocation of resources between operating segments.

The accounting policies of the reportable segments are the same as those of the Company. Woodward evaluates segment profit or loss based on internal performance measures for each segment in a given period. In connection with that assessment, Woodward generally excludes matters such as certain charges for restructuring, interest income and expense, certain gains and losses from asset dispositions, or other non-recurring and/or non-operationally related expenses.

A summary of consolidated net sales and earnings by segment follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Segment external net sales:				
Aerospace	\$ 474,236	\$ 482,954	\$ 948,161	\$ 875,841
Industrial	245,984	275,890	492,414	535,814
Total consolidated net sales	<u>\$ 720,220</u>	<u>\$ 758,844</u>	<u>\$ 1,440,575</u>	<u>\$ 1,411,655</u>
Segment earnings:				
Aerospace	\$ 117,638	\$ 101,722	\$ 210,549	\$ 174,576
Industrial	25,972	27,128	54,202	56,297
Nonsegment expenses	(28,131)	(27,496)	(79,202)	(56,497)
Interest expense, net	(8,280)	(11,186)	(16,802)	(22,693)
Consolidated earnings before income taxes	<u>\$ 107,199</u>	<u>\$ 90,168</u>	<u>\$ 168,747</u>	<u>\$ 151,683</u>

Segment assets consist of accounts receivable, inventories, property, plant, and equipment, net, goodwill, and other intangibles, net. A summary of consolidated total assets follows:

	March 31, 2020	September 30, 2019
Segment assets:		
Aerospace	\$ 1,892,325	\$ 1,900,657
Industrial	1,541,137	1,561,441
Unallocated corporate property, plant and equipment, net	105,881	114,887
Other unallocated assets	520,933	379,541
Consolidated total assets	<u>\$ 4,060,276</u>	<u>\$ 3,956,526</u>

Note 24. Subsequent events

The Company announced a series of actions in response to the ongoing global economic challenges and uncertainties attributable to the COVID-19 pandemic and the resulting impact on the broader macroeconomic environment and its business, including the following:

Termination of Merger Agreement

On January 12, 2020, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Hexcel Corporation (“Hexcel”) and Genesis Merger Sub, Inc., a wholly owned subsidiary of Woodward (“Merger Sub”). The Merger Agreement provided that, upon the terms and subject to the conditions set forth therein, Merger Sub would merge with and into Hexcel (the “Merger”), with Hexcel surviving the Merger as a wholly owned subsidiary of Woodward.

On April 5, 2020, the Company, Hexcel and Merger Sub entered into an agreement to terminate the Merger Agreement (such agreement, the “Termination Agreement”), without liability to Woodward, Hexcel, or any of their respective subsidiaries, directors or officers. The material circumstances surrounding the decision to enter into the Termination Agreement include the economic uncertainties in both the aerospace and industrial sectors resulting from the global health crisis caused by the COVID-19 pandemic. Neither party will be required to pay the other a termination fee as a result of the mutual decision to terminate the Merger Agreement. Woodward incurred transaction-related costs associated with the Merger (“Merger Transaction-Related Costs”) in the amount of \$15,965 for the first half of fiscal year 2020. Transaction-related costs associated with the Merger have been expensed as incurred.

Preferred Stock Rights

On April 6, 2020, the Company announced the authorization and declaration of a dividend distribution of one right (a “Right”) for each outstanding share of common stock, par value \$0.001455 per share (the “Common Stock”), of the Company to stockholders of record as of the close of business on April 16, 2020 (the “Record Date”). Each Right entitles the registered holder, upon the occurrence of specified events, to purchase from the Company one one-thousandth of a share of Series B Participating Preferred Stock, par value \$0.003 per share (the “Preferred Stock”), of the Company at an exercise price of \$480.00 (the “Exercise Price”). In addition, each Right entitles the registered holder (other than any person or group that acquires 15% or more of the Common Stock without the approval of the Board), following the occurrence of other specified events, to purchase Common Stock of the Company or stock of any acquirer of the Company at a substantial discount. The complete terms of the Rights are set forth in a Preferred Stock Rights Agreement (the “Rights Agreement”), dated as of April 5, 2020, between the Company and American Stock Transfer & Trust Company, LLC, as rights agent.

The Board adopted the Rights Agreement to protect stockholders from coercive or otherwise unfair takeover tactics. In general terms, it works by imposing a significant penalty upon any person or group that acquires 15% or more of the Common Stock without the approval of the Board. As a result, the overall effect of the Rights Agreement and the issuance of the Rights may be to render more difficult or discourage a merger, tender or exchange offer or other business combination involving the Company that is not approved by the Board. However, neither the Rights Agreement nor the Rights should interfere with any merger, tender or exchange offer or other business combination approved by the Board.

Dividend Reduction

On January 29, 2020, Woodward had increased its quarterly dividend from \$0.1625 to \$0.28 per share as part of a planned dividend yield target of the combined company under the now-terminated Merger Agreement. To further preserve financial flexibility, the Company announced on April 6, 2020, a reduction of its quarterly cash dividend to \$0.08125 per share.

Officer and Director Compensation Changes

On April 3, 2020, the Compensation Committee of the Board approved a reduction of Company officers' salaries through 2020 and the company-wide elimination of any annual bonus payments in 2020. The CEO's salary was reduced by 25% and all other officers' salaries were reduced by 10%. In addition, the Board approved on the same date a reduction of directors' base retainers by 25%, effective as of the next regular quarterly installment payment.

Workforce Management, Restructuring, and Cost Reductions

On April 6, 2020, the Company committed to a plan of termination (the "Termination Plan") in response to the ongoing global economic challenges resulting from the COVID-19 pandemic and its impact on the Company's business. The Termination Plan, which was predominantly implemented on April 8, 2020, involved the termination and/or furlough of employees and contractors at certain of the Company's operating facilities, primarily in the U.S. As a result of the Termination Plan, the Company anticipates that it will incur approximately \$18,000 of restructuring and related charges related to employee severance and benefits costs as of June 30, 2020, with the majority of the cash expenditures being paid by June 30, 2020.

Separately, as part of the responsive actions to the COVID-19 pandemic, the Company is implementing certain additional measures for the duration of 2020, as well as other, more temporary, measures. The measures for 2020 include a reduction in work hours for certain employees globally and company-wide overtime restrictions, as well as a hiring freeze, and a company-wide wage freeze, in addition to the aforementioned reduction of officers' salaries and directors' base retainers, and elimination of annual bonus payments. The more temporary measures involve various furloughs of employees, primarily at its aerospace fuel systems and controls facilities in Loves Park, Illinois that are expected to last up to approximately eight weeks.

The Termination Plan resulted in a decrease, on a full-time employee ("FTE") equivalent basis, of approximately 11% of the Company's total workforce. The work reductions will result, for the remainder of 2020, in a further incremental reduction of the Company's workforce of approximately 4%, also on an FTE-equivalent basis. Thus, the Company anticipates a combined workforce reduction of approximately 15% on an FTE-equivalent basis for the remainder of 2020. Due to their more temporary nature, the employee furloughs are not included in these workforce reduction calculations.

Additionally, the Company has implemented other specific actions to reduce costs with a reduction of working capital, capital expenditures, and non-essential costs.

Dividend Declaration

On April 29, 2020, the Board approved a cash dividend of \$0.08125 per share for the quarter, payable on June 1, 2020, for stockholders of record as of May 18, 2020.

Renewables Business Divestiture

On April 30, 2020, the Company completed the closing of its previously announced sale of the assets of its disposal groups.

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

(Amounts in thousands, except per share amounts)

Forward Looking Statements

This Quarterly Report on Form 10-Q, including "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements regarding future events and our future results within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are statements that are deemed forward-looking statements. These statements are based on current expectations, estimates, forecasts, and projections about the industries in which we operate and the beliefs and assumptions of management. Words such as "anticipate," "believe," "estimate," "seek," "goal," "expect," "forecast," "intend," "continue," "outlook," "plan," "project," "target," "strive," "can," "could," "may," "should," "will," "would," variations of such words, and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections of our future financial performance, our anticipated growth and trends in our businesses, and other characteristics of future events or circumstances are forward-looking statements. Forward-looking statements may include, among others, statements relating to:

- plans and expectations related to the now-terminated merger with Hexcel Corporation;
- the impacts on our business relating to the global COVID-19 pandemic, including the impacts thereof to supply and demand, and measures taken by governments and private industry in response;
- future sales, earnings, cash flow, uses of cash, and other measures of financial performance;
- trends in our business and the markets in which we operate, including expectations in those markets in future periods;
- our expected expenses in future periods and trends in such expenses over time;
- descriptions of our plans and expectations for future operations;
- our expectations with regard to the grounding of the Boeing 737 MAX aircraft, the related impact on our original equipment manufacturer and initial provision sales, and the aircraft's return to service;
- plans and expectations relating to the performance of our joint venture with General Electric Company;
- investments in new campuses, business sites and related business developments;
- the effect of economic trends or growth;
- the expected levels of activity in particular industries or markets and the effects of changes in those levels;
- the scope, nature, or impact of acquisition activity and integration of such acquisition into our business;
- the research, development, production, and support of new products and services;
- new business opportunities;
- restructuring and alignment costs and savings;
- our plans, objectives, expectations and intentions with respect to business opportunities that may be available to us;
- our liquidity, including our ability to meet capital spending requirements and operations;
- future repurchases of common stock;
- future levels of indebtedness and capital spending;
- the stability of financial institutions, including those lending to us;
- pension and other postretirement plan assumptions and future contributions; and
- our tax rate and other effects of the changes in U.S. federal tax law.

We undertake no obligation to revise or update any forward-looking statements for any reason, except as required by applicable law.

Unless we have indicated otherwise or the context otherwise requires, references in this Form 10-Q to "Woodward," "the Company," "we," "us," and "our" refer to Woodward, Inc. and its consolidated subsidiaries.

Except where we have otherwise indicated or the context otherwise requires, amounts presented in this Form 10-Q are in thousands, except per share amounts.

OVERVIEW

COVID-19 Pandemic

In March 2020, the World Health Organization (“WHO”) declared the COVID-19 outbreak a pandemic. In an effort to contain COVID-19 or slow its spread, governments around the world have also enacted various measures, including orders to close all businesses not deemed “essential,” isolate residents to their homes or places of residence, and practice social distancing when engaging in essential activities. In an effort to protect the health and safety of its employees, we have implemented enhanced cleaning protocols and adopted social distancing policies at all of our locations, including working from home, reducing the number of people working in locations at any one time, and suspending employee travel. We have taken steps to align our business with the unfavorable economic conditions, including the implementation of enhanced measures through our global supply chain and business unit management teams to ensure we are efficiently utilizing inventory on hand, as well as our internal processing capabilities. In addition, we have taken specific actions to reduce costs and implemented staff reductions, reduction in employee hours and/or salaries, furloughs, temporary layoffs, or a combination of these actions, at many of its locations.

We anticipate that these actions and the global health crisis caused by COVID-19 will negatively impact business activity across the globe. We have already experienced declining demand and the aerospace and industrial sectors have been significantly impacted economically, which has resulted in a rapid decline in order and shipments to customers. Outbreaks in various regions have also resulted in the extended shutdown of certain businesses in these regions, which has resulted in disruptions or delays to our supply chain. Although we have experienced certain impacts by the global emergence of the COVID-19 pandemic, the full extent it will have on our business is currently unknown. When COVID-19 is demonstrably contained, we anticipate an improvement in economic activity; however, the timing and degree of such improvement will depend on the rate, pace, and effectiveness of the containment efforts deployed by various national, state, and local governments.

We have been deemed an essential business and therefore have continued to operate during the pandemic. We will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, communities, business partners, suppliers, and shareholders, or as required by federal, state, or local authorities. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on the Company's customers, employees, and prospects, or on our financial results for the remainder of fiscal year 2020. For further information on the actions taken by the Company in response to the COVID-19 pandemic, see Note 24, *Subsequent events*.

Termination of Merger with Hexcel

On January 12, 2020, Woodward entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Hexcel Corporation (“Hexcel”) and Genesis Merger Sub, Inc., a wholly owned subsidiary of Woodward (“Merger Sub”). The Merger Agreement provided that, upon the terms and subject to the conditions set forth therein, Merger Sub would merge with and into Hexcel, with Hexcel surviving the merger as a wholly owned subsidiary of Woodward. In response to the economic uncertainties in both the aerospace and industrial sectors resulting from the global health crisis caused by the COVID-19 pandemic, Woodward and Hexcel entered into an agreement to terminate the Merger Agreement on April 5, 2020, with no liability to either party (the “Termination Agreement”). Neither party will be required to pay the other a termination fee as a result of the mutual decision to terminate the Merger Agreement. Merger Transaction-Related Costs have been expensed as incurred.

For further information on the Termination Agreement, refer to the Form 8-K filed by Woodward with the SEC on April 6, 2020.

Operational Highlights

Quarter to Date Highlights

Net sales for the second quarter of fiscal year 2020 were \$720,220, a decrease of 5.1% from \$758,844 for the second quarter of the prior fiscal year. Foreign currency exchange rates had an unfavorable impact on net sales of \$5,142 for the second quarter of fiscal year 2020, as compared to the same period of the prior year. Aerospace segment net sales for the second quarter of fiscal year 2020 were down 1.8% to \$474,236, compared to \$482,954 for the second quarter of the prior fiscal year. Industrial segment net sales for the second quarter of fiscal year 2020 were \$245,984, down 10.8% compared to \$275,890 for the second quarter of fiscal year 2019.

Net earnings for the second quarter of fiscal year 2020 were \$91,318, or \$1.41 per diluted share, compared to \$77,579, or \$1.20 per diluted share, for the second quarter of fiscal year 2019. Adjusted net earnings for the second quarter of fiscal year 2020 were \$104,052, or adjusted earnings per share of \$1.61 per diluted share, compared to \$90,257, or \$1.40 per diluted

share, for the second quarter of fiscal year 2019. Net earnings and adjusted net earnings for the quarter benefited from our decision to eliminate annual bonus payments for 2020, which resulted in the reversal in the second quarter of fiscal year 2020 of the annual bonus expense recorded in the first quarter of fiscal year 2020.

The effective tax rate in the second quarter of fiscal year 2020 was 14.8%, compared to 14.0% for the second quarter of the prior fiscal year.

Earnings before interest and taxes (“EBIT”) for the second quarter of fiscal year 2020 was \$115,479, up 13.9% from \$101,354 in the same period of fiscal year 2019. Earnings before interest, taxes, depreciation and amortization (“EBITDA”) for the second quarter of fiscal year 2020 was \$148,504, up 7.4% from \$138,211 for the same period of fiscal year 2019. Adjusted EBIT for the second quarter of fiscal year 2020 was \$132,401, up 10.8% from \$119,500 for the second quarter of fiscal year 2019. Adjusted EBITDA for the second quarter of fiscal year 2020 was \$165,426, up 12.3% from \$147,372 for the second quarter of fiscal year 2019.

Aerospace segment earnings as a percent of segment net sales were 24.8% in the second quarter of fiscal year 2020, compared to 21.1% in the second quarter of the prior fiscal year. Industrial segment earnings as a percent of segment net sales in the second quarter of fiscal year 2020 were 10.6%, compared to 9.8% in the second quarter of the prior fiscal year. There were no adjustments to Industrial segment earnings as a percent of segment net sales for the second quarter of fiscal year 2020, which were down compared to adjusted Industrial segment earnings as a percent of segment net sales of 13.1% for the second quarter of fiscal year 2019.

Adjusted net earnings, adjusted earnings per share, EBIT, adjusted EBIT, EBITDA, adjusted EBITDA, and adjusted Industrial segment earnings are non-U.S. GAAP financial measures. A description of these measures as well as a reconciliation of these non-U.S. GAAP financial measures to the closest U.S. GAAP financial measures can be found under the caption “Non-U.S. GAAP Measures” in this Item 2 – Management’s Discussion and Analysis of Financial Conditions and Results of Operations.

Year to Date Highlights

Net sales for the first half of fiscal year 2020 were \$1,440,575, an increase of 2.0% from \$1,411,655 for the first half of the prior fiscal year. Foreign currency exchange rates had an unfavorable impact on net sales of \$8,806 for the first half of fiscal year 2020. Aerospace segment net sales for the first half of fiscal year 2020 were up 8.3% to \$948,161, compared to \$875,841 for the first half of the prior fiscal year. Industrial segment net sales for the first half of fiscal year 2020 were \$492,414, down 8.1% compared to \$535,814 for the first half of fiscal year 2019.

Net earnings for the first half of fiscal year 2020 were \$144,691, or \$2.24 per diluted share, compared to \$126,699, or \$1.97 per diluted share, for the first half of fiscal year 2019. Adjusted net earnings for the first half of fiscal year 2020 were \$175,266, or adjusted earnings per share of \$2.71 per diluted share, compared to adjusted net earnings of \$151,903, or \$2.36 per diluted share, for the first half of fiscal year 2019.

The effective tax rate in the first half of fiscal year 2020 was 14.3%, compared to 16.5% for the first half of the prior fiscal year.

EBIT for the first half of fiscal year 2020 was \$185,549, up 6.4% from \$174,376 in the same period of fiscal year 2019. EBITDA for the first half of fiscal year 2020 was \$251,025, up 0.5% from \$249,874 for the same period of fiscal year 2019. Adjusted EBIT for the first half of fiscal year 2020 was \$226,851, up 8.5% from \$208,996 for the same period of fiscal year 2019. Adjusted EBITDA for the first half of fiscal year 2020 was \$292,327, up 9.9% from \$265,998 for the same period of fiscal 2019.

Aerospace segment earnings as a percent of segment net sales were 22.2% in the first half of fiscal year 2020, compared to 19.9% in the first half of the prior fiscal year. Industrial segment earnings as a percent of segment net sales in the first half of fiscal year 2020 were 11.0%, compared to 10.5% in the first half of the prior fiscal year. There were no adjustments to Industrial segment earnings as a percent of segment net sales for the first half of fiscal year 2020, which were down compared to adjusted Industrial segment earnings as a percent of segment net sales of 14.0% for the first half of fiscal year 2019.

Adjusted net earnings, adjusted earnings per share, EBIT, adjusted EBIT, EBITDA, adjusted EBITDA, and adjusted Industrial segment earnings are non-U.S. GAAP financial measures. A description of these measures as well as a reconciliation of these non-U.S. GAAP financial measures to the closest U.S. GAAP financial measures can be found under the caption “Non-U.S. GAAP Measures” in this Item 2 – Management’s Discussion and Analysis of Financial Conditions and Results of Operations.

Liquidity Highlights

Net cash provided by operating activities for the first half of fiscal year 2020 was \$52,179, compared to \$140,954 for the first half of fiscal year 2019. The decrease in net cash provided by operating activities in the first half of fiscal year 2020 compared to the first half of the prior fiscal year is primarily attributable to timing of certain cash payments for accounts payable, taxes due, and the timing of cash received from customers.

For the first half of fiscal year 2020, free cash flow, which we define as net cash flows from operating activities less payments for property, plant and equipment, was \$22,818, compared to \$86,613 for the first half of fiscal year 2019. Adjusted free cash flow, which we define as free cash flow plus the proceeds from the sale of real property at our former Duarte, California operations as well as excluding cash paid for merger and divestiture transaction costs, was \$54,659 for the first half of fiscal year 2020. A reconciliation of free cash flow and adjusted free cash flow, both non-U.S. GAAP financial measures, to the closest U.S. GAAP financial measures can be found under the caption "Non-U.S. GAAP Measures" in this Item 2 – Management's Discussion and Analysis of Financial Conditions and Results of Operations.

At March 31, 2020, we held \$102,849 in cash and cash equivalents, and had total outstanding debt of \$1,070,866. We have additional borrowing availability of \$745,476, net of outstanding letters of credit, under our revolving credit agreement. At March 31, 2020, we also had additional borrowing capacity of \$7,524 under various foreign lines of credit and foreign overdraft facilities.

RESULTS OF OPERATIONS

The following table sets forth consolidated statements of earnings data as a percentage of net sales for each period indicated:

	Three-Months Ended				Six-Months Ended			
	March 31, 2020	% of Net Sales	March 31, 2019	% of Net Sales	March 31, 2020	% of Net Sales	March 31, 2019	% of Net Sales
Net sales	\$ 720,220	100 %	\$ 758,844	100 %	\$ 1,440,575	100 %	\$ 1,411,655	100 %
Costs and expenses:								
Cost of goods sold	517,514	71.9	566,841	74.7	1,052,431	73.1	1,059,015	75.0
Selling, general, and administrative expenses	57,629	8.0	54,857	7.2	119,674	8.3	106,784	7.6
Research and development costs	34,661	4.8	43,831	5.8	71,507	5.0	82,698	5.9
Impairment of assets held for sale	-	-	-	-	37,902	2.6	-	-
Interest expense	8,756	1.2	11,480	1.5	17,765	1.2	23,358	1.7
Interest income	(476)	(0.1)	(294)	(0.0)	(963)	(0.1)	(665)	(0.0)
Other (income) expense, net	(5,063)	(0.7)	(8,039)	(1.1)	(26,488)	(1.8)	(11,218)	(0.8)
Total costs and expenses	613,021	85.1	668,676	88.1	1,271,828	88.3	1,259,972	89.3
Earnings before income taxes	107,199	14.9	90,168	11.9	168,747	11.7	151,683	10.7
Income tax expense	15,881	2.2	12,589	1.7	24,056	1.7	24,984	1.8
Net earnings	\$ 91,318	12.7	\$ 77,579	10.2	\$ 144,691	10.0	\$ 126,699	9.0

Other select financial data:

	March 31, 2020	September 30, 2019
Working capital	\$ 744,972	\$ 563,792
Short-term borrowings	100,000	220,000
Current portion of long-term debt	101,643	-
Total debt	1,070,866	1,084,899
Total stockholders' equity	1,907,694	1,726,741

Net Sales

Consolidated net sales for the second quarter of fiscal year 2020 decreased by \$38,624, or 5.1%, compared to the same period of fiscal year 2019. Consolidated net sales for the first half of fiscal year 2020 increased by \$28,920, or 2.0%, compared to the same period of fiscal year 2019.

Details of the changes in consolidated net sales are as follows:

	Three-Month Period	Six-Month Period
Consolidated net sales for the period ended March 31, 2019	\$ 758,844	\$ 1,411,655
Aerospace volume	(11,347)	57,707
Industrial volume	(24,230)	(34,269)
Noncash consideration	(2,591)	3,441
Effects of changes in price and sales mix	4,686	10,847
Effects of changes in foreign currency rates	(5,142)	(8,806)
Consolidated net sales for the period ended March 31, 2020	\$ 720,220	\$ 1,440,575

The decrease in consolidated net sales for the second quarter of fiscal year 2020 is primarily attributable to the decline in sales volume related to the global spread of the COVID-19 pandemic and extended grounding of the Boeing 737 MAX aircraft. The increase in consolidated net sales for the first half of fiscal year 2020 is primarily attributable to strength across commercial and defense original equipment manufacturer ("OEM") and aftermarket sales in the Aerospace segment during the first quarter of fiscal year 2020. In the Industrial segment, the decrease in net sales volumes is primarily attributable to softness in oil and gas and the associated aftermarket, compounded by the impact of the COVID-19 pandemic on China natural gas truck demand. We expect the volume decreases in consolidated net sales for the second quarter of fiscal year 2020 will continue in the third quarter of fiscal year 2020, as the most significant effects of the COVID-19 pandemic became apparent late in the second quarter of fiscal year 2020.

Costs and Expenses

Cost of goods sold decreased by \$49,327 to \$517,514, or 71.9% of net sales, for the second quarter of fiscal year 2020, from \$566,841, or 74.7% of net sales, for the second quarter of fiscal year 2019. Cost of goods sold decreased by \$6,584 to \$1,052,431, or 73.1% of net sales, for the first half of fiscal year 2020 from \$1,059,015, or 75.0% of net sales, for the first half of fiscal year 2019. The decrease in cost of goods sold in the second quarter of fiscal year 2020 is primarily attributable to the elimination of annual bonus for fiscal year 2020 and lower sales volume as a result of global disruption from the COVID-19 pandemic, partially offset by demand for military OEM and aftermarket programs in our Aerospace segment. The decrease in cost of goods sold for the first half of fiscal year 2020 is primarily attributable to the elimination of annual bonus for fiscal year 2020, as well as Duarte move-related costs and purchase accounting impacts related to the amortization of the backlog intangible acquired in connection with the acquisition of Woodward L'Orange which were recognized in the first half of fiscal year 2019, whereas there were no such costs recognized in the first half of fiscal year 2020.

Gross margin (as measured by net sales less cost of goods sold, divided by net sales) was 28.1% for the second quarter and 26.9% for the first half of fiscal year 2020, compared to 25.3% for the second quarter and 25.0% for the first half of fiscal year 2019. The increase in gross margin is primarily attributable to the elimination of annual bonus for fiscal year 2020, as well as Duarte move-related costs and purchase accounting impacts related to the amortization of the backlog intangible acquired in connection with the acquisition of Woodward L'Orange which were recognized in the second quarter and first half of fiscal year 2019, whereas there were no such costs recognized in the second quarter and first half of fiscal year 2020.

Selling, general and administrative expenses increased by \$2,772, or 5.1%, to \$57,629 for the second quarter of fiscal year 2020, compared to \$54,857 for the second quarter of fiscal year 2019. Selling, general, and administrative expenses increased by \$12,890, or 12.1%, to \$119,674 for the first half of fiscal year 2020, compared to \$106,784 for the first half of fiscal year 2019. Selling, general, and administrative expenses as a percentage of net sales increased to 8.0% for the second quarter of fiscal year 2020, compared to 7.2% for the second quarter of fiscal year 2019 and 8.3% for the first half of fiscal year 2020, compared to 7.6% for the first half of fiscal year 2019. The increase in selling, general and administrative expenses both in dollars and as a percentage of sales is primarily due to an increase in certain expenses to support ongoing company growth related to merger and divestiture activities, partially offset by the elimination of annual bonus for fiscal year 2020.

Research and development costs decreased by \$9,170, or 20.9%, to \$34,661 for the second quarter of fiscal year 2020, as compared to \$43,831 for the second quarter of fiscal year 2019. Research and development costs as a percentage of net sales decreased to 4.8% for the second quarter of fiscal year 2020, as compared to 5.8% for the second quarter of fiscal year 2019. Research and development costs decreased by \$11,191, or 13.5%, to \$71,507 for the first half of fiscal year 2020, as compared to \$82,698 for the first half of fiscal year 2019. Research and development costs decreased as a percentage of net sales to 5.0% for the first half of fiscal year 2020, as compared to 5.9% for the first half of fiscal year 2019. The decrease in research and development costs both in dollars and a percentage of net sales is primarily due to the elimination of annual bonus for fiscal year 2020. Our research and development activities also extend across almost all of our customer base, and we anticipate ongoing variability in research and development due to the timing of customer business needs on current and future programs.

Impairment of assets held for sale was a charge of \$37,902 recognized in the first half of fiscal year 2020. In the first quarter of fiscal year 2020, Woodward's board of directors approved a plan to divest Woodward's renewable power systems and protective relay businesses (collectively, the "Renewables Business"), which resulted in the recognition of the associated assets and liabilities as held for sale. Concurrently, Woodward determined that the assets held for sale, net of any liabilities held for sale, were impaired and recognized a non-cash impairment charge of \$37,902, representing the write down of the associated net assets held for sale to their fair market value as of December 31, 2019. Refer to Note 10, *Impairment of assets held for sale*, for further details.

Interest expense decreased by \$2,724, or 23.7%, to \$8,756 for the second quarter of fiscal year 2020, compared to \$11,480 for the second quarter of fiscal year 2019. Interest expense decreased as a percentage of net sales to 1.2% for the second quarter of fiscal year 2020, as compared to 1.5% for the second quarter of fiscal year 2019. Interest expense decreased by \$5,593, or 23.9%, to \$17,765 for the first half of fiscal year 2020, as compared to \$23,358 for the first half of fiscal year 2019. Interest expense as a percentage of net sales was 1.2% for the first half of fiscal year 2020, compared to 1.7% for the first half of fiscal year 2019. Since the second quarter of fiscal year 2019, we have paid the entire balance of two series of private placement notes totaling \$143,000 primarily using proceeds from our revolving credit facility. The revolving credit facility bears interest at a substantially lower rate than the private placement notes that were paid.

Other income decreased by \$2,976 to \$5,063 for the second quarter of fiscal year 2020, compared to \$8,039 for the second quarter of fiscal year 2019. Other income increased by \$15,270 to \$26,488 for the first half of fiscal year 2020, compared to \$11,218 for the first half of fiscal year 2019. The increase in other income in the first half of fiscal year 2020 compared to the first half of fiscal year 2019 was primarily due to a gain on the sale of a portion of our property in Duarte, California in the amount of \$13,552, all of which was recognized in the first quarter of fiscal year 2020.

Income taxes were provided at an effective rate on earnings before income taxes of 14.8% for the second quarter and 14.3% for the first half of fiscal year 2020, and 14.0% for the second quarter and 16.5% for the first half of fiscal year 2019.

The increase in the effective tax rate for the second quarter of fiscal year 2020 compared to the same period of the prior year is primarily attributable to smaller favorable net excess income tax benefits from stock-based compensation. This increase is partially offset by a reduction of India's tax on dividend distributions, decreased foreign earnings in higher taxed jurisdictions, and the effects of lower full-year projected earnings in the second quarter of fiscal year 2020 compared to the full-year projected earnings in the first quarter of fiscal year 2020.

The decrease in the effective tax rate for the first half of fiscal year 2020 compared to the same period of the prior fiscal year is primarily attributable to a reduction of India's tax on dividend distributions, a decrease to foreign earnings in higher taxed jurisdictions, and the tax benefit with the impairment of assets held for sale. This decrease is partially offset by a smaller favorable increase in the net excess income tax benefits from stock-based compensation.

Within the calculation of our annual effective tax rate, we have used assumptions and estimates that may change as a result of future guidance, interpretation, and rule-making from the IRS, the SEC, the FASB, and/or various other taxing jurisdictions. Changes in corporate tax rates, the net deferred tax assets and/or liabilities relating to our U.S. operations, the taxation of foreign earnings, and the deductibility of expenses contained in the Tax Act or other future tax reform legislation could have a material impact on our future U.S. tax expense.

Woodward's tax returns are subject to audits by U.S. federal, state, and foreign tax authorities, and these audits are at various stages of completion at any given time. Reviews of tax matters by authorities and lapses of the applicable statutes of limitation may result in changes to tax expense. Woodward's fiscal years remaining open to examination for U.S. Federal income taxes include fiscal years 2017 and thereafter. Woodward is currently under examination by the IRS for fiscal year 2017, which included a foreign tax credit carryback to fiscal year 2016. Woodward's fiscal years remaining open to examination for significant U.S. state income tax jurisdictions include fiscal years 2015 and thereafter. Woodward's fiscal years remaining open to examination in significant foreign jurisdictions include 2016 and thereafter.

In March 2020, the U.S. Congress passed the “Coronavirus Aid, Relief, and Economic Security Act” (the “CARES Act”). The CARES Act provides relief from the certain economic impacts of COVID-19 to companies and individuals. Non-income tax impacts of the CARES Act include (i) extension of payment deadline for certain U.S. payroll taxes and (ii) tax credits for certain qualifying costs incurred by the Company in connection with certain facility closures due to COVID-19. Non-income tax credits are generally recognized as a reduction to costs in the period in which the related costs the credits are intended to compensate are incurred. The non-income tax impacts of the CARES Act were insignificant to the results of operations for the second quarter and first half of fiscal year 2020 and we will continue to assess the impact in future periods.

Segment Results

The following table presents sales by segment:

	Three-Months Ended March 31,				Six-Months Ended March 31,				
	2020		2019		2020		2019		
Net sales:									
Aerospace	\$	474,236	65.8%	\$ 482,954	63.6 %	\$ 948,161	65.8 %	\$ 875,841	62.0 %
Industrial		245,984	34.2	275,890	36.4	492,414	34.2	535,814	38.0
Consolidated net sales	\$	720,220	100.0 %	\$ 758,844	100.0 %	\$ 1,440,575	100.0 %	\$ 1,411,655	100.0 %

The following table presents earnings by segment and reconciles segment earnings to consolidated net earnings:

	Three-Months Ended March 31,				Six-Months Ended March 31,			
	2020		2019		2020		2019	
Aerospace	\$	117,638	\$	101,722	\$	210,549	\$	174,576
Industrial		25,972		27,128		54,202		56,297
Nonsegment expenses		(28,131)		(27,496)		(79,202)		(56,497)
Interest expense, net		(8,280)		(11,186)		(16,802)		(22,693)
Consolidated earnings before income taxes		107,199		90,168		168,747		151,683
Income tax expense		(15,881)		(12,589)		(24,056)		(24,984)
Consolidated net earnings	\$	91,318	\$	77,579	\$	144,691	\$	126,699

The following table presents segment earnings as a percent of segment net sales:

	Three-Months Ended March 31,				Six-Months Ended March 31,			
	2020		2019		2020		2019	
Aerospace		24.8%		21.1%		22.2%		19.9%
Industrial		10.6%		9.8%		11.0%		10.5%

Aerospace

Aerospace segment net sales decreased by \$8,718, or 1.8%, to \$474,236 for the second quarter of fiscal year 2020, compared to \$482,954 for the second quarter of fiscal year 2019. Aerospace segment net sales increased by \$72,320, or 8.3%, to \$948,161 for the first half of fiscal year 2020, compared to \$875,841 for the same period of fiscal year 2019. The decrease in segment net sales for the second quarter of fiscal year 2020 as compared to the same periods of fiscal year 2019 was driven by decreased sales volume due to decreased passenger and cargo traffic from the global COVID-19 pandemic and extended grounding of the Boeing 737 MAX aircraft, partially offset by increased demand on military OEM and aftermarket programs as a result of higher defense spending.

Defense OEM sales increased in the second quarter of fiscal year 2020 compared to the second quarter of fiscal year 2019, driven primarily by increased military budgets and spending for smart weapons and fixed wing aircraft. Our defense aftermarket has also increased as the U.S. Government has prioritized the combat readiness of existing military programs on which we have content. Global conflicts and growing international demand for various other military programs continue to drive demand for defense aircraft, including fighter jets, transports, and both utility and attack rotorcraft, supported by our products and systems. Although we expect some ongoing variability in defense aftermarket sales due to the global COVID-19 pandemic and timing of continued maintenance needs and upgrade programs, we expect U.S. government funding for defense platforms on which we have content to be strong under the recently enacted defense budget.

Aerospace segment earnings increased by \$15,916, or 15.6%, to \$117,638 for the second quarter of fiscal year 2020, compared to \$101,722 for the second quarter of fiscal year 2019. Aerospace segment earnings increased by \$35,973, or 20.6%, to \$210,549 for the first half of fiscal year 2020, compared to \$174,576 for the first half of fiscal year 2019.

The net increase in Aerospace segment earnings for the second quarter and first half of fiscal year 2020 was due to the following:

	Three-Month Period	Six-Month Period
Earnings for the period ended March 31, 2019	\$ 101,722	\$ 174,576
Sales volume	(8,148)	22,095
Price, sales mix and productivity	3,811	7,105
Manufacturing expansion costs	-	(7,129)
Annual bonus	18,931	19,394
Other, net	1,322	(5,492)
Earnings for the period ended March 31, 2020	\$ 117,638	\$ 210,549

Aerospace segment earnings as a percentage of segment net sales were 24.8% for the second quarter and 22.2% for the first half of fiscal year 2020, compared to 21.1% for the second quarter and 19.9% for the first half of fiscal year 2019. Aerospace segment earnings in the second quarter of fiscal year 2020 decreased primarily due to the global spread of the COVID-19 pandemic and extended grounding of the Boeing 737 MAX aircraft, partially offset by favorable product mix and the elimination of annual bonus for fiscal year 2020. The increase in Aerospace segment earnings for the first half of fiscal year 2020 is primarily attributable to higher sales volume during the first quarter of fiscal year 2020 and the elimination of annual bonus for fiscal year 2020.

Industrial

Industrial segment net sales decreased by \$29,906, or 10.8%, to \$245,984 for the second quarter of fiscal year 2020, compared to \$275,890 for the second quarter of fiscal year 2019. Industrial segment net sales decreased by \$43,400, or 8.1%, to \$492,414 for the first half of fiscal year 2020, compared to \$533,814 for the same period of fiscal year 2019. Foreign currency exchange rates had an unfavorable impact on segment net sales of \$4,857 and \$8,560 for the second quarter and first half of fiscal year 2020, respectively.

The decrease in Industrial segment net sales in the second quarter and first half of fiscal year 2020 was primarily attributable to softness in the oil and gas market and the associated aftermarket, compounded by global disruption from the spread of the COVID-19 pandemic.

The demand for diesel fuel systems was negatively impacted by a softening of the oil and gas market amid a slowing global economy, pricing volatility and decreased capital investments related to reduced drilling activity, particularly within the North American fracking market. Although the near-term oil and gas market is softening, we believe the long-term oil and gas market remains promising, driven by growing demand from developing countries.

Sales of fuel systems for compressed natural gas (“CNG”) trucks in Asia were strong in the second quarter and first half of fiscal year 2020 as production rates for China 6 compliant trucks recovered from the large pre-buy of China 5 compliant trucks, which negatively impacted sales in previous quarters. We anticipate the market demand for natural gas trucks to continue as the Chinese government continues to enforce China 6 regulations and continues to incentivize the use of natural gas rather than diesel, and as Chinese access to natural gas improves. Although the industrial gas turbine market began to stabilize during the first half of fiscal year 2020 as global power demand increases and domestic upgrade initiatives transition from planning to execution, we expect to see volatility in demand due to the COVID-19 pandemic. Industrial gas turbine sales in the second quarter of fiscal year 2020 benefitted from the depletion of inventory in the market and increased Woodward content on certain newer industrial gas turbines. However, this was partially offset by the weakening demand in new turbine programs due to the economic uncertainty caused by the COVID-19 pandemic and we expect lower demand in industrial gas turbine sales until the outbreak is contained and demand stabilizes.

On January 31, 2020, we entered into an agreement to divest the Renewables Business. As a result of this divestiture, which closed on April 30, 2020, we expect future net sales attributable to the renewables market to be insignificant in future periods.

Industrial segment earnings decreased by \$1,156, or 4.3%, to \$25,972 for the second quarter of fiscal year 2020, compared to \$27,128 for the second quarter of fiscal year 2019. Adjusted Industrial segment earnings for the second quarter of fiscal year 2019, which exclude certain purchase accounting impacts related to the L’Orange Acquisition, were \$36,113. Segment earnings decreased by \$2,095, or 3.7%, to \$54,202 for the first half of fiscal year 2020, compared to \$56,297 for the same period of fiscal year 2019.

There were no adjustments to Industrial segment earnings in the second quarter or the first half of fiscal year 2020, which were down compared to adjusted Industrial segment earnings of \$36,113 and \$74,793 for the second quarter and first half of fiscal year 2019, respectively.

The net decrease in Industrial segment earnings for the second quarter and first half of fiscal year 2020 was due to the following:

	Three-Month Period	Six-Month Period
Earnings for the period ended March 31, 2019	\$ 27,128	\$ 56,297
Sales volume	(11,472)	(16,926)
Price, sales mix and productivity	(1,682)	(3,677)
L'Orange backlog amortization	6,066	12,880
Effects of changes in foreign currency rates	(1,797)	(2,428)
Annual bonus	9,555	11,845
Other, net	(1,826)	(3,789)
Earnings for the period ended March 31, 2020	\$ 25,972	\$ 54,202

Industrial segment earnings as a percentage of segment net sales were 10.6% for the second quarter and 11.0% for the first half of fiscal year 2020, compared to 9.8% for the second quarter and 10.5% for the first half of fiscal year 2019. The decrease in Industrial segment earnings in the second quarter and first half of fiscal year 2020 was primarily due to lower sales volume and unfavorable sales mix, partially offset by the amortization of the backlog intangible acquired in connection with the L'Orange acquisition that was recognized in both the second quarter and first half of fiscal year 2019, whereas no amortization of this backlog intangible was recognized in the second quarter and first half of fiscal year 2020. The decrease was further partially offset by the elimination of annual bonus for fiscal year 2020. There were no adjustments to Industrial segment earnings as a percentage of segment net sales for the second quarter or the first half of fiscal year 2020, which were down compared to adjusted Industrial segment earnings as a percentage of segment net sales of 13.1% for the second quarter and 14.0% for the first half of fiscal year 2019.

Nonsegment

Nonsegment expenses increased to \$28,131 for the second quarter of fiscal year 2020, compared to \$27,496 for the second quarter of fiscal year 2019. Included in nonsegment expenses for the second of fiscal year 2020 was merger and divestiture transaction costs of \$16,922. Included in nonsegment expenses for the second quarter of fiscal year 2019 were Duarte move-related costs in the amount of \$9,161. Excluding these charges from both 2020 and 2019, nonsegment expenses decreased in the second quarter of fiscal year 2020 compared to the second quarter of fiscal year 2019 primarily due to the elimination of annual bonus for fiscal year 2020.

Nonsegment expenses increased to \$79,202 for the first half of fiscal year 2020, compared to \$56,497 for the first half of fiscal year 2019. Included in nonsegment expenses for the first half of fiscal year 2020 were merger and divestiture transaction costs of \$16,922, and the impairment charge on assets held for sale associated with the divestiture of our Renewables Business in the amount of \$37,902, partially offset by a gain on the sale of a portion of our property in Duarte, California in the amount of \$13,552. Included in nonsegment expenses for the first half of fiscal year 2019 were Duarte move-related costs in the amount of \$16,124. Excluding these charges from both 2020 and 2019, nonsegment expenses decreased in the first half of fiscal year 2020 compared to the first half of fiscal year 2019 primarily due to the elimination of annual bonus for fiscal year 2020.

LIQUIDITY AND CAPITAL RESOURCES

Historically, we have satisfied our working capital needs, as well as capital expenditures, product development and other liquidity requirements associated with our operations, with cash flow provided by operating activities and borrowings under our credit facilities. Historically, we have also issued debt to supplement our cash needs, repay our other indebtedness, or finance our acquisitions. We expect that cash generated from our operating activities, together with borrowings under our revolving credit facility and other borrowing capacity, will be sufficient to fund our continuing operating needs, including capital expansion funding for the foreseeable future.

Our aggregate cash and cash equivalents were \$102,849 at March 31, 2020 and \$99,073 at September 30, 2019, and our working capital was \$744,972 at March 31, 2020 and \$563,792 at September 30, 2019. Of the cash and cash equivalents held at March 31, 2020, \$99,342 was held by our foreign locations and \$2,880 is restricted cash held in escrow related to the sale of property in Duarte, California. We are not presently aware of any significant restrictions on the repatriation of these funds, although a portion is considered indefinitely reinvested in these foreign subsidiaries. If these funds were needed to fund our

operations or satisfy obligations in the United States, then they could be repatriated and their repatriation into the United States may cause us to incur additional U.S. income taxes or foreign withholding taxes. Any additional U.S. taxes could be offset, in part or in whole, by foreign tax credits. The amount of such taxes and application of tax credits would be dependent on the income tax laws and other circumstances at the time these amounts are repatriated. Based on these variables, it is impractical to determine the income tax liability that might be incurred if these funds were to be repatriated. The additional uncertainty associated with the “The Tax Cuts and Jobs Act” enacted in December 2017 (the “Tax Act”) increases the impracticality of determining this income tax liability.

We do not believe the one-time repatriation tax on deferred foreign income resulting from the Tax Act, which is expected to be paid over an eight-year period that began in January 2019, will have a significant impact on our cash flows in any individual fiscal year.

Consistent with common business practice in China, our Chinese subsidiaries accept bankers’ acceptance notes from Chinese customers, in settlement of certain customer accounts receivable. Bankers’ acceptance notes are financial instruments issued by Chinese financial institutions as part of financing arrangements between the financial institution and a customer of the financial institution. Bankers’ acceptance notes represent a commitment by the issuing financial institution to pay a certain amount of money at a specified future maturity date to the legal owner of the bankers’ acceptance note as of the maturity date. The maturity date of bankers’ acceptance notes varies, but it is our policy to only accept bankers’ acceptance notes with maturity dates no more than 180 days from the date of our receipt of such draft. The issuing financial institution is the obligor, not our customers. Upon our acceptance of a bankers’ acceptance note from a customer, such customer has no further obligation to pay us for the related accounts receivable balance. We had bankers’ acceptance notes of \$40,030 at March 31, 2020 and \$42,171 at September 30, 2019 recorded as non-customer accounts receivable in our Condensed Consolidated Balance Sheets. We only accept bankers’ acceptance notes issued by banks that are believed to be creditworthy and to which the credit risks associated with the bankers’ acceptance notes are believed to be low.

In addition to our revolving credit facility, we have various foreign credit facilities, some of which are tied to net amounts on deposit at certain foreign financial institutions. These foreign credit facilities are reviewed annually for renewal. We use borrowings under these foreign credit facilities to finance certain local operations on a periodic basis. For further discussion of our revolving credit facility and our other credit facilities, see Note 15, *Credit facilities, short-term borrowings and long-term debt* in the Notes to the Condensed Consolidated Financial Statements in Part I, Item I of this Form 10-Q.

At March 31, 2020, we had total outstanding debt of \$1,070,866 consisting of various series of unsecured notes due between 2020 and 2033, amounts borrowed under our revolving credit facility, and our finance leases. Our Series G and Series J notes, both of which have an aggregate principal amount of \$50,000, mature on November 15, 2020. At March 31, 2020, we had additional borrowing availability of \$745,476 under our revolving credit facility, net of outstanding letters of credit, and additional borrowing availability of \$7,524 under various foreign credit facilities.

At March 31, 2020, we had \$242,901 of borrowings outstanding under our revolving credit facility, of which \$100,000 was classified as short-term borrowings based on our intent and ability to pay this amount in the next twelve months. Of these borrowings, as of March 31, 2020, \$215,300 is denominated in U.S. dollars and €25,000 is denominated in Euro. Revolving credit facility and short-term borrowing activity during the six-months ended March 31, 2020 were as follows:

Maximum daily balance during the period	\$	343,255
Average daily balance during the period	\$	282,419
Weighted average interest rate on average daily balance		2.70%

We believe we were in compliance with all our debt covenants as of March 31, 2020. Additionally, we do not believe the current known impacts of the COVID-19 pandemic will affect our ability to remain in compliance with our debt covenants. See Note 15, *Credit facilities, short-term borrowings and long-term debt* in the Notes to the Consolidated Financial Statements in Part II, Item 8 of our most recent Form 10-K, for more information about our covenants.

In addition to utilizing our cash resources to fund the working capital needs of our business, we evaluate additional strategic uses of our funds, including the repurchase of our common stock, payment of dividends, significant capital expenditures, consideration of strategic acquisitions and other potential uses of cash.

Our ability to service our long-term debt, to remain in compliance with the various restrictions and covenants contained in our debt agreements, and to fund working capital, capital expenditures and product development efforts will depend on our ability to generate cash from operating activities, which in turn is subject to, among other things, future operating performance as well as general economic, financial, competitive, legislative, regulatory, and other conditions, some of which may be beyond our control. We do not believe the current known impacts of the COVID-19 pandemic will impact our ability to satisfy our long-term debt obligations.

In the first quarter of fiscal year 2017, our board of directors terminated our prior stock repurchase program and replaced it with a new program for the repurchase of up to \$500,000 of Woodward's outstanding shares of common stock on the open market or in privately negotiated transactions over a three-year period in November 2019 (the "2017 Authorization"). Effective upon the expiration of the 2017 Authorization in November 2019, our board of directors approved a new program for the repurchase of up to \$500,000 of our outstanding shares of common stock on the open market or in privately negotiated transactions over a three-year period that will end in 2022 (the "2019 Authorization"). In the first half of fiscal year 2020, we repurchased 124 shares of our common stock for \$13,346 under the 2019 Authorization. We purchased 456 shares of our common stock for \$43,253 in the first half of fiscal year 2019 under the 2017 Authorization. Under the now-terminated Merger Agreement, we had been generally prohibited from repurchasing our common stock during the pendency of the Merger. With the termination of the Merger Agreement on April 5, 2020, share repurchases may continue. However, to preserve cash flow due to the economic uncertainties caused by the COVID-19 pandemic, we do not currently anticipate making significant share repurchases for the remainder of fiscal year 2020.

Associated with our decision to relocate our Duarte, California operations to the our newly renovated Drake Campus in Fort Collins, Colorado, which was finalized in fiscal year 2019, on December 30, 2019, we closed on the sale of one of two parcels of the Duarte real property and recorded a pre-tax gain on sale of assets in the amount of \$13,522. The carrying value of the remaining parcel of Duarte real estate is \$2,520 as of March 31, 2020, all of which we have identified as an asset held for sale as of that date. Based on an existing real property purchase agreement and current market conditions, we expect to record an additional gain on the subsequent sale of the remaining parcel of real estate, which is expected to close by September 30, 2020.

We believe that cash flows from operations, along with our contractually committed borrowings and other borrowing capability, will continue to be sufficient to fund anticipated capital spending requirements and our operations for the foreseeable future. However, we could be adversely affected if the financial institutions providing our capital requirements refuse to honor their contractual commitments, cease lending, or declare bankruptcy. We believe the lending institutions participating in our credit arrangements are financially stable and do not currently foresee adverse impacts to financial institutions providing our capital requirements as a result of the COVID-19 pandemic.

Cash Flows

	Six-Months Ended March 31,	
	2020	2019
Net cash provided by operating activities	\$ 52,179	\$ 140,954
Net cash provided by (used in) investing activities	2,131	(44,781)
Net cash provided by (used in) financing activities	(48,462)	(112,723)
Effect of exchange rate changes on cash and cash equivalents	(2,072)	(1,741)
Net change in cash and cash equivalents	3,776	(18,291)
Cash and cash equivalents, including restricted cash, at beginning of year	99,073	83,594
Cash and cash equivalents, including restricted cash, at end of period	\$ 102,849	\$ 65,303

Net cash flows provided by operating activities for the first half of fiscal year 2020 was \$52,179, compared to \$140,954 for the same period of fiscal year 2019. The decrease in net cash provided by operating activities in the first half of fiscal year 2020 compared to the first half of the prior fiscal year is primarily attributable to the timing of certain cash payments for accounts payable, taxes due, and the timing of payments received for accounts receivable in the first half of fiscal year 2020.

Net cash flows provided by investing activities for the first half of fiscal year 2020 was \$2,131, compared to net cash used in investing activities of \$44,781 in the first half of fiscal year 2019. The increase in cash flows from investing activities in the first half of fiscal year 2020 compared to the first half of the prior fiscal year is primarily due to proceeds in the amount of \$18,767 from the sale of a parcel of our Duarte real property and a decrease in payments for the purchase of property, plant and equipment.

Net cash flows used in financing activities for the first half of fiscal year 2020 was \$48,462, compared to net cash flows used in financing activities of \$112,723 in the first half of fiscal year 2019. During the first half of fiscal year 2020, we had net debt payments in the amount of \$20,317, compared to net payments in the amount of \$78,910 in the first half of fiscal year 2019. Also in the first half of fiscal year 2020, we repurchased 124 shares of our common stock for \$13,346, compared to the repurchase of 456 shares of our common stock for \$39,049 in the first half of fiscal year 2019. The common stock repurchases were made pursuant to a 10b-18 plan under the 2019 Authorization and a 10b5-1 plan under the 2017 Authorization.

Contractual Obligations

We have various contractual obligations, including obligations related to long-term debt, operating and finance leases, purchases, retirement pension benefit plans, and other postretirement benefit plans. These contractual obligations are summarized and discussed more fully in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our most recent Form 10-K.

Non-U.S. GAAP Financial Measures

Adjusted net earnings, adjusted earnings per share, adjusted Industrial segment earnings, EBIT, adjusted EBIT, EBITDA, adjusted EBITDA, free cash flow, and adjusted free cash flow are financial measures not prepared and presented in accordance with U.S. GAAP. However, we believe these non-U.S. GAAP financial measures provide additional information that enables readers to evaluate our business from the perspective of management.

Earnings based non-U.S. GAAP financial measures

Adjusted net earnings is defined by the Company as net earnings excluding, as applicable, (i) the gain on sale of assets associated with the sale of the Company's Duarte real property, (ii) the impairment of assets held for sale associated with the Company's divestiture of its Renewables Business, (iii) Duarte move related costs, (iv) the purchase accounting impacts related to the amortization of the backlog intangible acquired in connection with the acquisition of Woodward L'Orange on June 1, 2018 (the "L'Orange Acquisition"), (v) costs associated with the now-terminated merger agreement with Hexcel, and (vi) transaction costs associated with the divestiture of our Renewables Business. The Company believes that these excluded items are short-term in nature, not directly related to the ongoing operations of the business and therefore, the exclusion of them illustrates more clearly how the underlying business of Woodward is performing. Management uses adjusted net earnings to evaluate the Company's performance excluding these infrequent or unusual period expenses that are not necessarily indicative of the Company's operating performance for the period. Management defines adjusted earnings per share as adjusted net earnings, as defined above, divided by the weighted-average number of diluted shares of common stock outstanding for the period. Management uses both adjusted net earnings and adjusted earnings per share when comparing operating performance to other periods which may not have similar infrequent or unusual charges.

The reconciliation of net earnings and earnings per share to adjusted net earnings and adjusted earnings per share, respectively, for the three and six-months ended March 31, 2020 and March 31, 2019 is shown in the tables below.

	Three-Months Ended March 31,			
	2020		2019	
	Net Earnings	Earnings Per Share	Net Earnings	Earnings Per Share
Net earnings (U.S. GAAP)	\$ 91,318	\$ 1.41	\$ 77,579	\$ 1.20
Non-U.S. GAAP adjustments:				
Duarte move related costs, net of tax	-	-	6,829	0.11
Purchase accounting impact, net of tax ¹	-	-	5,849	0.09
Merger and divestiture transaction costs, net of tax ²	12,734	0.20	-	-
Total Non-U.S. GAAP adjustments	12,734	0.20	12,678	0.20
Adjusted net earnings (Non-U.S. GAAP)	\$ 104,052	\$ 1.61	\$ 90,257	\$ 1.40

(1) The purchase accounting impacts relate to the amortization of the backlog intangible, net of tax, acquired in connection with the L'Orange Acquisition.

(2) Merger and divestiture transaction costs include, as applicable, (i) transaction costs and integration planning costs associated with the now-terminated merger agreement with Hexcel and (ii) transaction costs associated with the divestiture of the Renewables Business.

	Six-Months Ended March 31,			
	2020		2019	
	Net Earnings	Earnings Per Share	Net Earnings	Earnings Per Share
Net earnings (U.S. GAAP)	\$ 144,691	\$ 2.24	\$ 126,699	\$ 1.97
Non-U.S. GAAP adjustments:				
Gain on sale of Duarte property, net of tax	(10,175)	(0.16)	-	-
Impairment of assets held for sale, net of tax	28,016	0.43	-	-
Duarte move related costs, net of tax	-	-	12,123	0.19
Purchase accounting impact, net of tax ¹	-	-	13,081	0.20
Merger and divestiture transaction costs, net of tax ²	12,734	0.20	-	-
Total non-U.S. GAAP adjustments	30,575	0.47	25,204	0.39
Adjusted net earnings (Non-U.S. GAAP)	\$ 175,266	\$ 2.71	\$ 151,903	\$ 2.36

(1) The purchase accounting impacts relate to the amortization of the backlog intangible, net of tax, acquired in connection with the L'Orange Acquisition.

(2) Merger and divestiture transaction costs include, as applicable, (i) transaction costs and integration planning costs associated with the now-terminated merger agreement with Hexcel and (ii) transaction costs associated with the divestiture of the Renewables Business.

Adjusted Industrial segment earnings is defined by the Company as Industrial segment earnings excluding the purchase accounting impacts related to the amortization of the backlog intangible acquired in connection with the L'Orange Acquisition. The Company believes that these purchase accounting impacts are short-term in nature, not related to the ongoing operations of the Industrial segment business and therefore, the exclusion of this item illustrates more clearly how the underlying business of Woodward's Industrial segment is performing.

The reconciliation of Industrial segment earnings to adjusted Industrial segment earnings for the three and six-months ended March 31, 2019 is shown in the table below; no such adjustments were made for the three and six-months ended March 31, 2020.

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Industrial segment earnings (U.S. GAAP)	\$ 25,972	\$ 27,128	\$ 54,202	\$ 56,297
Purchase accounting impacts ¹	-	8,985	-	18,496
Adjusted Industrial segment earnings (Non-U.S. GAAP)	\$ 25,972	\$ 36,113	\$ 54,202	\$ 74,793

(1) The purchase accounting impacts relate to the amortization of the backlog intangible, net of tax, acquired in connection with the L'Orange Acquisition.

Management uses EBIT to evaluate Woodward's performance without financing and tax related considerations, as these elements do not fluctuate with operating results. Management uses EBITDA in evaluating Woodward's operating performance, making business decisions, including developing budgets, managing expenditures, forecasting future periods, and evaluating capital structure impacts of various strategic scenarios. Securities analysts, investors and others frequently use EBIT and EBITDA in their evaluation of companies, particularly those with significant property, plant, and equipment, and intangible assets subject to amortization. The Company believes that EBIT and EBITDA are useful measures to the investor when measuring operating performance as they eliminate the impact of financing and tax expenses, which are non-operating expenses and may be driven by factors outside of the Company's operations, such as changes in tax laws or regulations, and, in the case of EBITDA, the noncash charges associated with depreciation and amortization. Further, as interest from financing, income taxes, depreciation and amortization can vary dramatically between companies and between periods, management believes that the removal of these items can improve comparability.

Adjusted EBIT and adjusted EBITDA represent further non-U.S. GAAP adjustments to EBIT and EBITDA, in each case adjusted to exclude, as applicable, (i) the gain on sale of assets associated with the sale of the Company's Duarte real property, (ii) the impairment of assets held for sale associated with the Company's divestiture of its Renewables Business, (iii) Duarte move related costs, (iv) the purchase accounting impacts related to the amortization of the backlog intangible acquired in connection with the L'Orange Acquisition, (v) costs associated with the now-terminated merger agreement with Hexcel, and (vi) transaction costs associated with the divestiture of our Renewables Business. As these gains and charges are infrequent or unusual items that can be variable from period to period and do not fluctuate with operating results, management believes that by removing these gains and charges from EBIT and EBITDA it improves comparability of past, present and future operating results and provides consistency when comparing EBIT and EBITDA between periods.

EBIT and adjusted EBIT reconciled to net earnings for the three and six-months ended March 31, 2020 and March 31, 2019 were as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Net earnings (U.S. GAAP)	\$ 91,318	\$ 77,579	\$ 144,691	\$ 126,699
Income tax expense	15,881	12,589	24,056	24,984
Interest expense	8,756	11,480	17,765	23,358
Interest income	(476)	(294)	(963)	(665)
EBIT (Non-U.S. GAAP)	115,479	101,354	185,549	174,376
Non-U.S. GAAP adjustments:				
Gain on sale of Duarte property	-	-	(13,522)	-
Impairment of assets held for sale	-	-	37,902	-
Duarte move related costs	-	9,161	-	16,124
Purchase accounting impacts ¹	-	8,985	-	18,496
Merger and divestiture transaction costs ²	16,922	-	16,922	-
Total non-U.S. GAAP adjustments	16,922	18,146	41,302	34,620
Adjusted EBIT (Non-U.S. GAAP)	\$ 132,401	\$ 119,500	\$ 226,851	\$ 208,996

(1) The purchase accounting impacts relate to the amortization of the backlog intangible, net of tax, acquired in connection with the L'Orange Acquisition.

(2) Merger and divestiture transaction costs include, as applicable, (i) transaction costs and integration planning costs associated with the now-terminated merger agreement with Hexcel and (ii) transaction costs associated with the divestiture of the Renewables Business.

EBITDA and adjusted EBITDA reconciled to net earnings for the three and six-months ended March 31, 2020 and March 31, 2019 were as follows:

	Three-Months Ended March 31,		Six-Months Ended March 31,	
	2020	2019	2020	2019
Net earnings (U.S. GAAP)	\$ 91,318	\$ 77,579	\$ 144,691	\$ 126,699
Income tax expense	15,881	12,589	24,056	24,984
Interest expense	8,756	11,480	17,765	23,358
Interest income	(476)	(294)	(963)	(665)
Amortization of intangible assets	9,848	16,693	19,753	34,165
Depreciation expense	23,177	20,164	45,723	41,333
EBITDA (Non-U.S. GAAP)	148,504	138,211	251,025	249,874
Non-U.S. GAAP adjustments:				
Gain on sale of Duarte property	-	-	(13,522)	-
Impairment of assets held for sale	-	-	37,902	-
Duarte move related costs	-	9,161	-	16,124
Merger and divestiture transaction costs ²	16,922	-	16,922	-
Total non-U.S. GAAP adjustments	16,922	9,161	41,302	16,124
Adjusted EBITDA (Non-U.S. GAAP)	\$ 165,426	\$ 147,372	\$ 292,327	\$ 265,998

(1) Merger and divestiture transaction costs include, as applicable, (i) transactions costs and integration planning costs associated with the now-terminated merger agreement with Hexcel and (ii) transaction costs associated with the divestiture of the Renewables Business.

The use of these non-U.S. GAAP financial measures is not intended to be considered in isolation of, or as a substitute for, the financial information prepared and presented in accordance with U.S. GAAP. As adjusted net earnings, adjusted net earnings per share, adjusted Industrial segment earnings, EBIT, adjusted EBIT, EBITDA, and adjusted EBITDA exclude certain financial information compared with net earnings, the most comparable U.S. GAAP financial measure, users of this financial information should consider the information that is excluded. Our calculations of adjusted net earnings, adjusted net earnings per share, adjusted Industrial segment earnings, EBIT, adjusted EBIT, EBITDA, and adjusted EBITDA may differ from similarly titled measures used by other companies, limiting their usefulness as comparative measures.

Cash flow-based non-U.S. GAAP financial measures

Management uses free cash flow, which is defined by the Company as net cash flows provided by operating activities less payments for property, plant and equipment, in reviewing the financial performance of and cash generation by Woodward's various business groups and evaluating cash levels. We believe free cash flow is a useful measure for investors because it portrays our ability to grow organically and generate cash from our businesses for purposes such as paying interest on our indebtedness, repaying maturing debt, funding business acquisitions, investing in research and development, purchasing our common stock, and paying dividends. In addition, securities analysts, investors, and others frequently use free cash flow in their evaluation of companies. Adjusted free cash flow represents a further non-U.S. GAAP adjustment to free cash flow to include cash proceeds from the sale of real property located at our former operations in Duarte, California and cash paid for merger and divestiture related transaction costs. Management believes that by including these items in free cash flow it better portrays the cash impact from our fiscal year 2018 decision to relocate our Duarte, California operations to the renovated Drake Campus in Fort Collins, Colorado and excludes the infrequent or unusual cash payments for merger and divestiture transaction costs not indicative of the Company's operating performance for the period.

The use of these non-U.S. GAAP financial measures is not intended to be considered in isolation of, or as substitutes for, the financial information prepared and presented in accordance with U.S. GAAP. Free cash flow and adjusted free cash flow do not necessarily represent funds available for discretionary use, and is not necessarily a measure of our ability to fund our cash needs. Our calculation of free cash flow and adjusted free cash flow may differ from similarly titled measures used by other companies, limiting their usefulness as a comparative measure.

Free cash flow and adjusted free cash flow reconciled to net cash provided by operating activities for the six-months ended March 31, 2020 and March 31, 2019 were as follows:

	Six-Months Ended March 31,	
	2020	2019
Net cash provided by operating activities (U.S. GAAP)	\$ 52,179	\$ 140,954
Payments for property, plant and equipment	(29,361)	(54,341)
Free cash flow (Non-U.S. GAAP)	22,818	86,613
Cash proceeds from the sale of the Duarte facility	18,767	-
Cash paid for merger and divestiture transaction costs	13,074	-
Adjusted free cash flow (Non-U.S. GAAP)	\$ 54,659	\$ 86,613

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires us to make judgments, assumptions and estimates that affect the amounts reported in the Condensed Consolidated Financial Statements and accompanying notes. Note 1, *Operations and summary of significant accounting policies*, to the Consolidated Financial Statements in our most recent Form 10-K, describes the significant accounting policies and methods used in the preparation of the Consolidated Financial Statements. Our critical accounting estimates, identified in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our most recent Form 10-K, include the discussion of estimates used for revenue recognition, purchase accounting, inventory valuation, depreciation and amortization, reviews for impairment of goodwill and other long-lived assets, postretirement benefit obligations, and our provision for income taxes. Such accounting policies and estimates require significant judgments and assumptions to be used in the preparation of the Condensed Consolidated Financial Statements included in this Form 10-Q, and actual results could differ materially from the amounts reported.

New Accounting Standards

From time to time, the FASB or other standards-setting bodies issue new accounting pronouncements. Updates to the FASB Accounting Standards Codification are communicated through issuance of an Accounting Standards Update.

To understand the impact of recently issued guidance, whether adopted or to be adopted, please review the information provided in Note 2, *New accounting standards* and Note 5, *Leases*, in the Notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Form 10-Q. Unless otherwise discussed, we believe that the impact of recently issued guidance, whether adopted or to be adopted in the future, is not expected to have a material impact on our Condensed Consolidated Financial Statements upon adoption.

Off-Balance Sheet Arrangements

As of March 31, 2020, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K promulgated by the SEC, that have or are reasonably likely to have a current or future effect on our financial condition, changes in our financial condition, revenues, or expenses, results of operations, liquidity, capital expenditures, or capital resources, that are material to investors.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of business, we have exposures to interest rate risk from our long-term and short-term debt and our postretirement benefit plans, and foreign currency exchange rate risk related to our foreign operations and foreign currency transactions. We are also exposed to various market risks that arise from transactions entered into in the normal course of business related to items such as the cost of raw materials and changes in inflation. Certain contractual relationships with customers and vendors mitigate risks from changes in raw material costs and foreign currency exchange rate changes that arise from normal purchasing and normal sales activities.

These market risks are discussed more fully in “Quantitative and Qualitative Disclosures About Market Risk” in Part II, Item 7A of our most recent Form 10-K. Except for the broad effects of the COVID-19 pandemic and the subsequent negative impact on the global economy and major financial markets, these market risks have not materially changed since the date our most recent Form 10-K was filed with the SEC.

Item 4. Controls and Procedures

We have established disclosure controls and procedures, which are designed to ensure that information required to be disclosed in reports filed or submitted under the Securities Exchange Act of 1934, as amended (the “Act”) is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Act is accumulated and communicated to management, including our Principal Executive Officer (Thomas A. Gendron, Chairman of the Board, Chief Executive Officer and President) and Principal Financial and Accounting Officer (Robert F. Weber, Jr., Vice Chairman and Chief Financial Officer), as appropriate, to allow timely decisions regarding required disclosures.

Thomas A. Gendron and Robert F. Weber, Jr., evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act), as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on their evaluations, they concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of March 31, 2020.

During the quarterly period ended December 31, 2019, we adopted the new lease guidance of ASC 842. We designed new business policies and procedures to assist in the adoption and ongoing application of the new guidance, provided training, and designed and applied new internal controls related to impacted accounting and disclosures. There have not been any other significant changes in our internal controls over financial reporting during the quarter ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

Woodward is currently involved in claims, pending or threatened litigation or other legal proceedings, investigations and/or regulatory proceedings arising in the normal course of business, including, among others, those relating to product liability claims, employment matters, worker’s compensation claims, contractual disputes, product warranty claims and alleged violations of various laws and regulations. Woodward accrues for known individual matters using estimates of the most likely amount of loss where it believes that it is probable the matter will result in a loss when ultimately resolved and such loss is reasonably estimable.

While the outcome of pending claims, legal and regulatory proceedings, and investigations cannot be predicted with certainty, management believes that any liabilities that may result from these claims, proceedings and investigations will not have a material effect on Woodward’s liquidity, financial condition, or results of operations.

Item 1A. Risk Factors

Investment in our securities involves risk. In addition to the risk factor identified below, an investor or potential investor should consider the risks summarized under the caption “Risk Factors” in Part I, Item 1A of our most recent Form 10-K and our Form 10-Q for the quarter ended December 31, 2019 when making investment decisions regarding our securities. There have been no material changes in the Company’s risk factors from the aforementioned Form 10-K, except as set forth in the below risk factor and that, due to the termination of the Merger Agreement, the risk factors set forth in the Form 10-Q for the quarter ended December 31, 2019 under “Risks Relating to the Proposed Merger with Hexcel” are no longer applicable.

Company Risk

The recent global COVID-19 pandemic has led to significant volatility in financial, commodities (including oil and gas) and other markets and industries (including the aviation industry) and has negatively affected the business and results of operations for the Company. We are unable to predict the extent to which the pandemic and related impacts will continue to adversely affect our business operations, financial performance, results of operations, financial position and the achievement of our strategic objectives.

In March 2020, the World Health Organization declared COVID-19 to be a global pandemic. The pandemic has led to significant volatility in financial, commodities (including oil and gas) and other markets and industries (including the aviation industry) and has negatively affected the business and results of operations for the Company. We have taken steps to align our business with the unfavorable economic conditions, including the implementation of enhanced measures through our operations management teams and global supply chain to ensure the Company is efficiently utilizing inventory on hand, as well as our internal processing capabilities. In addition, the Company has implemented staff reductions, reduction in employee hours, furloughs, and/or temporary layoffs, at many of its various locations. Given the ongoing and dynamic nature of the circumstances, it is difficult to predict the impact of the COVID-19 pandemic on our business, and there is no guarantee that efforts by the Company to address the adverse impacts of COVID-19 will be effective.

We serve international markets through manufacturing facilities, sales offices and representatives located in the Americas, Asia Pacific, Europe, and India and we rely on third-party suppliers in those areas. Outbreaks of COVID-19 in various regions have resulted in the extended shutdown of certain businesses in these regions, which has resulted in disruptions or delays to our supply chain. These include disruptions from the temporary closure of third-party suppliers, interruptions in product supply and restrictions on the export or shipment of our products. Furthermore, performance delays or interruptions, payment defaults or bankruptcies of our third-party suppliers have adversely affected our business.

The significant disruption or default by our suppliers has adversely impacted our sales and operating results, and we are unable to predict the magnitude of such impact. In addition, the pandemic has resulted in a widespread health crisis which has adversely affect the global economy, resulting in an economic downturn that has impacted demand for the products and services we provide, which may continue until the COVID-19 outbreak is contained.

We are heavily dependent on net sales to customers in the commercial aerospace industry. Approximately 65% of Woodward’s net sales for its fiscal year ended September 30, 2019 were derived from sales to customers in the aerospace industry, with 24% of such sales from Boeing. Actions by US federal, state and foreign governments to address the pandemic, including lockdowns, quarantines, border controls, travel restrictions and business venue closures, as well as changes in the propensity for the general public to travel by air, have had and are expected to continue to have, a significant adverse effect on the commercial aircraft markets and the demand for the products and services we provide. Furthermore, payment deferrals or defaults or bankruptcy of our customers may adversely affect our business, and may lead to additional charges, impairments and other adverse financial impacts.

In addition, the COVID-19 pandemic and resulting market volatility could result in significant effects on our liquidity, which could adversely affect our ability to remain in compliance with our debt covenants, satisfy our debt obligations, declare dividends or other distributions, and conduct share buybacks. Conditions in the financial and credit markets may also limit the availability of funding or increase the cost of funding, which could adversely affect our business, financial position and results of operations.

The ultimate impact of the COVID-19 pandemic on our operations and financial performance will depend on many factors that are not within our control, including, but not limited, to: governmental, business and individuals’ actions that have been and continue to be taken in response to the pandemic (including restrictions on travel and transport and workforce pressures); the impact of the pandemic and actions taken in response on global and regional economies, travel, and economic activity; the availability of federal, state, local or non-U.S. funding programs; general economic uncertainty in key global markets and financial market volatility; global economic conditions and levels of economic growth; and the pace of recovery when the COVID-19 pandemic subsides.

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

None.

Issuer Purchases of Equity Securities

(In thousands, except for shares and per share amounts)

	Total Number of Shares Purchased	Weighted Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number (or Approximate Dollar Value) of Shares that may yet be Purchased under the Plans or Programs at Period End (1)
January 1, 2020 through January 31, 2020	52	\$ 116.31	-	\$ 500,000
February 1, 2020 through February 29, 2020 (2)	39	103.20	-	500,000
March 1, 2020 through March 31, 2020 (2)	125,102	107.24	123,920	486,654

(1) In November 2019, our board of directors approved a stock repurchase program for the repurchase of up to \$500,000 of Woodward's outstanding shares of common stock on the open market or in privately negotiated transactions over a three-year period that will end in November 2022.

(2) Under a trust established for the purposes of administering the Woodward Executive Benefit Plan, 52 shares of common stock were acquired in January 2020, 39 shares of common stock were acquired in February 2020, and 175 shares of common stock were acquired in March 2020 on the open market related to the deferral of compensation by certain eligible members of Woodward's management who irrevocably elected to invest some or all of their deferred compensation in Woodward common stock. In addition, 1,007 shares of common stock were acquired in March 2020, on the open market related to the reinvestment of dividends for shares of treasury stock held for deferred compensation. Shares owned by the trust, which is a separate legal entity, are included in "Treasury stock held for deferred compensation" in the Condensed Consolidated Balance Sheets.

Item 6. Exhibits

Exhibits filed as part of this Report are listed in the Exhibit Index.

**WOODWARD, INC.
EXHIBIT INDEX**

<u>Exhibit Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger, dated as of January 12, 2020, by and among Woodward, Inc., Hexcel Corporation, and Genesis Merger Sub, Inc.
3.1	Bylaws of Woodward, Inc., as amended and restated on January 11, 2020
4.1	Preferred Stock Rights Agreement, dated as of April 5, 2020, by and between Woodward, Inc. and American Stock Transfer & Trust Company, LLC, as Rights Agent
10.1	Mutual Termination Agreement, dated as of April 5, 2020, by and among Woodward, Inc., Hexcel Corporation and Genesis Merger Sub, Inc.
†* 10.2	Jonathan W. Thayer Separation and Release Agreement, dated as of April 28, 2020
* 31.1	Rule 13a-14(a)/15d-14(a) certification of Thomas A. Gendron
* 31.2	Rule 13a-14(a)/15d-14(a) certification of Robert F. Weber, Jr.
* 32.1	Section 1350 certifications
* 101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Earnings, (iii) Condensed Consolidated Statements of Comprehensive Earnings, (iv) Condensed Consolidated Statements of Cash Flows, (v) Condensed Consolidated Statements of Stockholders' Equity, and (vi) Notes to Condensed Consolidated Financial Statements.
* 104	Cover page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

† Management contract or compensatory plan or arrangement.

* Filed as an exhibit to this Report

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.

WOODWARD, INC.

Date: May 11, 2020

/s/ Thomas A. Gendron

Thomas A. Gendron
Chairman of the Board, Chief Executive Officer, and President
(on behalf of the registrant and as the registrant's Principal Executive Officer)

Date: May 11, 2020

/s/ Robert F. Weber, Jr.

Robert F. Weber, Jr.
Vice Chairman and Chief Financial Officer
(on behalf of the registrant and as the registrant's
Principal Financial and Accounting Officer)

SEPARATION AND RELEASE AGREEMENT

This Separation and Release Agreement (the “Agreement”) is entered into between Woodward, Inc. (the “Company”) and Jonathan W. Thayer (“Executive”) (the Company and Executive will be collectively referred to hereinafter as the “Parties”).

WHEREAS, Executive was employed by the Company;

WHEREAS, Executive separated from such employment, effective April 13, 2020 (the “Termination Date”);

WHEREAS, the Parties seek to fully and finally settle all existing claims, whether or not now known, arising out of Executive’s employment and termination of employment on the terms set forth herein;

NOW THEREFORE, the Parties mutually understand and agree as follows:

1. **Payments and Consideration.** In consideration for Executive's execution of this Agreement, and subject to the fulfillment of all of its terms and conditions by Executive, and provided Executive has not exercised his right of revocation as described in Article 13, Company and Executive agree as follows:

(a) **Severance Pay.** No later than ten (10) business days following the completion of the Revocation Periods described in Article 13, the Company shall pay Executive a lump sum equal to the gross amount of Five Hundred Seventy-Five Thousand dollars (\$575,000.00) (the “Severance Pay”), less applicable taxes and other lawful withholdings.

(b) **Cash Long Term Incentive Plan (the “Cash LTI Plan”).** The Executive shall be eligible for treatment as a Retired member as defined in and pursuant to the Administrative Guidelines for the Cash LTI Plan, with an imputed retirement date of September 30, 2020 (the “Cash LTI Consideration”). Accordingly, Executive will receive a cash payment for each of the three performance cycles of which the Executive was a participant (and through September 30, 2020), equal to the pro-rated amounts (based on remaining term of each cycle as of such date) of actual payout(s), if any, for each such cycle, payable in each case within five (5) business days following the date payment is made to Participants for the applicable Cash LTI cycle. Proration pursuant to this agreed upon cash payment shall be consistent with the methodology used for proration under the Cash LTI Administrative Guidelines for Participant Retirements in accordance with section 5.5 thereunder. For the avoidance of doubt, for the FY18-FY20 cycle, the proration factor shall be 58.33% (21 of 36 months) of any earned award for that cycle; for the FY19-FY21 cycle, the proration factor shall be 58.33% (21 of 36 months); and for the FY20-FY22 cycle, the proration factor shall be 33.33% (12 of 36 months). Executive is responsible for notification to the company in any change of address or banking information in order to make any award payment timely.

(c) Outstanding Stock Options. All stock options previously awarded to Executive shall continue to be exercisable in accordance with the terms of the Woodward 2017 Omnibus Incentive Plan, and the respective associated stock option agreements (the “Award Agreements”). Notwithstanding the foregoing, in consideration for the Executive’s agreement to the restrictive covenants provided in Article 7 hereof, (i) all of Executive’s unvested stock options previously granted to Executive, other than the October 2019 grant, shall continue to fully vest following the Termination Date in accordance with their respective original vesting schedules, notwithstanding anything to the contrary contained in the Award Agreements; (ii) all of Executive’s unexercised stock options granted to Executive prior to September 30, 2019 (which for the avoidance of doubt includes such options that are vested and that are unvested) shall continue to be exercisable for their respective remaining 10-year terms as though the Executive had continued his employment for such full duration, notwithstanding anything to the contrary contained in the Award Agreements (such revised vesting and exercise periods, the “Stock Option Consideration”). For the avoidance of doubt, the stock options granted to Executive on October 1, 2019 shall lapse and be forfeited pursuant to the terms of the applicable Award Agreement.

(d) Relocation Benefits. Executive will be reimbursed for unwinding his recent relocation from Baltimore, Maryland, to Fort Collins, Colorado, specifically, with regard to the personal property and the sole real property, in each case, as acquired by Executive for his Fort Collins residence, as follows:

(i) With respect to such real property, the Company shall undertake, for a period of 90 days from and after the Termination Date, to sell the real property on behalf of Executive through a third party contractor or agency providing relocation services as may be selected by the Company at its discretion. In the event of a sale hereunder, the Company shall remit to Executive an amount equal to the sum of (A) the net proceeds received from such sale, and (B) the shortfall, if any, between (x) Executive’s purchase price of the real property (including any improvements thereto) and (y) the net sale proceeds. For purposes of this subsection (i), Executive shall be entitled to establish a minimum sale price for the real property; provided, however, that such minimum sale price shall not be greater than the Executive’s purchase price (including any improvements thereto). In the event such real property is not sold within 90 days following the Termination Date, the Company shall, no later than 10 business days thereafter, purchase the real property from Executive at an amount equal to his purchase price (including any improvements thereto). All transaction fees associated with such sale, and all carrying costs of the real property (i.e., mortgage interest, property insurance, and HOA fees) between the Termination Date and the sale date (whether pursuant to a third party sale or an outright sale to the Company), shall be borne by the Company.

(ii) With respect to such personal property, the Company shall, no later than 10 business days following the Termination Date, purchase the property from Executive at an amount equal to his purchase price for such personal property.

(e) Healthcare Benefits. In lieu of providing Executive with any premiums or insurance coverage under any continued healthcare benefits, including the Consolidated Omnibus Budget Reconciliation Act (“COBRA”) or applicable state law, or other similar benefits, Company will pay Executive, no later than ten (10) business days following the completion of the Revocation Periods described in Article 13, the lump sum amount of Thirty-Seven Thousand dollars (\$37,000.00), approximating the pre-tax value of such coverage for a 12-month period (the “Healthcare Consideration”).

(f) Outplacement Services. Executive will be eligible to receive outplacement services through Lee Hecht Harrison upon the Effective Date of this Agreement for a period of 12 months.

(g) Elimination of FY20 Bonus. For the avoidance of doubt, Executive shall not be entitled to any cash payments under the fiscal year 2020 Woodward Variable Incentive Plan (“WVIP”), as the Company has elected to eliminate all such WVIP payments on an enterprise-wide basis.

(h) Consideration. Executive acknowledges that the Severance Pay, the Cash LTI Consideration, the Stock Option Consideration, the Relocation Benefits, the Healthcare Consideration, and other consideration set forth herein exceeds that to which Executive would otherwise be entitled upon termination of employment without providing a release of claims under the normal operation of the Company’s benefit plans, policies, and/or practices. Irrespective of whether Executive signs this Agreement, Executive will be paid all compensation earned through the Termination Date.

2. Waiver and Release. For valuable consideration from the Company, receipt of which is hereby acknowledged, Executive waives, releases, and forever discharges the Company and its current and former parents, subsidiaries, affiliates, divisions, shareholders, owners, members, officers, directors, attorneys, agents, employees, insurers, successors, and assigns, and the Company’s parents’, subsidiaries’ and affiliates’ divisions, shareholders, owners, members, officers, directors, attorneys, agents, employees, insurers, successors, and assigns (collectively referred to as the “Company Releasees”) from any and all rights, causes of action, claims or demands, whether express or implied, known or unknown, that arise on or before the date that Executive executes this Agreement, which Executive has or may have against the Company and/or the Company Releasees, including, but not limited to, any rights, causes of action, claims, or demands relating to or arising out of the following:

(a) anti-discrimination, anti-harassment, and anti-retaliation laws, such as the Age Discrimination in Employment Act, the Older Workers Benefit Protection Act, and Executive Order 11141, which prohibit employment discrimination based on age; Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1866 (42 U.S.C. § 1981), the Equal Pay Act, and Executive Order 11246, which prohibit discrimination based on race, color, national origin, religion, or sex (including sexual harassment or sexual abuse); the Genetic Information Nondiscrimination Act, which prohibits discrimination on the basis of genetic information; the Americans With Disabilities Act and Sections 503 and 504 of the Rehabilitation Act of 1973, which prohibit discrimination based on disability; and any other federal, state, or local laws prohibiting employment or wage discrimination; and

(b) other employment laws, such as the Worker Adjustment and Retraining Notification Act, which requires that advance notice be given of certain workforce reductions; the Executive Retirement Income Security Act of 1974, which, among other things, protects employee benefits; the Family and Medical Leave Act, which requires employers to provide leaves of absence under certain circumstances; state laws which regulate wage and hour matters, including all forms of compensation, vacation pay, sick pay, compensatory time, overtime, commissions, bonuses, and meal and break periods; state family, medical, and military leave laws, which require employers to provide leaves of absence under certain circumstances; the Sarbanes Oxley Act; and any other federal, state, or local laws relating to employment which—to the extent Executive performed work for the Company in West Virginia—would include, without limitation, the West Virginia Human Rights Act, and—to the extent Executive performed work for the Company in New Jersey—would include, without limitation, the New Jersey Conscientious Executive Protection Act; and

(c) tort, contract, and quasi-contract claims, such as claims for wrongful discharge, physical or personal injury, sexual harassment or sexual abuse, intentional or negligent infliction of emotional distress, fraud, fraud in the inducement, negligent misrepresentation, defamation, invasion of privacy, interference with contract or with prospective economic advantage, breach of express or implied contract, unjust enrichment, promissory estoppel, breach of covenants of good faith and fair dealing, negligent hiring, negligent supervision, negligent retention, and similar or related claims;

(d) all remedies of any type, including, but not limited to, damages and injunctive relief, in any action that may be brought on Executive's behalf against the Company and/or the Company Releasees by any government agency or other entity or person;

(e) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received or to be received by Executive, whether as a result of this Agreement or otherwise;

(f) any claim related to any decision(s), for whatever reason, by any of the Woodward Releasees to not re-hire Executive at any time in the future; and

(g) any and all claims for attorneys' fees and costs.

Executive understands that Executive is releasing claims about which Executive may not know anything at the time Executive executes this Agreement. Executive acknowledges that it is Executive's intent to release such unknown claims, even though Executive recognizes that someday Executive might learn new facts relating to Executive's employment or learn that some or all of the facts Executive currently believes to be true are untrue, and even though Executive might then regret having signed this Agreement. Nevertheless, Executive acknowledges Executive's awareness of that risk and agrees that this Agreement shall remain effective in all respects in any such case. Executive expressly waives all rights Executive might have under any laws, including, without limitation, the laws set forth in Exhibit A to this Agreement, intended to protect Executive from waiving unknown claims.

3. Excluded Claims. Notwithstanding anything to the contrary in this Agreement, the waiver and release contained in this Agreement shall exclude awards to Executive from or by a government agency for providing information, as well as any rights or claims that (a) may arise after the date on which Executive executes this Agreement; or (b) cannot be released under applicable law (such as worker's compensation and unemployment insurance claims). In addition, the Parties agree that this Agreement shall not adversely affect, alter, or extinguish any vested right that Executive may have with respect to any pension or other retirement benefits to which Executive is or will be entitled by virtue of Executive's employment with the Company, and nothing in this Agreement shall prohibit Executive from enforcing such rights. Moreover, nothing in this Agreement shall prevent or preclude Executive from challenging in good faith the validity of this Agreement, nor does it impose any conditions precedent, penalties, or costs for doing so, unless specifically authorized by applicable law.

4. No Other Claims. Except to the extent previously disclosed by Executive in writing to the Company, Executive represents and warrants that Executive has (a) filed no claims, lawsuits, charges, grievances, or causes of action of any kind against the Company and/or the Company Releasees and, to the best of Executive's knowledge, Executive possesses no claims (including Fair Labor Standards Act ("FLSA") and worker's compensation claims); (b) received any and all compensation (including overtime compensation), meal periods, and rest periods to which Executive may have been entitled, and Executive is not currently aware of any facts or circumstances constituting a violation by the Company and/or the Company Releasees of the FLSA or other applicable wage, hour, meal period, and/or rest period laws; and (c) not suffered any work-related injury or illness within the twelve (12) months preceding Executive's execution of this Agreement, and Executive is not currently aware of any facts or circumstances that would give rise to a worker's compensation claim against the Company and/or the Company Releasees.

5. Sexual Harassment/Sexual Abuse Claims (Tax Cuts and Jobs Act Disclosure). This Agreement has been offered to Executive based on the Company's understanding that Executive has not suffered any sexual harassment or sexual abuse in connection with Executive's employment by the Company or services rendered in connection with the Company, including by any owner, director, officer, partner, manager, employee, agent, client, potential client, customer, potential customer, vendor, or supplier of the Company. If that understanding is incorrect, then Executive should promptly provide information relating to any such sexual harassment or sexual abuse in writing as soon as practicable to the Company contact identified in the "Review and Revocation Periods" Paragraph below, even if Executive has previously reported such information prior to receiving this Agreement. The disclosure of such information will not adversely affect the terms of this Agreement, nor will it extend the time periods described in the "Review and Revocation Periods" Paragraph below. If Executive does not provide such information in accordance with this Paragraph before Executive's execution of this Agreement, then by signing this Agreement Executive represents and warrants that Executive has not suffered any sexual harassment or sexual abuse in connection with Executive's employment by the Company or services rendered in connection with the Company, including by any owner, director, officer, partner, manager, employee, agent, client, potential client, customer, potential customer, vendor, or supplier of the Company.

6. Wage Deduction Orders. Executive represents and warrants that Executive is not subject to any wage garnishment or deduction orders that would require payment to a third party of any portion of the Severance Pay. Any exceptions to the representation and warranty contained in this Paragraph must be described in writing and attached to the executed copy of this Agreement that Executive submits to the Company. Such disclosure shall not disqualify Executive from receiving Severance Pay under this Agreement; provided, however, that the amount of Severance Pay described in Paragraph 1 shall be reduced in accordance with any such wage garnishment or deduction order as required by applicable law.

7. Restrictive Covenants. The Executive shall be subject to the following restrictive covenants as of the Effective Date of this Agreement:

(a) Noncompetition. Except as may be prohibited by applicable law, for a period of twelve (12) months after the Termination Date, the Executive shall not (i) directly or indirectly act alone or in concert or conspire with any person in order to engage in or prepare to engage in or to have a financial or other interest in any business or any activity which the Executive knows (or reasonably should have known) to be directly competitive with the business of the Company or its subsidiaries as then being carried on; or (ii) serve as an employee, agent, partner, shareholder, director or consultant for, or in any other capacity participate, engage, or have a financial or other interest in any business or any activity which the Executive knows (or reasonably should have known) to be directly competitive with the business of the Company or its subsidiaries as then being carried on (provided, however, that notwithstanding anything to the contrary contained in this Agreement, the Executive may own up to five percent (5%) of the outstanding shares of the capital stock of a company whose securities are registered under Section 12 of the Securities Exchange Act of 1934).

(b) Confidentiality. The Company has advised the Executive, and the Executive acknowledges, that it is the policy of the Company to maintain as secret and confidential all Protected Information (as defined below), and that Protected Information has been and will be developed at substantial cost and effort to the Company. Other than in the regular course of the Executive's employment with the Company, all Protected Information shall remain confidential permanently and the Executive shall not at any time, directly or indirectly, divulge, furnish, or make accessible to any person, firm, corporation, association, or other entity, nor use in any manner, at any time or for any reason, any Protected Information, or cause any such information of the Company to enter the public domain, other than with the written consent of the Company or as may be required by law or legal process (after giving the Company notice and an opportunity to contest such requirement). For purposes of this Agreement, "Protected Information" means trade secrets, confidential and proprietary business information of the Company and its subsidiaries, and any other information of the Company and its subsidiaries, including, but not limited to, customer lists (including potential customers), sources of supply, processes, plans, materials, pricing information, internal memoranda, marketing plans, internal policies, and products and services which may be developed from time to time by the Company and its subsidiaries and their agents or employees, including the Executive; provided, however, that information that is in the public domain (other than as a result of a breach by the Executive of this Agreement), approved for release by the Company or lawfully obtained from third parties who are not bound by a confidentiality agreement with the Company, is not Protected Information.

(c) Nonsolicitation. For a period of twelve (12) months after the Termination Date, the Executive shall not employ or retain or solicit for employment or arrange to have any other person, firm, or other entity employ or retain or solicit for employment or otherwise participate in the employment or retention of any person who is an employee or consultant of the Company or any subsidiary thereof. Nothing in the foregoing shall preclude the Executive's rights to make generalized searches for employees by use of media advertisements that do not specifically target such individuals.

(d) Cooperation. Executive agrees to cooperate with the Company and its attorneys in connection with any and all lawsuits, claims, investigations, or similar proceedings that have been or could be asserted at any time arising out of or related in any way to Executive's employment by the Company or any of its subsidiaries.

(e) Nondisparagement. At all times, the Executive and Company agree not to disparage the one another or otherwise make comments harmful to the other's reputation.

(f) Remedies. The Executive and the Company agree that the restrictive covenants contained in this Article 7 are reasonable under the circumstances, and further agree that if in the opinion of any court of competent jurisdiction any such covenant is not reasonable in any respect, such court will have the right, power and authority to excise or modify any provision or provisions of such covenants as to the court will appear not reasonable and to enforce the remainder of the covenants as so amended. The Executive acknowledges and agrees that the remedy at law available to the Company for breach of any of the Executive's obligations under this Article 7 would be inadequate and that damages flowing from such a breach may not readily be susceptible to being measured in monetary terms. Accordingly, the Executive acknowledges, consents and agrees that, in addition to any other rights or remedies that the Company may have at law, in equity or under this Agreement, upon adequate proof of the Executive's violation of any such provision of this Agreement, the Company will be entitled to seek immediate injunctive relief, including but not limited to, a temporary order restraining any threatened or further breach, without the necessity of proof of actual damage.

(g) Adherence to Company's Insider Trading Policy. Executive shall remain subject to quarterly blackout period currently in effect until the trading restrictions under such blackout period is lifted, effective on the third business day following the public release by Woodward of its earnings for the second quarter of fiscal year 2020, and shall comply with all provisions of the Company's Insider Trading Policy as applicable to employees following their separation date. Following the Termination Date, and provided the Executive no longer gains access to or receives material non-public information regarding the Company (including but not limited to consolidated financial information), Executive shall no longer be subject to any Company imposed blackout restrictions.

8. Right to Communicate.

(a) Notwithstanding any provision of this Agreement or any other agreement executed by Executive to the contrary, there shall be no restriction on Executive's ability to (i) report violations of any law or regulation, (ii) provide truthful testimony or information pursuant to subpoena, court order, or similar legal process, (iii) provide truthful information to government or regulatory agencies, or (iv) otherwise engage in whistleblower activity protected by the Securities Exchange Act of 1934, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or any rules or regulations issued thereunder, including, without limitation, Rule 21F-17.

(b) In addition, 18 U.S.C. §1833(b) provides, "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal." Nothing in this Agreement, any other agreement executed by Executive, or any Company policy is intended to conflict with this statutory protection.

9. Future Employment With the Company. Executive agrees that neither Company nor any affiliate of Company has any obligation to hire or rehire Executive at any time in the future. Executive forever releases, waives, and relinquishes any right or claim to be hired by, or to reinstatement with, the Company (or any affiliate of the Company). Executive agrees that this Agreement is a lawful, non-discriminatory, and non-retaliatory basis upon which the Company (or any affiliate of the Company) may refuse to hire or rehire Executive.

10. Non-Admission of Liability. The Parties agree that nothing contained in this Agreement is to be construed as an admission of liability, fault, or improper action on the part of either of the Parties.

11. Return of Company Property. Executive represents and warrants that Executive has returned all property belonging to the Company, including, but not limited to, all keys, access cards, office equipment, computers, cellular telephones, notebooks, documents, records, files, written materials, electronic information, credit cards bearing the Company's name, and other Company property (originals or copies in whatever form) in Executive's possession or under Executive's control, with the exception of this Agreement and compensation and benefits-related documents concerning Executive.

12. Consultation With Legal Counsel. The Company hereby advises Executive to consult with an attorney prior to signing this Agreement.

13. Review and Revocation Periods. Executive acknowledges that Executive has been given at least twenty-one (21) days to consider this Agreement from the date that it was first given to Executive. Executive agrees that changes in the terms of any version(s) of this Agreement, whether material or immaterial, do not restart the running of the twenty-one (21)-day consideration period. Executive may accept the Agreement by executing this Agreement within the designated time period. Executive shall have seven (7) days from the date that he executes the Agreement to revoke his acceptance of the Agreement by delivering written notice of revocation within the seven (7)-day period to the following Company contact:

Woodward, Inc.
Attn: Paul Benson, Corporate Vice President, Human Resources
1081 Woodward Way, Fort Collins CO 80524

If Executive does not revoke acceptance, this Agreement will become effective and irrevocable by Executive on the eighth day after Executive has executed it.

For the avoidance of doubt, if Executive elects not to execute this Agreement and return it to the Company by May 1, 2020 (the "Expiration Date"), the offer to pay the Severance Pay will automatically expire on the Expiration Date. If Executive or Executive's agent proposes new or different terms to the Company from those contained in this Agreement, such proposal will nullify the offer to pay Severance Pay unless and until the Company renews its offer or makes a subsequent offer, in which case the terms of the renewed or subsequent offer (if any) will control. If Executive exercises any right of revocation Executive has under this Agreement, the offer to pay the Severance Pay will expire on the date of such revocation.

14. Choice of Law. This Agreement is made and entered into in Colorado and, to the extent the interpretation of this Agreement is not governed by applicable federal law, shall be interpreted and enforced under and shall be governed by the laws of that state.

15. Severability. Should any provision of this Agreement be held to be illegal, void or unenforceable, such provision shall be of no force and effect. However, the illegality or unenforceability of any such provision shall have no effect upon, and shall not impair the enforceability of, any other provision of this Agreement.

16. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

17. Binding Effect. This Agreement shall be binding upon and inure to the benefit of Executive, the Company, and the Company Releasees, and their respective representatives, predecessors, heirs, successors, and assigns.

18. Entire Agreement. This Agreement contains the complete understanding between the Parties as to the subject matter contained herein, and no other promises or agreements shall be binding unless signed by both an authorized representative of the Company and Executive. In signing this Agreement, the Parties are not relying on any fact, statement, or assumption not set forth in this Agreement. Notwithstanding the foregoing, Executive understands that any agreements signed by Executive to which the Company is a party, a successor, or an assign concerning non-disclosure of confidential information, non-competition, non-solicitation, tuition reimbursement, loan repayment, deductions from final compensation ownership of inventions or intellectual property, equity or stock plans, or the like, are not superseded by this Agreement. Rather, the terms of such agreements are incorporated herein by reference and, to the extent such agreements impose upon Executive additional and/or broader obligations than contained herein, such terms and conditions will be controlling unless the Company expressly waives in writing its right to enforce such terms and conditions.

19. Code Section 409A Compliance. It is intended that this Agreement shall comply with the provisions of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and other guidance promulgated thereunder (“Code Section 409A”), or be exempt from the application of Code Section 409A. For purposes of Code Section 409A, the right to a series of installment payments hereunder shall be treated as a right to a series of separate payments. In no event may Executive, directly or indirectly, designate the calendar year of any payment under this Agreement. Notwithstanding any provision in this Agreement to the contrary, any references to termination of employment or Termination Date shall mean and refer to “separation from service” and the date of such “separation from service” as that term is defined in Code Section 409A.

20. Specified Executive. Notwithstanding any other provision of this Agreement to the contrary, because Executive is considered a “specified employee” for purposes of Code Section 409A, any payment that constitutes “deferred compensation” within the meaning of Code Section 409A that is otherwise due to Executive as a result of such Executive’s “separation from service” under this Agreement during the six (6)-month period immediately following Executive’s “separation from service” shall be accumulated and paid to the Executive on the first day of the seventh month following such “separation from service” (“Delayed Payment Date”), provided that if Executive dies prior to the payment of such amounts, such amounts shall be paid to the personal representative of Executive’s estate on the first to occur of the Delayed Payment Date or ten (10) days following the date of Executive’s death.

21. Representation and Warranty of Understanding. By signing below, Executive represents and warrants that he: (a) has carefully read and understands the terms of this Agreement; (b) is entering into the Agreement knowingly, voluntarily and of his own free will; (c) understands its terms and significance and intends to abide by its provisions without exception; (d) has not made any false statements or representations in connection with this Agreement; and (e) has not transferred or assigned to any person or entity not a party to this Agreement any claim or right released hereunder, and Executive agrees to indemnify the Company and hold it harmless against any claim (including claims for attorneys’ fees or costs actually incurred, regardless of whether litigation has commenced) based on or arising out of any alleged assignment or transfer of a claim by Executive.

/s/ Jonathan W. Thayer

Jonathan W. Thayer

April 23, 2020

DATE

Woodward, Inc.

/s/ Paul P. Benson

Paul P. Benson

(Corporate Vice President, Human Resources)

April 28, 2020

DATE

Exhibit A

As emphasized in the Agreement, Executive understands that Executive is releasing claims that Executive may not know about and that Executive expressly waives and relinquishes all rights and benefits which Executive may have under any state or federal statute or common law principle that would otherwise limit the effect of this release to claims known or suspected prior to the date Executive sign this Agreement, including, but not limited to, the effect of protections afforded by the following laws:

1. California Executives

Section 1542 of the Civil Code of the State of California states as follows:

“A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release, and that if known by him or her would have materially affected his or her settlement with the debtor or released party.”

2. Montana Executives

Section 28-1-1602 of the Montana Code Annotated states as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in the creditor’s favor at the time of executing the release, which, if known by the creditor, must have materially affected the creditor’s settlement with the debtor.”

3. North Dakota Executives

Section 9-13-02 of the North Dakota Century Code states as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in the creditor’s favor at the time of executing the release, which if known by the creditor, must have materially affected the creditor’s settlement with the debtor.”

4. South Dakota Executives

Section 20-7-11 of the South Dakota Codified Laws states as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in his [or her] favor at the time of executing the release, which if known by him [or her] must have materially affected his [or her] settlement with the debtor.”

Thus, notwithstanding the provisions of Section 1542 of the Civil Code of the State of California, Section 28-1-1602 of the Montana Code Annotated, Section 9-13-02 of the North Dakota Century Code, and Section 20-7-11 of the South Dakota Codified Laws, and for the purpose of implementing a full and complete release and discharge of the Company and the Company Releasees, Executive expressly acknowledges that this release is intended to include in its effect, without limitation, all claims which Executive does not know or suspect to exist in Executive’s favor at the time Executive executes this Agreement, and that this Agreement contemplates the extinguishment of any such claims.

Woodward, Inc.
Rule 13a-14(a)/15d-14(a) certifications

CERTIFICATION

I, Thomas A. Gendron, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2020, of Woodward, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 11, 2020

/s/ Thomas A. Gendron
 Thomas A. Gendron
Chairman of the Board,
Chief Executive Officer, and President
 (Principal Executive Officer)

A signed original of this written statement required by Rule 13a-14(a)/15d-14(a), or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Rule 13a-14(a)/15d-14(a), has been provided to Woodward and will be retained by Woodward and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION

I, Robert F. Weber, Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2020, of Woodward, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 11, 2020

/s/ Robert F. Weber, Jr.

Robert F. Weber, Jr.
Vice Chairman and Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Rule 13a-14(a)/15d-14(a), or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Rule 13a-14(a)/15d-14(a), has been provided to Woodward and will be retained by Woodward and furnished to the Securities and Exchange Commission or its staff upon request.

Woodward, Inc.
Section 1350 certifications

We hereby certify, pursuant to 18 U.S.C. Section 1350, that the accompanying Quarterly Report on Form 10-Q for the period ended March 31, 2020 (the "Quarterly Report"), of Woodward, Inc., fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of Woodward, Inc.

Date: May 11, 2020 /s/ Thomas A. Gendron
Thomas A. Gendron
Chairman of the Board,
Chief Executive Officer, and President

Date: May 11, 2020 /s/ Robert F. Weber, Jr.
Robert F. Weber, Jr.
Vice Chairman and Chief Financial Officer

A signed original of this written statement required by Rule 13a-14(b)/15d-14(b) and 18 U.S.C. Section 1350, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement, has been provided to Woodward and will be retained by Woodward and furnished to the Securities and Exchange Commission or its staff upon request.
