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

FORM 10-Q

☒ Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended June 30, 2019

or

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from _________ to _______

Commission File Number 1-134

CURTISS-WRIGHT CORPORATION
(Exact name of Registrant as specified in its charter)

Delaware	13-0612970
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
130 Harbour Place Drive, Suite 300 Davidson, North Carolina	28036
(Address of principal executive offices)	(Zip Code)

(704) 869-4600
(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	CW	New York Stock Exchange

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 of time that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically 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 ☒ 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 the 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	☒		Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	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 ☒

Indicate the number of shares outstanding of each of the issuer’s classes of common stock, as of the latest practicable date.

Common Stock, par value $1.00 per share: 42,730,098 shares (as of July 31, 2019).

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES

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PART 1- FINANCIAL INFORMATION
Item 1. Financial Statements
CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS
(UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands, except per share data)	2019	2018	2019	2018
Net sales				
Product sales	$ 532,253	$ 511,676	$ 1,003,852	$ 956,363
Service sales	106,743	108,622	213,458	211,457
Total net sales	638,996	620,298	1,217,310	1,167,820
Cost of sales				
Cost of product sales	342,726	324,184	654,682	623,495
Cost of service sales	66,226	69,614	135,711	136,634
Total cost of sales	408,952	393,798	790,393	760,129
Gross profit	230,044	226,500	426,917	407,691
Research and development expenses	18,900	15,054	36,141	30,995
Selling expenses	30,693	32,665	62,170	64,185
General and administrative expenses	74,766	76,705	150,876	145,937
Operating income	105,685	102,076	177,730	166,574
Interest expense	7,960	9,566	15,232	17,770
Other income, net	5,871	3,971	11,349	8,654
Earnings before income taxes	103,596	96,481	173,847	157,458
Provision for income taxes	(23,524)	(21,693)	(38,182)	(39,027)
Net earnings	$ 80,072	$ 74,788	$ 135,665	$ 118,431
Net earnings per share:				
Basic earnings per share	$ 1.87	$ 1.69	$ 3.17	$ 2.68
Diluted earnings per share	$ 1.86	$ 1.68	$ 3.15	$ 2.66
Dividends per share	0.17	0.15	0.32	0.30
Weighted-average shares outstanding:				
Basic	42,758	44,124	42,776	44,144
Diluted	43,024	44,553	43,038	44,604

See notes to condensed consolidated financial statements

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)
(In thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Net earnings	$ 80,072	$ 74,788	$ 135,665	$ 118,431
Other comprehensive income (loss)				
Foreign currency translation adjustments, net of tax (1)	$ 540	$ (43,771)	$ 8,782	$ (28,360)
Pension and postretirement adjustments, net of tax (2)	1,749	3,062	3,432	5,684
Other comprehensive income (loss), net of tax	2,289	(40,709)	12,214	(22,676)
Comprehensive income	$ 82,361	$ 34,079	$ 147,879	$ 95,755

(1) The tax benefit included in other comprehensive income for foreign currency translation adjustments for the three and six months ended June 30, 2019 was immaterial. The tax benefit included in other comprehensive loss for foreign currency translation adjustments for the three and six months ended June 30, 2018 was $2.0 million and $1.2 million , respectively.

(2) The tax expense included in other comprehensive income for pension and postretirement adjustments for the three and six months ended June 30, 2019 was $0.6 million and $1.1 million , respectively. The tax expense included in other comprehensive income for pension and postretirement adjustments for the three and six months ended June 30, 2018 was $0.9 million and $1.8 million , respectively.

See notes to condensed consolidated financial statements

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)
(In thousands, except per share data)

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 216,344	$ 276,066
Receivables, net	636,058	593,755
Inventories, net	436,190	423,426
Other current assets	48,060	50,719
Total current assets	1,336,652	1,343,966
Property, plant, and equipment, net	375,582	374,660
Goodwill	1,112,781	1,088,032
Other intangible assets, net	433,517	429,567
Operating lease right-of-use assets, net	135,190	—
Other assets	32,918	19,160
Total assets	**$ 3,426,640**	**$ 3,255,385**
Liabilities		
Current liabilities:		
Current portion of long-term and short-term debt	$ —	$ 243
Accounts payable	173,791	232,983
Accrued expenses	138,278	166,954
Income taxes payable	8,521	5,811
Deferred revenue	243,053	236,508
Other current liabilities	74,226	44,829
Total current liabilities	637,869	687,328
Long-term debt	761,476	762,313
Deferred tax liabilities, net	49,929	47,121
Accrued pension and other postretirement benefit costs	97,334	101,227
Long-term operating lease liability	117,789	—
Long-term portion of environmental reserves	16,411	15,777
Other liabilities	93,536	110,838
Total liabilities	1,774,344	1,724,604
Contingencies and commitments (Note 14)		
Stockholders' equity		
Common stock, $1 par value,100,000,000 shares authorized as of June 30, 2019 and December 31, 2018; 49,187,378 shares issued as of June 30, 2019 and December 31, 2018; outstanding shares were 42,715,831 as of June 30, 2019 and 42,772,417 as of December 31, 2018	49,187	49,187
Additional paid in capital	116,835	118,234
Retained earnings	2,339,703	2,191,471
Accumulated other comprehensive loss	(302,490)	(288,447)
Common treasury stock, at cost (6,471,547 shares as of June 30, 2019 and 6,414,961 shares as of December 31, 2018)	(550,939)	(539,664)
Total stockholders' equity	1,652,296	1,530,781
Total liabilities and stockholders' equity	**$ 3,426,640**	**$ 3,255,385**

See notes to condensed consolidated financial statements

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Six Months Ended June 30,	
(In thousands)	**2019**	**2018**
Cash flows from operating activities:		
Net earnings	$ 135,665	$ 118,431
Adjustments to reconcile net earnings to net cash provided by operating activities		
Depreciation and amortization	51,600	51,257
Gain on divestitures	—	(2,149)
Gain on fixed asset disposals	(6,080)	(897)
Deferred income taxes	1,450	5,554
Share-based compensation	6,980	7,801
Change in operating assets and liabilities, net of businesses acquired and divested:		
Receivables, net	(37,621)	(57,522)
Inventories, net	(11,080)	(43,625)
Progress payments	(356)	6,718
Accounts payable and accrued expenses	(87,430)	(38,621)
Deferred revenue	5,278	17,865
Income taxes payable	2,872	(7,712)
Pension and postretirement liabilities, net	311	(48,265)
Other current and long-term assets and liabilities	(21,203)	17,850
Net cash provided by operating activities	40,386	26,685
Cash flows from investing activities:		
Proceeds from sales and disposals of long lived assets	8,920	4,328
Consideration from divestitures	—	(268)
Acquisition of intangible assets	(147)	(1,500)
Additions to property, plant, and equipment	(33,471)	(19,852)
Acquisition of businesses, net of cash acquired	(50,075)	(212,737)
Additional consideration paid on prior year acquisitions	—	(460)
Net cash used for investing activities	(74,773)	(230,489)
Cash flows from financing activities:		
Borrowings under revolving credit facility	7,318	367,762
Payment of revolving credit facility	(7,561)	(366,953)
Repurchases of common stock	(25,065)	(46,115)
Proceeds from share-based compensation	5,411	6,360
Dividends paid	(6,420)	(6,623)
Other	(395)	(365)
Net cash used for financing activities	(26,712)	(45,934)
Effect of exchange-rate changes on cash	1,377	(6,484)
Net decrease in cash and cash equivalents	(59,722)	(256,222)
Cash and cash equivalents at beginning of period	276,066	475,120
Cash and cash equivalents at end of period	$ 216,344	$ 218,898
Supplemental disclosure of non-cash activities:		
Capital expenditures incurred but not yet paid	$ 85	$ 425

See notes to condensed consolidated financial statements

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(UNAUDITED)
(In thousands)

	For the six months ended June 30, 2019				
	Common Stock	**Additional Paid in Capital**	**Retained Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Treasury Stock**
December 31, 2018	$ 49,187	$ 118,234	$ 2,191,471	$ (288,447)	$ (539,664)
Cumulative effect from adoption of ASU 2018-02	—	—	26,257	(26,257)	—
Net earnings	—	—	135,665	—	—
Other comprehensive income, net of tax	—	—	—	12,214	—
Dividends declared	—	—	(13,690)	—	—
Restricted stock	—	(5,491)	—	—	5,491
Stock options exercised	—	(1,822)	—	—	7,233
Share-based compensation	—	6,575	—	—	405
Repurchase of common stock	—	—	—	—	(25,065)
Other	—	(661)	—	—	661
June 30, 2019	$ 49,187	$ 116,835	$ 2,339,703	$ (302,490)	$ (550,939)

	For the three months ended June 30, 2019				
	Common Stock	**Additional Paid in Capital**	**Retained Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Treasury Stock**
March 31, 2019	$ 49,187	$ 114,696	$ 2,266,902	$ (304,779)	$ (540,426)
Net earnings	—	—	80,072	—	—
Other comprehensive income, net of tax	—	—	—	2,289	—
Dividends declared	—	—	(7,271)	—	—
Stock options exercised	—	(1,303)	—	—	2,038
Share-based compensation	—	3,442	—	—	43
Repurchase of common stock	—	—	—	—	(12,594)
June 30, 2019	$ 49,187	$ 116,835	$ 2,339,703	$ (302,490)	$ (550,939)

CURTISS-WRIGHT CORPORATION and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(UNAUDITED)
(In thousands)

	For the six months ended June 30, 2018				
	Common Stock	**Additional Paid in Capital**	**Retained Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Treasury Stock**
December 31, 2017	$ 49,187	$ 120,609	$ 1,944,324	$ (216,840)	$ (369,480)
Cumulative effect from adoption of ASC 606	—	—	(2,274)	—	—
Net earnings	—	—	118,431	—	—
Other comprehensive loss, net of tax	—	—	—	(22,676)	—
Dividends declared	—	—	(13,231)	—	—
Restricted stock	—	(6,923)	—	—	6,923
Stock options exercised	—	(1,535)	—	—	7,896
Share-based compensation	—	7,599	—	—	201
Repurchase of common stock	—	—	—	—	(46,115)
Other	—	(725)	—	—	725
June 30, 2018	$ 49,187	$ 119,025	$ 2,047,250	$ (239,516)	$ (399,850)

	For the three months ended June 30, 2018				
	Common Stock	**Additional Paid in Capital**	**Retained Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Treasury Stock**
March 31, 2018	$ 49,187	$ 116,221	$ 1,979,051	$ (198,807)	$ (366,677)
Net earnings	—	—	74,788	—	—
Other comprehensive loss, net of tax	—	—	—	(40,709)	—
Dividends declared	—	—	(6,589)	—	—
Restricted stock	—	(95)	—	—	95
Stock options exercised	—	(298)	—	—	507
Share-based compensation	—	3,197	—	—	12
Repurchase of common stock	—	—	—	—	(33,787)
June 30, 2018	$ 49,187	$ 119,025	$ 2,047,250	$ (239,516)	$ (399,850)

See notes to condensed consolidated financial statements

1 . BASIS OF PRESENTATION

Curtiss-Wright Corporation and its subsidiaries (the "Corporation" or the "Company") is a global, diversified manufacturing and service company that designs, manufactures, and overhauls precision components and provides highly engineered products and services to the aerospace, defense, power generation, and general industrial markets.

The unaudited condensed consolidated financial statements include the accounts of Curtiss-Wright and its majority-owned subsidiaries. All intercompany transactions and accounts have been eliminated.

The unaudited condensed consolidated financial statements of the Corporation have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). Certain information and footnote disclosures normally included in annual financial statements have been condensed or omitted as permitted by such rules and regulations. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments necessary for a fair presentation of these financial statements.

Management is required to make estimates and judgments that affect the reported amount of assets, liabilities, revenue, and expenses and disclosure of contingent assets and liabilities in the accompanying financial statements. Actual results may differ from these estimates. The most significant of these estimates includes the estimate of costs to complete using the over-time revenue recognition accounting method, the estimate of useful lives for property, plant, and equipment, cash flow estimates used for testing the recoverability of assets, pension plan and postretirement obligation assumptions, estimates for inventory obsolescence, fair value estimates around assets and assumed liabilities from acquisitions, estimates for the valuation and useful lives of intangible assets, legal reserves, and the estimate of future environmental costs. Changes in estimates of contract sales, costs, and profits are recognized using the cumulative catch-up method of accounting. This method recognizes in the current period the cumulative effect of the changes on current and prior periods. Accordingly, the effect of the changes on future periods of contract performance is recognized as if the revised estimate had been the original estimate. During the three and six months ended June 30, 2019 and 2018 , there were no significant changes in estimated contract costs. In the opinion of management, all adjustments considered necessary for a fair presentation have been reflected in these financial statements.

The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Corporation’s 2018 Annual Report on Form 10-K. The results of operations for interim periods are not necessarily indicative of trends or of the operating results for a full year.

Recent accounting pronouncements adopted

ASU 2016-02 - Leases - On January 1, 2019, the Corporation adopted ASC 842, *Leases,* using the optional transition method of adoption which permits the entity to continue presenting all periods prior to January 1, 2019 under previous lease accounting guidance. In conjunction with the adoption, the Corporation elected the package of practical expedients which permits the entity to forgo reassessment of conclusions reached regarding lease existence and lease classification under previous guidance, as well as the practical expedient to not separate non-lease components. Further, the Corporation made an accounting policy election to account for short-term leases in a manner consistent with the methodology applied under previous guidance. The adoption of this standard resulted in an increase of approximately $151 million in both total assets and total liabilities in the Corporation’s Condensed Consolidated Balance Sheet as of January 1, 2019.

ASU 2018-02 - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income - On January 1, 2019, the Corporation adopted ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* , which permits the reclassification of tax effects stranded in accumulated other comprehensive income to retained earnings as a result of the 2017 Tax Cuts and Jobs Act (the Tax Act). The adoption of this standard resulted in a reclassification of $26 million from accumulated other comprehensive loss to retained earnings in the Corporation’s Condensed Consolidated Balance Sheet as of January 1, 2019.

2 . REVENUE

The Corporation recognizes revenue when control of a promised good and/or service is transferred to a customer in an amount that reflects the consideration that the Corporation expects to be entitled to in exchange for that good and/or service.

Performance Obligations

The Corporation identifies a performance obligation for each promise in a contract to transfer a distinct good or service to the customer. As part of its assessment, the Corporation considers all goods and/or services promised in the contract, regardless of whether they are explicitly stated or implied by customary business practices. The Corporation’s contracts may contain either a single performance obligation, including the promise to transfer individual goods or services that are not separately distinct within the context of the respective contracts, or multiple performance obligations. For contracts with multiple performance obligations, the Corporation allocates the overall transaction price to each performance obligation using standalone selling prices, where available, or utilizes estimates for each distinct good or service in the contract where standalone prices are not available.

The Corporation’s performance obligations are satisfied either at a point-in-time or on an over-time basis. Revenue recognized on an over-time basis for both the three months and six months ended June 30, 2019 accounted for approximately 48% of total net sales. Revenue recognized on an over-time basis for both the three months and six months ended June 30, 2018 accounted for approximately 45% of total net sales. Typically, over-time revenue recognition is based on the utilization of an input measure used to measure progress, such as costs incurred to date relative to total estimated costs. Revenue recognized at a point-in-time for both the three months and six months ended June 30, 2019 accounted for approximately 52% of total net sales. Revenue recognized at a point-in-time for both the three months and six months ended June 30, 2018 accounted for approximately 55% of total net sales. Revenue for these types of arrangements is recognized at the point in time in which control is transferred to the customer, typically based upon the terms of delivery.

Contract backlog represents the remaining performance obligations that have not yet been recognized as revenue. Backlog includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. Total backlog was approximately $2.2 billion as of June 30, 2019 , of which the Corporation expects to recognize approximately 90% as net sales over the next 12 -36 months . The remainder will be recognized thereafter.

Disaggregation of Revenue

The following table presents the Corporation’s total net sales disaggregated by end market and customer type:

Total Net Sales by End Market and Customer Type	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2019	2018	2019	2018
Defense				
Aerospace	$ 104,426	$ 99,654	$ 183,213	$ 178,808
Ground	26,394	20,777	47,151	43,296
Naval	149,853	132,347	280,941	235,835
Total Defense Customers	$ 280,673	$ 252,778	$ 511,305	$ 457,939
Commercial				
Aerospace	$ 108,000	$ 104,617	$ 211,222	$ 204,021
Power Generation	93,171	102,316	189,652	200,635
General Industrial	157,152	160,587	305,131	305,225
Total Commercial Customers	$ 358,323	$ 367,520	$ 706,005	$ 709,881
Total	$ 638,996	$ 620,298	$ 1,217,310	$ 1,167,820

Note: Certain amounts in the prior year have been reclassed to conform to the current year presentation.

Contract Balances

Timing of revenue recognition and cash collection may result in billed receivables, unbilled receivables (contract assets), and deferred revenue (contract liabilities) on the Condensed Consolidated Balance Sheet. The Corporation’s contract assets primarily relate to its rights to consideration for work completed but not billed as of the reporting date. Contract assets are transferred to billed receivables when the rights to consideration become unconditional. This is typical in situations where amounts are billed as work progresses in accordance with agreed-upon contractual terms or upon achievement of contractual milestones. The Corporation's contract liabilities primarily consist of customer advances received prior to revenue being earned. Revenue recognized during the six months ended June 30, 2019 and 2018 included in the contract liabilities balance at the beginning of the year was approximately $133 million and $113 million , respectively. Contract assets and contract liabilities are reported in the "Receivables, net" and "Deferred revenue" lines, respectively, within the Condensed Consolidated Balance Sheet.

3 . ACQUISITIONS

The Corporation continually evaluates potential acquisitions that either strategically fit within the Corporation's existing portfolio or expand the Corporation's portfolio into new product lines or adjacent markets. The Corporation has completed a number of acquisitions that have been accounted for as business combinations and have resulted in the recognition of goodwill in the Corporation's financial statements. This goodwill arises because the acquisition purchase price reflects the future earnings and cash flow potential in excess of the earnings and cash flows attributable to the current product and customer set at the time of acquisition. Thus, goodwill inherently includes the know-how of the assembled workforce, the ability of the workforce to further improve the technology and product offerings, and the expected cash flows resulting from these efforts. Goodwill may also include expected synergies resulting from the complementary strategic fit these businesses bring to existing operations.

The Corporation allocates the purchase price at the date of acquisition based upon its understanding of the fair value of the acquired assets and assumed liabilities. In the months after closing, as the Corporation obtains additional information about these assets and liabilities, including through tangible and intangible asset appraisals, and as the Corporation learns more about the newly acquired business, it is able to refine the estimates of fair value and more accurately allocate the purchase price. Only items identified as of the acquisition date are considered for subsequent adjustment. The Corporation will make appropriate adjustments to the purchase price allocation prior to completion of the measurement period, as required.

During the six months ended June 30, 2019 , the Corporation acquired one business for an aggregate purchase price of $50 million , which is described in more detail below. During the six months ended June 30, 2018 , the Corporation acquired one business for an aggregate purchase price of $213 million , which is described in more detail below.

The Condensed Consolidated Statement of Earnings for the six months ended June 30, 2019 includes $4 million of total net sales and $1 million of net losses from the Corporation's 2019 acquisition. The Condensed Consolidated Statement of Earnings for the six months ended June 30, 2018 includes $22 million of total net sales and $3 million of net losses from the Corporation's 2018 acquisition.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition for all acquisitions consummated during the six months ended June 30, 2019 and 2018 .

(In thousands)	2019	2018
Accounts receivable	$ 2,300	$ 8,143
Inventory	322	49,508
Property, plant, and equipment	648	3,203
Other current and non-current assets	479	47
Intangible assets	26,000	141,100
Operating lease right-of-use assets, net	1,393	—
Current and non-current liabilities	(3,252)	(6,734)
Net tangible and intangible assets	27,890	195,267
Purchase price, net of cash acquired	50,075	212,737
Goodwill	$ 22,185	$ 17,470
Goodwill deductible for tax purposes	$ 22,185	$ 17,470

2019 Acquisition

Tactical Communications Group (TCG)

On March 15, 2019 , the Corporation acquired 100% of the membership interest of TCG for $50.1 million , net of cash acquired. The Purchase Agreement contains a purchase price adjustment mechanism and representations and warranties customary for a transaction of this type, including a portion of the purchase price deposited in escrow as security for potential indemnification claims against the seller. TCG is a designer and manufacturer of tactical data link software solutions for critical military communications systems. The acquired business operates within the Defense segment. The acquisition is subject to post-closing adjustments with the purchase price allocation not yet complete.

2018 Acquisition

Dresser-Rand Government Business (DRG)

On April 2, 2018 , the Corporation acquired certain assets and assumed certain liabilities of DRG for $212.7 million in cash. The Asset Purchase Agreement contains a purchase price adjustment mechanism and representations and warranties customary for a transaction of this type. DRG is a designer and manufacturer of mission-critical, high-speed rotating equipment solutions and also acts as the sole supplier of steam turbines and main engine guard valves on all aircraft carrier programs. The acquired business operates within the Corporation's Power segment.

4 . RECEIVABLES

Receivables primarily include amounts billed to customers, unbilled charges on long-term contracts consisting of amounts recognized as sales but not billed, and other receivables. Substantially all amounts of unbilled receivables are expected to be billed and collected within one year. An immaterial amount of unbilled receivables are subject to retainage provisions. The amount of claims and unapproved change orders within our receivables balances are immaterial.

The composition of receivables is as follows:

(In thousands)	June 30, 2019	December 31, 2018
Billed receivables:		
Trade and other receivables	$ 415,774	$ 390,306
Less: Allowance for doubtful accounts	(9,003)	(7,436)
Net billed receivables	406,771	382,870
Unbilled receivables (Contract Assets):		
Recoverable costs and estimated earnings not billed	243,403	225,810
Less: Progress payments applied	(14,116)	(14,925)
Net unbilled receivables	229,287	210,885
Receivables, net	$ 636,058	$ 593,755

5 . INVENTORIES

Inventoried costs contain amounts relating to long-term contracts and programs with long production cycles, a portion of which will not be realized within one year. Long-term contract inventory includes an immaterial amount of claims or other similar items subject to uncertainty concerning their determination or realization. Inventories are valued at the lower of cost or market.

The composition of inventories is as follows:

(In thousands)	June 30, 2019	December 31, 2018
Raw materials	$ 191,678	$ 214,442
Work-in-process	91,848	74,536
Finished goods	143,360	143,016
Inventoried costs related to U.S. Government and other long-term contracts	70,684	54,195
Gross inventories	497,570	486,189
Less: Inventory reserves	(53,808)	(55,776)
Progress payments applied	(7,572)	(6,987)
Inventories, net	$ 436,190	$ 423,426

Inventoried costs related to long-term contracts include capitalized contract development costs related to certain aerospace and defense programs of $43.6 million and $44.4 million as of June 30, 2019 and December 31, 2018 , respectively. These capitalized costs will be liquidated as units are produced. As of June 30, 2019 and December 31, 2018 , $32.5 million and $18.7 million , respectively, are scheduled to be liquidated under existing firm orders.

6 . GOODWILL

The changes in the carrying amount of goodwill for the six months ended June 30, 2019 are as follows:

(In thousands)	Commercial/Industrial	Defense	Power	Consolidated
December 31, 2018	$ 442,015	$ 448,871	$ 197,146	$ 1,088,032
Acquisitions	—	22,185	—	22,185
Adjustments	—	(208)	—	(208)
Foreign currency translation adjustment	155	2,489	128	2,772
June 30, 2019	$ 442,170	$ 473,337	$ 197,274	$ 1,112,781

7 . OTHER INTANGIBLE ASSETS, NET

The following tables present the cumulative composition of the Corporation’s intangible assets:

	June 30, 2019			December 31, 2018		
(In thousands)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Technology	$ 245,480	$ (133,102)	$ 112,378	$ 238,212	$ (123,156)	$ 115,056
Customer related intangibles	378,846	(204,767)	174,079	358,832	(193,455)	165,377
Programs [(1)]	144,000	(9,000)	135,000	144,000	(5,400)	138,600
Other intangible assets	41,123	(29,063)	12,060	40,340	(29,806)	10,534
Total	$ 809,449	$ (375,932)	$ 433,517	$ 781,384	$ (351,817)	$ 429,567

[(1)] Programs include values assigned to major programs of acquired businesses and represent the aggregate value associated with the customer relationships, contracts, technology, and trademarks underlying the associated program.

During the six months ended June 30, 2019 , the Corporation acquired intangible assets of $ 26.0 million . The Corporation acquired Customer-related intangibles of $ 18.9 million , Technology of $ 6.3 million , and Other intangible assets of $ 0.8 million , which have a weighted average amortization period of 14.6 years, 15.0 years, and 8.0 years, respectively.

Total intangible amortization expense for the six months ended June 30, 2019 was $22.6 million as compared to $21.1 million in the comparable prior year period. The estimated amortization expense for the five years ending December 31, 2019 through 2023 is $45.2 million , $43.4 million , $41.5 million , $39.0 million , and $35.3 million , respectively.

8 . LEASES

The Corporation conducts a portion of its operations from leased facilities, which include manufacturing and service facilities, administrative offices, and warehouses. In addition, the Corporation leases vehicles, machinery, and office equipment under operating leases. Our leases have remaining lease terms of 1 year to 25 years, some of which include options for renewals, escalations, or terminations.

The components of lease expense were as follows:

(In thousands)		Three Months Ended June 30, 2019		Six Months Ended June 30, 2019
Operating lease cost	$	7,146	$	15,358
Finance lease cost:				
Amortization of right-of-use assets	$	199	$	396
Interest on lease liabilities		125		253
Total finance lease cost	$	324	$	649

Supplemental cash flow information related to leases was as follows:

(In thousands)		Six Months Ended June 30, 2019
Cash used for operating activities:		
Operating cash flows from operating leases	$	(15,207)
Operating cash flows from finance leases		(253)
Non-cash activity:		
Right-of-use assets obtained in exchange for operating lease obligations	$	1,711

Supplemental balance sheet information related to leases was as follows:

(In thousands, except lease term and discount rate)		As of June 30, 2019
Operating Leases		
Operating lease right-of-use assets, net	$	135,190
Other current liabilities	$	23,328
Long-term operating lease liability		117,789
Total operating lease liabilities	$	141,117
Finance Leases		
Property, plant, and equipment	$	15,561
Accumulated depreciation		(5,014)
Property, plant, and equipment, net	$	10,547
Other current liabilities	$	777
Other liabilities		11,431
Total finance lease liabilities	$	12,208
Weighted average remaining lease term		
Operating leases		8.1 years
Finance leases		10.2 years
Weighted average discount rate		
Operating leases		3.85%
Finance leases		4.05%

Maturities of lease liabilities were as follows:

	As of June 30, 2019	
(In thousands)	Operating Leases	Finance Leases
2019	$ 14,448	$ 660
2020	27,560	1,342
2021	24,553	1,375
2022	18,358	1,410
2023	16,527	1,445
Thereafter	64,403	8,892
Total lease payments	$ 165,849	$ 15,124
Less: imputed interest	(24,732)	(2,916)
Total	$ 141,117	$ 12,208

In November 2018, the Corporation entered into a build-to-suit lease of approximately $27 million for the construction of a new facility for DRG in Charleston, South Carolina. The lease has not been reflected in the Corporation's condensed consolidated financial statements as of June 30, 2019 as the Corporation has not yet obtained the right to control the use of the facility.

9 . FAIR VALUE OF FINANCIAL INSTRUMENTS

Forward Foreign Exchange and Currency Option Contracts

The Corporation has foreign currency exposure primarily in the United Kingdom, Europe, and Canada. The Corporation uses financial instruments, such as forward and option contracts, to hedge a portion of existing and anticipated foreign currency denominated transactions. The purpose of the Corporation's foreign currency risk management program is to reduce volatility in earnings caused by exchange rate fluctuations. Guidance on accounting for derivative instruments and hedging activities requires companies to recognize all of the derivative financial instruments as either assets or liabilities at fair value in the Condensed Consolidated Balance Sheets based upon quoted market prices for comparable instruments.

Interest Rate Risks and Related Strategies

The Corporation's primary interest rate exposure results from changes in U.S. dollar interest rates. The Corporation's policy is to manage interest cost using a mix of fixed and variable rate debt. The Corporation periodically uses interest rate swaps to manage such exposures. Under these interest rate swaps, the Corporation exchanges, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount. The Corporation's foreign exchange contracts and interest rate swaps are considered Level 2 instruments which are based on market based inputs or unobservable inputs and corroborated by market data such as quoted prices, interest rates, or yield curves.

Effects on Condensed Consolidated Balance Sheets

As of June 30, 2019 and December 31, 2018 , the fair values of the asset and liability derivative instruments were immaterial.

Effects on Condensed Consolidated Statements of Earnings

Undesignated hedges

The location and amount of gains or (losses) recognized in income on forward exchange derivative contracts not designated for hedge accounting for the three and six months ended June 30, were as follows:

(In thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
Derivatives not designated as hedging instrument	2019	2018	2019	2018
Forward exchange contracts:				
General and administrative expenses	$ (2,158)	$ (2,871)	$ 1,431	$ (2,518)

Debt

The estimated fair value amounts were determined by the Corporation using available market information that is primarily based on quoted market prices for the same or similar issuances as of June 30, 2019 . Accordingly, all of the Corporation's debt is valued as a Level 2 financial instrument. The fair values described below may not be indicative of net realizable value or reflective of future fair values. Furthermore, the use of different methodologies to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

	June 30, 2019		December 31, 2018	
(In thousands)	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
3.84% Senior notes due 2021	100,000	101,995	100,000	100,359
3.70% Senior notes due 2023	202,500	207,217	202,500	201,813
3.85% Senior notes due 2025	90,000	93,385	90,000	89,711
4.24% Senior notes due 2026	200,000	212,152	200,000	202,288
4.05% Senior notes due 2028	67,500	70,686	67,500	66,942
4.11% Senior notes due 2028	90,000	94,742	90,000	89,647
Other debt	—	—	243	243
Total debt	750,000	780,177	750,243	751,003
Debt issuance costs, net	(654)	(654)	(714)	(714)
Unamortized interest rate swap proceeds	12,130	12,130	13,027	13,027
Total debt, net	$ 761,476	$ 791,653	$ 762,556	$ 763,316

10 . PENSION PLANS

Defined Benefit Pension Plans

The following table is a consolidated disclosure of all domestic and foreign defined pension plans as described in the Corporation's 2018 Annual Report on Form 10-K.

The components of net periodic pension cost for the three and six months ended June 30, 2019 and 2018 were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2019	2018	2019	2018
Service cost	$ 5,825	$ 6,495	$ 11,651	$ 13,001
Interest cost	7,371	6,521	14,743	13,055
Expected return on plan assets	(14,882)	(14,695)	(29,766)	(29,411)
Amortization of prior service cost	(70)	(62)	(141)	(125)
Amortization of unrecognized actuarial loss	2,592	3,903	5,184	7,809
Net periodic pension cost	$ 836	$ 2,162	$ 1,671	$ 4,329

The Corporation does not expect to make any contributions to the Curtiss-Wright Pension Plan in 2019 . Contributions to the foreign benefit plans are not expected to be material in 2019 . During the six months ended June 30, 2018 , the Corporation made a $50 million voluntary contribution to the Curtiss-Wright Pension Plan.

Defined Contribution Retirement Plan

Effective January 1, 2014 , all non-union employees who were not currently receiving final or career average pay benefits became eligible to receive employer contributions in the Corporation's sponsored 401(k) plan. The employer contributions include both employer match and non-elective contribution components. Effective January 1, 2019, the Corporation increased the employer match opportunity, raising the maximum employer contribution from 6% to 7% of eligible compensation. During the three and six months ended June 30, 2019 , the expense relating to the plan was $4.2 million and $9.6 million , respectively. During the three and six months ended June 30, 2018 , the expense relating to the plan was $3.2 million and $7.4 million , respectively. The Corporation made $13.1 million in contributions to the plan during the six months ended June 30, 2019 , and expects to make total contributions of $15.1 million in 2019 .

11 . EARNINGS PER SHARE

Diluted earnings per share was computed based on the weighted-average number of shares outstanding plus all potentially dilutive common shares. A reconciliation of basic to diluted shares used in the earnings per share calculation is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2019	2018	2019	2018
Basic weighted-average shares outstanding	42,758	44,124	42,776	44,144
Dilutive effect of stock options and deferred stock compensation	266	429	262	460
Diluted weighted-average shares outstanding	43,024	44,553	43,038	44,604

For the three and six months ended June 30, 2019 and 2018 , there were no anti-dilutive equity-based awards.

12 . SEGMENT INFORMATION

The Corporation manages and evaluates its operations based on end markets to strengthen its ability to service customers and recognize certain organizational efficiencies. Based on this approach, the Corporation has three reportable segments: Commercial/Industrial, Defense, and Power.

The Corporation's measure of segment profit or loss is operating income. Interest expense and income taxes are not reported on an operating segment basis as they are not considered in the segments' performance evaluation by the Corporation's chief operating decision-maker, its Chief Executive Officer.

Net sales and operating income by reportable segment were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2019	2018	2019	2018
Net sales				
Commercial/Industrial	$ 318,572	$ 312,605	$ 612,322	$ 609,358
Defense	145,571	148,085	267,068	268,968
Power	176,582	162,049	340,729	294,207
Less: Intersegment revenues	(1,729)	(2,441)	(2,809)	(4,713)
Total consolidated	$ 638,996	$ 620,298	$ 1,217,310	$ 1,167,820
Operating income (expense)				
Commercial/Industrial	$ 56,236	$ 51,736	$ 95,682	$ 90,961
Defense	29,661	38,641	47,314	58,369
Power	30,069	19,201	54,288	34,543
Corporate and eliminations [1]	(10,281)	(7,502)	(19,554)	(17,299)
Total consolidated	$ 105,685	$ 102,076	$ 177,730	$ 166,574

[1] Corporate and eliminations includes pension and other postretirement benefit expense, certain environmental costs related to remediation at legacy sites, foreign currency transactional gains and losses, and certain other expenses.

Adjustments to reconcile operating income to earnings before income taxes are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2019	2018	2019	2018
Total operating income	$ 105,685	$ 102,076	$ 177,730	$ 166,574
Interest expense	7,960	9,566	15,232	17,770
Other income, net	5,871	3,971	11,349	8,654
Earnings before income taxes	$ 103,596	$ 96,481	$ 173,847	$ 157,458

(In thousands)	June 30, 2019	December 31, 2018
Identifiable assets		
Commercial/Industrial	$ 1,467,700	$ 1,398,601
Defense	1,068,806	961,298
Power	771,379	720,073
Corporate and Other	118,755	175,413
Total consolidated	$ 3,426,640	$ 3,255,385

13 . ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The cumulative balance of each component of accumulated other comprehensive income (AOCI), net of tax, is as follows:

(In thousands)	Foreign currency translation adjustments, net	Total pension and postretirement adjustments, net	Accumulated other comprehensive income (loss)
December 31, 2017	$ (94,708)	$ (122,132)	$ (216,840)
Other comprehensive income (loss) before reclassifications [1]	(52,440)	(31,380)	(83,820)
Amounts reclassified from accumulated other comprehensive loss [1]	—	12,213	12,213
Net current period other comprehensive loss	(52,440)	(19,167)	(71,607)
December 31, 2018	$ (147,148)	$ (141,299)	$ (288,447)
Other comprehensive income (loss) before reclassifications [1]	8,782	(55)	8,727
Amounts reclassified from accumulated other comprehensive income (loss) [1]	—	3,487	3,487
Net current period other comprehensive income	8,782	3,432	12,214
Cumulative effect from adoption of ASU 2018-02 [2]	(1,318)	(24,939)	(26,257)
June 30, 2019	$ (139,684)	$ (162,806)	$ (302,490)

[1] All amounts are after tax.

[2] Reclassification to retained earnings due to adoption of ASU No. 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* . See Note 1 for additional information.

Details of amounts reclassified from accumulated other comprehensive income (loss) are below:

(In thousands)	Amount reclassified from AOCI	Affected line item in the statement where net earnings is presented
Defined benefit pension and other postretirement benefit plans		
Amortization of prior service costs	470	(1)
Amortization of actuarial losses	(5,092)	(1)
	(4,622)	Total before tax
	1,135	Income tax
Total reclassifications	$ (3,487)	Net of tax

(1) These items are included in the computation of net periodic pension cost. See Note 10 , Pension Plans .

14 . CONTINGENCIES AND COMMITMENTS

Legal Proceedings

The Corporation has been named in a number of lawsuits that allege injury from exposure to asbestos. To date, the Corporation has not been found liable for or paid any material sum of money in settlement in any case. The Corporation believes its minimal use of asbestos in its past operations as well as its acquired businesses' operations and the relatively non-friable condition of asbestos in its historical products makes it unlikely that it will face material liability in any asbestos litigation, whether individually or in the aggregate. The Corporation maintains insurance coverage and indemnification agreements for these potential liabilities and believes adequate coverage exists to cover any unanticipated asbestos liability.

In December 2013, the Corporation, along with other unaffiliated parties, received a claim from Canadian Natural Resources Limited (CNRL) filed in the Court of Queen's Bench of Alberta, Judicial District of Calgary. The claim pertains to a January 2011 fire and explosion at a delayed coker unit at its Fort McMurray refinery that resulted in the injury of five CNRL employees, damage to property and equipment, and various forms of consequential loss, such as loss of profit, lost opportunities, and business interruption. The fire and explosion occurred when a CNRL employee bypassed certain safety controls and opened an operating coker unit. The total quantum of alleged damages arising from the incident has not been finalized, but is estimated to meet or exceed $1 billion . The Corporation maintains various forms of commercial, property and casualty, product liability, and other forms of insurance; however, such insurance may not be adequate to cover the costs associated with a judgment against us. All parties have agreed in principle to participate in a formal mediation in late 2019 with the intention of settling this claim. In an effort to induce the parties to participate in the formal mediation, CNRL agreed to reduce its claim to approximately $400 million , which reflects the monetary amount of property damage incurred as a result of the fire and explosion. The Corporation is currently unable to estimate an amount, or range of potential losses, if any, from this matter. The Corporation believes that it has adequate legal defenses and intends to defend this matter vigorously. The Corporation's financial condition, results of operations, and cash flows could be materially affected during a future fiscal quarter or fiscal year by unfavorable developments or outcome regarding this claim.

In addition to the CNRL litigation, the Corporation is party to a number of other legal actions and claims, none of which individually or in the aggregate, in the opinion of management, are expected to have a material effect on the Corporation’s results of operations or financial position.

Letters of Credit and Other Financial Arrangements

The Corporation enters into standby letters of credit agreements and guarantees with financial institutions and customers primarily relating to guarantees of repayment, future performance on certain contracts to provide products and services, and to secure advance payments from certain international customers. As of June 30, 2019 and December 31, 2018 , there were $29.8 million and $21.7 million of stand-by letters of credit outstanding, respectively, and $10.9 million and $11.7 million of bank guarantees outstanding, respectively. In addition, the Corporation is required to provide the Nuclear Regulatory Commission financial assurance demonstrating its ability to cover the cost of decommissioning its Cheswick, Pennsylvania facility upon closure, though the Corporation does not intend to close this facility. The Corporation has provided this financial assurance in the form of a $45.6 million surety bond.

AP1000 Program

The Electro-Mechanical Division, which is within the Corporation’s Power segment, is the reactor coolant pump (RCP) supplier for the Westinghouse AP1000 nuclear power plants under construction in China and the United States. The terms of the AP1000 China and United States contracts include liquidated damage penalty provisions for failure to meet contractual delivery dates if the Corporation caused the delay and the delay was not excusable. On October 10, 2013, the Corporation received a letter from Westinghouse stating entitlements to the maximum amount of liquidated damages allowable under the AP1000 China contract from Westinghouse of approximately $25 million . The Corporation would be liable for liquidated damages under the contract if certain contractual delivery dates were not met and if the Corporation was deemed responsible for the delay. As of June 30, 2019 , the Corporation has not met certain contractual delivery dates under its AP 1000 China and U.S. contracts; however there are significant uncertainties as to which parties are responsible for the delays. The Corporation believes it has adequate legal defenses and intends to vigorously defend this matter. Given the uncertainties surrounding the responsibility for the delays, no accrual has been made for this matter as of June 30, 2019 . As of June 30, 2019 , the range of possible loss is $0 to $31 million for the AP1000 U.S. contract, for a total range of possible loss of $0 to $55.5 million .

Earlier this year, the Corporation was notified of a RCP fault at the Sanmen 2 AP1000 nuclear reactor in China. At this time, the root-cause of this situation is presently limited to a single RCP. We are in the process of evaluating the cause(s) in conjunction with Westinghouse and China. The Corporation’s legal liability is limited to the cost of repairing or replacing the RCP.

FORWARD-LOOKING STATEMENTS

Except for historical information, this Quarterly Report on Form 10-Q may be deemed to contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Examples of forward-looking statements include, but are not limited to: (a) projections of or statements regarding return on investment, future earnings, interest income, sales, volume, other income, earnings or loss per share, growth prospects, capital structure, and other financial terms, (b) statements of plans and objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking statements can be identified by the use of forward-looking terminology such as "anticipates," "believes," "continue," "could," "estimate," "expects," "intend," "may," "might," "outlook," "potential," "predict," "should," "will," as well as the negative of any of the foregoing or variations of such terms or comparable terminology, or by discussion of strategy. No assurance may be given that the future results described by the forward-looking statements will be achieved. While we believe these forward-looking statements are reasonable, they are only predictions and are subject to known and unknown risks, uncertainties, and other factors, many of which are beyond our control, which could cause actual results, performance, or achievement to differ materially from anticipated future results, performance, or achievement expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, those described in "Item 1A. Risk Factors" of our 2018 Annual Report on Form 10-K, and elsewhere in that report, those described in this Quarterly Report on Form 10-Q, and those described from time to time in our future reports filed with the Securities and Exchange Commission. Such forward-looking statements in this Quarterly Report on Form 10-Q include, without limitation, those contained in Item 1. Financial Statements and Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. These forward-looking statements speak only as of the date they were made, and we assume no obligation to update forward-looking statements to reflect actual results or changes in or additions to the factors affecting such forward-looking statements.

COMPANY ORGANIZATION

Curtiss-Wright Corporation is a diversified, multinational provider of highly engineered, technologically advanced, value-added products and services to a broad range of industries which are reported through our Commercial/Industrial, Defense, and Power segments. We are positioned as a market leader across a diversified array of niche markets through engineering and technological leadership, precision manufacturing, and strong relationships with our customers. We provide products and services to a number of global markets and have achieved balanced growth through the successful application of our core competencies in engineering and precision manufacturing. Our overall strategy is to be a balanced and diversified company, less vulnerable to cycles or downturns in any one market, and to establish strong positions in profitable niche markets. Approximately 42% of our 2019 revenues are expected to be generated from defense-related markets.

RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to help the reader understand the results of operations and financial condition of the Corporation for the three and six month periods ended June 30, 2019 . The financial information as of June 30, 2019 should be read in conjunction with the financial statements for the year ended December 31, 2018 contained in our Form 10-K.

The MD&A is organized into the following sections: Consolidated Statements of Earnings, Results by Business Segment, and Liquidity and Capital Resources. Our discussion will be focused on the overall results of continuing operations followed by a more detailed discussion of those results within each of our reportable segments.

Our three reportable segments are generally concentrated in a few end markets; however, each may have sales across several end markets. An end market is defined as an area of demand for products and services. The sales for the relevant markets will be discussed throughout the MD&A.

Analytical Definitions

Throughout management's discussion and analysis of financial condition and results of operations, the terms "incremental" and "organic" are used to explain changes from period to period. The term "incremental" is used to highlight the impact acquisitions and divestitures had on the current year results. The results of operations for acquisitions are incremental for the first twelve months from the date of acquisition. Additionally, the results of operations of divested businesses are removed from the comparable prior year period for purposes of calculating "organic" and "incremental" results. The definition of "organic" excludes the effect of foreign currency translation.

Consolidated Statements of Earnings

	Three Months Ended June 30,			Six Months Ended June 30,		
(In thousands)	2019	2018	% change	2019	2018	% change
Sales						
Commercial/Industrial	$ 318,267	$ 312,463	2 %	$ 611,774	$ 609,104	— %
Defense	144,962	146,177	(1)%	265,984	265,078	— %
Power	175,767	161,658	9 %	339,552	293,638	16 %
Total sales	$ 638,996	$ 620,298	3 %	$ 1,217,310	$ 1,167,820	4 %
Operating income						
Commercial/Industrial	$ 56,236	$ 51,736	9 %	$ 95,682	$ 90,961	5 %
Defense	29,661	38,641	(23)%	47,314	58,369	(19)%
Power	30,069	19,201	57 %	54,288	34,543	57 %
Corporate and eliminations	(10,281)	(7,502)	(37)%	(19,554)	(17,299)	(13)%
Total operating income	$ 105,685	$ 102,076	4 %	$ 177,730	$ 166,574	7 %
Interest expense	7,960	9,566	(17)%	15,232	17,770	(14)%
Other income, net	5,871	3,971	48 %	11,349	8,654	31 %
Earnings before income taxes	103,596	96,481	7 %	173,847	157,458	10 %
Provision for income taxes	(23,524)	(21,693)	8 %	(38,182)	(39,027)	(2)%
Net earnings	$ 80,072	$ 74,788		$ 135,665	$ 118,431	
New orders	$ 600,769	$ 700,104	(14)%	$ 1,347,507	$ 1,305,007	3 %

Components of sales and operating income increase (decrease):

	Three Months Ended June 30, 2019 vs. 2018		Six Months Ended June 30, 2019 vs. 2018	
	Sales	Operating Income	Sales	Operating Income
Organic	3%	3%	3%	4%
Acquisitions	1%	—%	2%	2%
Foreign currency	(1%)	1%	(1%)	1%
Total	3%	4%	4%	7%

Sales for the second quarter of 2019 increased $19 million , or 3% , to $639 million , compared with the prior year period. On a segment basis, sales from the Commercial/Industrial and Power segments increased $6 million and $14 million, respectively, with sales from the Defense segment decreasing $1 million .

Sales during the six months ended June 30, 2019 increased $50 million , or 4% , to $1,217 million , compared with the prior year period. On a segment basis, sales from the Commercial/Industrial, Defense, and Power segments increased $3 million , $1 million , and $46 million , respectively. Changes in sales by segment are discussed in further detail in the results by business segment section below.

Operating income in the second quarter of 2019 increased $4 million , or 4% , to $106 million , and operating margin of 16.5% was flat compared with the same period in 2018 . Operating income during the six months ended June 30, 2019 increased $11 million , or 7% , to $178 million and operating margin increased 30 basis points to 14.6% , compared with the same period in 2018 . The increase s in operating income for each of the respective periods were primarily due to favorable overhead absorption on higher naval defense sales and the absence of first year purchase accounting costs from our DRG acquisition in the Power segment. Operating income and operating margin also benefited from the recognition of a gain on a building sale in the Commercial/Industrial segment. These increases were partially offset by favorable contract adjustments within our naval defense business in the prior year period which did not recur as well as an unfavorable shift in mix in the Defense segment. Operating income for the six months ended June 30, 2019 also benefited from the incremental impact of our DRG acquisition.

Non-segment operating expense in the second quarter and six months ended June 30, 2019 increased $3 million , or 37%, to $10 million and $2 million , or 13%, to $20 million , respectively, from the comparable prior year periods. These increases were primarily due to higher 401(k) expenses and higher foreign currency losses.

Interest expense in the second quarter and six months ended June 30, 2019 decreased $ 2 million , or 17% , to $8 million and $ 3 million , or 14% , to $15 million , respectively, primarily due to a discretionary $50 million prepayment on our 2013 Notes in October 2018.

The effective tax rate for the three months ended June 30, 2019 of 22.7% was essentially flat compared to an effective tax rate of 22.5% in the prior year period. The effective tax rate for the six months ended June 30, 2019 of 22.0% decreased as compared to an effective tax rate of 24.8% in the prior year period, primarily due to additional tax expense associated with the Tax Act for foreign withholding taxes recognized in the prior year period. This decrease was partially offset by a lower discrete tax benefit related to share-based compensation in the current period.

Comprehensive income in the second quarter of 2019 was $82 million , compared to comprehensive income of $34 million in the prior year period. The change was primarily due to the following:

- Net earnings increased $5 million , primarily due to higher operating income.
- Foreign currency translation adjustments in the second quarter resulted in a $1 million comprehensive gain, compared to a $44 million comprehensive loss in the prior year period. The comprehensive gain during the current period was primarily attributed to increases in the Canadian dollar, partially offset by decreases in the British Pound.

Comprehensive income for the six months ended June 30, 2019 was $148 million , compared to comprehensive income of $96 million in the prior year period. The change was primarily due to the following:

- Net earnings increased $17 million , primarily due to higher operating income, lower interest expense, and higher other income, net.
- Foreign currency translation adjustments for the six months ended June 30, 2019 resulted in a $9 million comprehensive gain, compared to a $28 million comprehensive loss in the prior period. The comprehensive gain during the current period was primarily attributed to increases in the Canadian dollar.

New orders decreased $99 million during the second quarter from the comparable prior year period. The decrease was primarily due to the timing of customer funding on naval defense orders in the Power segment, partially offset by the timing of aerospace defense and naval defense orders in the Defense segment.

New orders increased $43 million during the six months ended June 30, 2019 from the comparable prior year period, primarily due to the timing of naval defense orders in both the Commercial/Industrial and Defense segments.

RESULTS BY BUSINESS SEGMENT

<u>Commercial/Industrial</u>

The following tables summarize sales, operating income and margin, and new orders within the Commercial/Industrial segment.

	Three Months Ended June 30,			Six Months Ended June 30,		
(In thousands)	2019	2018	% change	2019	2018	% change
Sales	$ 318,267	$ 312,463	2%	$ 611,774	$ 609,104	—%
Operating income	56,236	51,736	9%	95,682	90,961	5%
Operating margin	17.7%	16.6%	110 bps	15.6%	14.9%	70 bps
New orders	$ 293,962	$ 302,537	(3%)	$ 659,218	$ 631,815	4%

Components of sales and operating income increase (decrease):

	Three Months Ended June 30, 2019 vs. 2018		Six Months Ended June 30, 2019 vs. 2018	
	Sales	Operating Income	Sales	Operating Income
Organic	3%	8%	2%	4%
Acquisitions	—%	—%	—%	—%
Foreign currency	(1%)	1%	(2%)	1%
Total	2%	9%	—%	5%

Sales in the Commercial/Industrial segment are primarily generated from the commercial aerospace and general industrial markets, and to a lesser extent the defense and power generation markets.

Sales in the second quarter increased $6 million , or 2% , to $318 million from the prior year period. Sales during the six months ended June 30, 2019 increased $3 million , or less than 1%, to $612 million from the prior year period. The increases for each of the respective periods were primarily due to higher sales in the aerospace defense and commercial aerospace markets. In the aerospace defense market, sales in the second quarter and six months ended June 30, 2019 increased $5 million primarily due to higher sales of actuation systems on the F-35 program. Sales in the commercial aerospace market increased $4 million in the second quarter and six months ended June 30, 2019 primarily due to higher demand for sensors products. These increases were partially offset by lower sales of international surface treatment services and valves in the power generation market. In the naval defense market, sales in the second quarter increased primarily due to higher production on the Virginia-class submarine program, with sales during the six months ended June 30, 2019 decreasing primarily due to the timing of valve production on the CVN-80 aircraft carrier program. Unfavorable foreign currency translation reduced sales $4 million and $8 million in the second quarter and six months ended June 30, 2019, respectively.

Operating income during the second quarter increased $5 million , or 9% , to $56 million from the prior year period, while operating margin increased 110 basis points to 17.7% . Operating income during the six months ended June 30, 2019 increased $5 million , or 5% , to $96 million from the prior year period, while operating margin increased 70 basis points to 15.6% . The respective increases in operating income and operating margin were primarily due to the recognition of a gain on a building sale as well as the benefits of our ongoing margin improvement initiatives. These increases were partially offset by higher research and development expenses and the impact of tariffs.

New orders decreased $9 million during the second quarter from the comparable prior year period. The decrease was primarily due to a decline in new orders for industrial vehicles and surface treatment services. New orders increased $27 million during the six months ended June 30, 2019 from the comparable prior year period, primarily due to the timing of naval defense orders.

Defense

The following tables summarize sales, operating income and margin, and new orders within the Defense segment.

	Three Months Ended June 30,			Six Months Ended June 30,		
(In thousands)	2019	2018	% change	2019	2018	% change
Sales	$ 144,962	$ 146,177	(1%)	$ 265,984	$ 265,078	—%
Operating income	29,661	38,641	(23%)	47,314	58,369	(19%)
Operating margin	20.5%	26.4%	(590 bps)	17.8%	22.0%	(420 bps)
New orders	$ 185,796	$ 159,365	17%	$ 316,621	$ 293,254	8%

Components of sales and operating income increase (decrease):

	Three Months Ended June 30, 2019 vs. 2018		Six Months Ended June 30, 2019 vs. 2018	
	Sales	Operating Income	Sales	Operating Income
Organic	(3%)	(25%)	—%	(21%)
Acquisitions	3%	—%	1%	(1%)
Foreign currency	(1%)	2%	(1%)	3%
Total	(1%)	(23%)	—%	(19%)

Sales in the Defense segment are primarily to the defense markets and, to a lesser extent, the commercial aerospace and the general industrial markets.

Sales in the second quarter decreased $1 million , or 1% , to $145 million from the prior year period, as higher sales in the ground defense market were offset by lower sales in the naval defense and general industrial markets. Sales in the ground defense market benefited primarily from higher production levels on the Abrams tank platform. In the naval defense market, we experienced lower sales of embedded computing equipment on various programs. The timing of an automotive contract completed in the prior year resulted in lower industrial controls sales in the general industrial market. Sales in the aerospace defense and commercial aerospace markets were essentially flat.

Sales during the six months ended June 30, 2019 increased $1 million , or less than 1%, to $266 million from the prior year period. Sales in the ground defense market benefited primarily from higher production levels on the Abrams tank platform. In the commercial aerospace market, we experienced higher demand for avionics and electronics equipment on various domestic and international platforms. These increases were partially offset by lower industrial controls sales in the general industrial market due to the timing of an automotive contract completed in the prior year period. Sales in the aerospace defense and naval defense markets were essentially flat.

Operating income during the second quarter decreased $9 million , or 23% , to $30 million compared to the prior year period, and operating margin decreased 590 basis points from the prior year quarter to 20.5% . Operating income during the six months ended June 30, 2019 decreased $11 million , or 19% , to $47 million , and operating margin decreased 420 basis points from the prior year period to 17.8% . The decreases in operating income and operating margin for each of the respective periods were primarily due to an unfavorable shift in mix, higher research and development expenses, and favorable contract adjustments within our naval defense business in the prior year period which did not recur.

New orders increased $26 million and $23 million during the second quarter and six months ended June 30, 2019 from the comparable prior year periods, primarily due to the timing of aerospace defense and naval defense orders.

Power

The following tables summarize sales, operating income and margin, and new orders within the Power segment.

	Three Months Ended June 30,			Six Months Ended June 30,		
(In thousands)	2019	2018	% change	2019	2018	% change
Sales	$ 175,767	$ 161,658	9%	$ 339,552	$ 293,638	16%
Operating income	30,069	19,201	57%	54,288	34,543	57%
Operating margin	17.1%	11.9%	520 bps	16.0%	11.8%	420 bps
New orders	$ 121,011	$ 238,202	(49%)	$ 371,668	$ 379,938	(2%)

Components of sales and operating income increase (decrease):

	Three Months Ended June 30, 2019 vs. 2018		Six Months Ended June 30, 2019 vs. 2018	
	Sales	Operating Income	Sales	Operating Income
Organic	9%	57%	8%	47%
Acquisitions	—%	—%	8%	10%
Foreign currency	—%	—%	—%	—%
Total	9%	57%	16%	57%

Sales in the Power segment are primarily to the power generation and naval defense markets.

Sales in the second quarter increased $14 million , or 9% , to $176 million from the prior year period. In the naval defense market, sales increased $18 million primarily due to increased production on the Virginia-class submarine program and higher aircraft carrier sales. The naval defense market also benefited from higher spares and service center sales. This increase was partially offset by lower sales in the power generation market primarily due to the timing of production on the AP1000 China Direct program.

Sales for the six months ended June 30, 2019 increased $46 million , or 16% , to $340 million from the prior year period, primarily due to the impact of our DRG acquisition in the second quarter of 2018, which contributed incremental sales of $31 million during the current period. Excluding the impact of DRG, sales in the naval defense market increased $18 million primarily due to increased production on the Virginia-class submarine and CVN-80 aircraft carrier programs. These increases were partially offset by lower sales in the power generation market primarily due to the timing of production on the AP1000 China Direct program.

Operating income in the second quarter of 2019 increased $11 million , or 57% , to $30 million , and operating margin increased 520 basis points from the prior year period to 17.1% . Operating income during the six months ended June 30, 2019 increased $20 million , or 57% , to $54 million , and operating margin increased 420 basis points from the prior year period to 16.0% . The increases in operating income and operating margin for each of the respective periods were primarily due to favorable overhead absorption on higher naval defense sales and the absence of first year purchase accounting costs from our DRG acquisition.

New orders decreased $117 million and $8 million during the second quarter and six months ended June 30, 2019 from the comparable prior year periods, primarily due to the timing of customer funding in the naval defense market.

SUPPLEMENTARY INFORMATION

The table below depicts sales by end market. End market sales help provide an enhanced understanding of our businesses and the markets in which we operate. The table has been included to supplement the discussion of our consolidated operating results.

Net Sales by End Market	Three Months Ended June 30,			Six Months Ended June 30,		
(In thousands)	2019	2018	% change	2019	2018	% change
Defense markets:						
Aerospace	$ 104,426	$ 99,654	5%	$ 183,213	$ 178,808	2%
Ground	26,394	20,777	27%	47,151	43,296	9%
Naval	149,853	132,347	13%	280,941	235,835	19%
Total Defense	$ 280,673	$ 252,778	11%	$ 511,305	$ 457,939	12%
Commercial markets:						
Aerospace	$ 108,000	$ 104,617	3%	$ 211,222	$ 204,021	4%
Power Generation	93,171	102,316	(9%)	189,652	200,635	(5%)
General Industrial	157,152	160,587	(2%)	305,131	305,225	—%
Total Commercial	$ 358,323	$ 367,520	(3%)	$ 706,005	$ 709,881	(1%)
Total Curtiss-Wright	$ 638,996	$ 620,298	3%	$ 1,217,310	$ 1,167,820	4%

Note: Certain amounts in the prior year have been reclassed to conform to the current year presentation.

Defense markets
Sales during the second quarter increased $28 million , or 11% , to $281 million against the comparable prior year period, primarily due to higher sales in the naval defense and ground defense markets. The naval defense market benefited from increased production on the Virginia-class submarine program, which contributed $12 million in sales. Sales in the ground defense market increased primarily due to higher production levels on the Abrams tank platform.

Sales during the six months ended June 30, 2019 increased $53 million , or 12% , to $511 million , primarily due to higher sales in the naval defense market. This increase was primarily due to the impact of our DRG acquisition in the second quarter of 2018, which contributed incremental sales of $31 million during the current period. Excluding the impact of DRG, sales in the naval defense market increased $14 million primarily due to increased production on the Virginia-class submarine program. Sales in the ground defense market increased primarily due to higher production levels on the Abrams tank platform.

Commercial markets
Sales during the second quarter decreased $9 million , or 3% , to $358 million against the comparable prior year period, while sales during the six months ended June 30, 2019 decreased $4 million , or 1% , to $706 million . The decreases in each of the respective periods were primarily due to lower sales in the power generation market, partially offset by increases in the commercial aerospace market. In the power generation market, we experienced lower sales due to the timing of production on the AP1000 China Direct program as well as lower international sales of surface treatment services and valves. Sales in the commercial aerospace market increased primarily due to higher demand for sensors products.

LIQUIDITY AND CAPITAL RESOURCES

Sources and Use of Cash

We derive the majority of our operating cash inflow from receipts on the sale of goods and services and cash outflow for the procurement of materials and labor; cash flow is therefore subject to market fluctuations and conditions. Most of our long-term contracts allow for several billing points (progress or milestone) that provide us with cash receipts as costs are incurred throughout the project rather than upon contract completion, thereby reducing working capital requirements. In some cases, these payments can exceed the costs incurred on a project. Management continually evaluates cash utilization alternatives, including share repurchases, acquisitions, increased dividends, and paying down debt, to determine the most beneficial use of available capital resources. We believe that our cash and cash equivalents, cash flow from operations, available borrowings under the credit facility, and ability to raise additional capital through the credit markets, are sufficient to meet both the short-term and long-term capital needs of the organization.

Condensed Consolidated Statements of Cash Flows	Six Months Ended	
(In thousands)	June 30, 2019	June 30, 2018
Cash provided by (used in):		
Operating activities	$ 40,386	$ 26,685
Investing activities	(74,773)	(230,489)
Financing activities	(26,712)	(45,934)
Effect of exchange-rate changes on cash	1,377	(6,484)
Net decrease in cash and cash equivalents	(59,722)	(256,222)

Net cash provided by operating activities increased $14 million from the prior year period. The increase in net cash provided is primarily due to a prior year period voluntary pension contribution of $50 million. Net cash provided during the current period also benefited from higher collections of accounts receivable and lower inventory receipts, partially offset by higher disbursements.

Net cash used for investing activities decreased $156 million from the comparable prior year period primarily due to cash used for acquisitions and higher capital expenditures in the current period. The Corporation acquired one business during the six months ended June 30, 2019 for approximately $50 million . The Corporation acquired one business during the six months ended June 30, 2018 for approximately $213 million . Capital expenditures for the six months ended June 30, 2019 and June 30, 2018 were $33 million and $20 million , respectively. The increase in capital expenditures was primarily due to additional investment related to the new DRG facility in Charleston, South Carolina.

Financing Activities

Debt

The Corporation's debt outstanding had an average interest rate of 3.7% for both the three and six months ended June 30, 2019 and June 30, 2018. The Corporation's average debt outstanding was $750 million for both the three and six months ended June 30, 2019 and $905 million and $853 million for the three and six months ended June 30, 2018 , respectively.

Revolving Credit Agreement

As of June 30, 2019 , the Corporation had no outstanding borrowings under the 2012 Senior Unsecured Revolving Credit Agreement (the "Credit Agreement" or "credit facility") and $30 million in letters of credit supported by the credit facility. The unused credit available under the Credit Agreement as of June 30, 2019 was $470 million which could be borrowed without violating any of our debt covenants.

Repurchase of common stock

During the six months ended June 30, 2019 , the Corporation used $25 million of cash to repurchase approximately 220,000 outstanding shares under its share repurchase program. During the six months ended June 30, 2018 , the Corporation used $46 million of cash to repurchase approximately 357,000 outstanding shares under its share repurchase program.

Dividends

The Corporation made dividend payments of $6 million and $7 million during the six months ended June 30, 2019 and June 30, 2018 , respectively.

Debt Compliance

As of the date of this report, we were in compliance with all debt agreements and credit facility covenants, including our most restrictive covenant, which is our debt to capitalization limit of 60%. The debt to capitalization limit is a measure of our indebtedness (as defined per the notes purchase agreement and credit facility) to capitalization, where capitalization equals debt plus equity, and is the same for and applies to all of our debt agreements and credit facility.

As of June 30, 2019 , we had the ability to borrow additional debt of $1.6 billion without violating our debt to capitalization covenant.

CRITICAL ACCOUNTING POLICIES

Our condensed consolidated financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. Preparation of these statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. These estimates and assumptions are affected by the application of our accounting policies. Critical accounting policies are those that require application of management's most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain and may change in subsequent periods. A summary of significant accounting policies and a description of accounting policies that are considered critical may be found in our 2018 Annual Report on Form 10-K, filed with the U.S. Securities and Exchange Commission on February 27, 2019 , in the Notes to the
Consolidated Financial Statements, Note 1, and the Critical Accounting Policies section of Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our market risk during the six months ended June 30, 2019 . Information regarding market risk and market risk management policies is more fully described in item “7A.Quantitative and Qualitative Disclosures about Market Risk” of our 2018 Annual Report on Form 10-K.

Item 4. CONTROLS AND PROCEDURES

As of June 30, 2019 , our management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective as of June 30, 2019 insofar as they are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms, and they include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

During the quarter ended June 30, 2019 , there have been no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) 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

In the ordinary course of business, the Corporation and its subsidiaries are subject to various pending claims, lawsuits, and contingent liabilities. We do not believe that the disposition of any of these matters, individually or in the aggregate, will have a material adverse effect on our consolidated financial condition, results of operations, and cash flows.

In December 2013, the Corporation, along with other unaffiliated parties, received a claim from Canadian Natural Resources Limited (CNRL), which was filed in the Court of Queen's Bench of Alberta, Judicial District of Calgary. The claim pertains to a January 2011 fire and explosion at a delayed coker unit at its Fort McMurray refinery that resulted in the injury of five CNRL employees, damage to property and equipment, and various forms of consequential loss such as loss of profit, lost opportunities, and business interruption. The fire and explosion occurred when a CNRL employee bypassed certain safety controls and opened an operating coker unit. The total quantum of alleged damages arising from the incident has not been finalized, but is estimated to meet or exceed $1 billion. We maintain various forms of commercial, property and casualty, product liability, and other forms of insurance; however, such insurance may not be adequate to cover the costs associated with a judgment against us. All parties have agreed in principle to participate in a formal mediation in late 2019 with the intention of settling this claim. In an effort to induce the parties to participate in the formal mediation, CNRL agreed to reduce its claim to approximately $400 million, which reflects the monetary amount of property damage incurred as result of the fire and explosion. We are currently unable to estimate an amount, or range of potential losses, if any, from this matter. We believe that we have adequate legal defenses and intend to defend this matter vigorously. Our financial condition, results of operations, and cash flows could be materially affected during a future fiscal quarter or fiscal year by unfavorable developments or outcome regarding this claim.

We have been named in pending lawsuits that allege injury from exposure to asbestos. To date, we have not been found liable or paid any material sum of money in settlement in any case. We believe that the minimal use of asbestos in our past operations as well as our acquired businesses and the relatively non-friable condition of asbestos in our historical products make it unlikely that we will face material liability in any asbestos litigation, whether individually or in the aggregate. We maintain insurance coverage and indemnification agreements for these potential liabilities and we believe adequate coverage exists to cover any unanticipated asbestos liability.

Item 1A. RISK FACTORS

There have been no material changes in our Risk Factors during the six months ended June 30, 2019 . Information regarding our Risk Factors is more fully described in Item “1A. Risk Factors” of our 2018 Annual Report on Form 10-K.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

The following table provides information about our repurchase of equity securities that are registered by us pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, during the quarter ended June 30, 2019 .

	Total Number of shares purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Program	Maximum Dollar amount of shares that may yet be Purchased Under the Program
April 1 - April 30	37,249	$ 112.66	147,713	$ 34,129,633
May 1 - May 31	38,385	114.54	186,098	229,732,917
June 1 - June 30	34,091	117.36	220,189	225,731,999
For the quarter ended June 30, 2019	109,725	$ 114.78	220,189	$ 225,731,999

On December 12, 2018, the Corporation authorized $100 million of share repurchases through a 10b5-1 program. Of this authorization, the Corporation used $50 million for opportunistic share repurchases in December 2018. On May 15, 2019, the

Corporation authorized an additional $200 million of share repurchases. For the current year, the Corporation expects to repurchase at least $50 million of additional shares through a 10b5-1 program.

Item 3. DEFAULTS UPON SENIOR SECURITIES

None.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Item 5. OTHER INFORMATION

There have been no material changes in our procedures by which our security holders may recommend nominees to our board of directors during the six months ended June 30, 2019 . Information regarding security holder recommendations and nominations for directors is more fully described in the section entitled “Stockholder Recommendations and Nominations for Director” of our 2019 Proxy Statement on Schedule 14A, which is incorporated by reference to our 2018 Annual Report on Form 10-K.

Item 6. EXHIBITS

Exhibit No.	Exhibit Description	Incorporated by Reference		Filed Herewith
		Form	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of the Registrant	8-A12B/A	May 24, 2005	
3.2	Amended and Restated Bylaws of the Registrant	8-K	May 18, 2015	
10.1	Instrument of Amendment No. 10 to the Curtiss-Wright Corporation Savings and Investment Plan, as Amended and Restated effective January 1, 2015*			X
10.2	Instrument of Amendment No. 11 to the Curtiss-Wright Corporation Savings and Investment Plan, as Amended and Restated effective January 1, 2015*			X
31.1	Certification of David C. Adams, Chairman and CEO, Pursuant to Rules 13a – 14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended			X
31.2	Certification of Glenn E. Tynan, Chief Financial Officer, Pursuant to Rules 13a – 14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended			X
32	Certification of David C. Adams, Chairman and CEO, and Glenn E. Tynan, Chief Financial Officer, Pursuant to 18 U.S.C. Section 1350			X
101.INS	XBRL Instance Document			X
101.SCH	XBRL Taxonomy Extension Schema Document			X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document			X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document			X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document			X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document			X

* Indicates contract or compensatory plan or arrangement

SIGNATURE

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.

CURTISS-WRIGHT CORPORATION
(Registrant)

By: /s/ Glenn E. Tynan
Glenn E. Tynan
Vice President and Chief Financial Officer
Dated: August 1, 2019

CURTISS-WRIGHT CORPORATION

SAVINGS AND INVESTMENT PLAN

As Amended and Restated effective January 1, 2015

TENTH INSTRUMENT OF AMENDMENT

Recitals:

1. Curtiss-Wright Corporation (the "Company") has heretofore adopted the Curtiss-Wright Corporation Savings and Investment Plan (the "Plan") and has caused the Plan to be amended and restated in its entirety effective as of January 1, 2015.

2. Subsequent to the most recent amendment and restatement of the Plan, the Company has decided to amend the Plan to increase the maximum limit under the automatic escalation program.

3. Section 12.01(a) of the Plan permits the Company to amend the Plan at any time and from time to time.

4. Section 12.01(b) authorizes the Administrative Committee to adopt Plan amendments on behalf of the Company under certain circumstances.

5. Certain of the Plan amendments described herein shall be subject to approval by the Board of Directors.

Amendments to the Plan:

Effective January 1, 2019, Section 3.04A is amended by substituting the numeral "8" for the numeral "6".

Except to the extent amended by this Instrument of Amendment, the Plan shall remain in full force and effect.

IN WITNESS WHEREOF, this amendment has been executed on this 15th day of January 2019.

Curtiss-Wright Corporation
Administrative Committee

By: /s/ Christopher J. McMahon

CURTISS-WRIGHT CORPORATION

SAVINGS AND INVESTMENT PLAN

As Amended and Restated effective January 1, 2015

ELEVENTH INSTRUMENT OF AMENDMENT

Recitals:

1. Curtiss-Wright Corporation (the "Company") has heretofore adopted the Curtiss-Wright Corporation Savings and Investment Plan (the "Plan") and has caused the Plan to be amended and restated in its entirety effective as of January 1, 2015.

2. Subsequent to the most recent amendment and restatement of the Plan, the Company has decided to amend the Plan for the following reasons (capitalized terms used but not defined herein are as defined in the Plan):

   a. To provide that those union Employees covered under the collective bargaining agreement covering Employees of the Target Rock operations of Curtiss-Wright Flow Control Corporation hired on or after June 1, 2019, or as soon as administratively practical thereafter, will become eligible to enroll in the Plan as soon as administratively practical after they have completed a Year of Eligibility Service (completion of at least 1,000 Hours of Service within a 12-month period); and
   b. To provide for the merger of the Tactical Communications Group, LLC 401(k) Plan into the Plan effective on or about August 1, 2019.

3. Section 12.01(a) of the Plan permits the Company to amend the Plan at any time and from time to time.

4. Section 12.01(b) authorizes the Administrative Committee to adopt Plan amendments on behalf of the Company under certain circumstances.

5. Certain of the Plan amendments described herein shall be subject to approval by the Board of Directors.

Amendments to the Plan:

1. Section 2.01 is amended by adding a new subsection (h) at the end thereof to read as follows:

   Effective as of June 1, 2019, or as soon as administratively practical thereafter, and notwithstanding the provisions of Section 2.01(e), but subject to Appendix A, each Employee described in Section 2.01(e)(iii) shall be eligible to become a Member in accordance with the provisions of Section 2.01(a). In no event shall a Casual Employee, Co-Op Student Employee or Temporary Employee be eligible to become a Member.

2. The Tactical Communications Group, LLC 401(k) Plan (the "TCG Plan") shall be and hereby is merged with and into the Plan effective on or about August 1, 2019, with the surviving plan being the Plan. Any Member may invest his Accounts, including amounts transferred to the Plan from the TCG Plan, in accordance with the Plan's provisions relating to the investment of Members' Accounts.

Except to the extent amended by this Instrument of Amendment, the Plan shall remain in full force and effect.

IN WITNESS WHEREOF, this amendment has been executed on this 12 th day of June 2019.

Curtiss-Wright Corporation
Administrative Committee

By: /s/ Christopher J. McMahon

Exhibit 31.1

Certifications

I, David C. Adams, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Curtiss-Wright Corporation;

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(s) 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(s) 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: August 1, 2019

/s/ David C. Adams
David C. Adams
Chairman and Chief Executive Officer

Exhibit 31.2

Certifications

I, Glenn E. Tynan, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Curtiss-Wright Corporation;

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(s) 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(s) 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: August 1, 2019

/s/ Glenn E. Tynan
Glenn E. Tynan
Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Curtiss-Wright Corporation (the "Company") on Form 10-Q for the period ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), David C. Adams, as Chairman and Chief Executive Officer of the Company, and Glenn E. Tynan, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. section 1350, that to the best of his knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ David C. Adams

David C. Adams
Chairman and Chief Executive Officer
August 1, 2019

/s/ Glenn E. Tynan

Glenn E. Tynan
Vice President and Chief Financial Officer
August 1, 2019