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, 2022

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: 033-90866

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**25-1615902**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
30 Isabella Street Pittsburgh, Pennsylvania	**15212**
(Address of principal executive offices)	**(Zip code)**

412-825-1000
(Registrant's telephone number, including area code)

Not applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $.01 par value per share	WAB	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 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	☐
Emerging growth company	☐	Smaller reporting 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.

As of July 29, 2022, there were 181,874,780 shares of common stock, par value $.01 per share, of the registrant outstanding.

WESTINGHOUSE AIR BRAKE
TECHNOLOGIES CORPORATION

June 30, 2022

FORM 10-Q

TABLE OF CONTENTS

PART I—FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS

In millions, except par value	Unaudited June 30, 2022	December 31, 2021
Assets		
Assets		
Cash and cash equivalents	$ 501	$ 473
Accounts receivable	1,000	1,085
Unbilled accounts receivable	422	392
Inventories	1,918	1,689
Other current assets	205	193
Total current assets	4,046	3,832
Property, plant and equipment, net	1,428	1,497
Goodwill	8,459	8,587
Other intangible assets, net	3,531	3,705
Other noncurrent assets	869	833
Total noncurrent assets	14,287	14,622
Total Assets	$ 18,333	$ 18,454
Liabilities and Shareholders' Equity		
Liabilities		
Accounts payable	$ 1,178	$ 1,012
Customer deposits	627	629
Accrued compensation	228	335
Accrued warranty	216	228
Current portion of long-term debt	226	2
Other accrued liabilities	715	704
Total current liabilities	3,190	2,910
Long-term debt	3,987	4,056
Accrued postretirement and pension benefits	68	77
Deferred income taxes	289	288
Contingent consideration	143	141
Other long-term liabilities	709	743
Total Liabilities	8,386	8,215
Commitments and contingencies (Note 14)		
Equity		
Common stock, $.01 par value; 500.0 shares authorized and 226.9 shares issued: 181.9 and 185.8 outstanding at June 30, 2022 and December 31, 2021, respectively	2	2
Additional paid-in capital	7,926	7,916
Treasury stock, at cost, 45.0 and 41.1 shares, at June 30, 2022 and December 31, 2021, respectively	(1,696)	(1,306)
Retained earnings	4,314	4,055
Accumulated other comprehensive loss	(641)	(466)
Total Westinghouse Air Brake Technologies Corporation shareholders' equity	9,905	10,201
Noncontrolling interest	42	38
Total Equity	9,947	10,239
Total Liabilities and Equity	$ 18,333	$ 18,454

The accompanying notes are an integral part of these statements.

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME

In millions, except per share data	Unaudited Three Months Ended June 30, 2022	Unaudited Three Months Ended June 30, 2021	Unaudited Six Months Ended June 30, 2022	Unaudited Six Months Ended June 30, 2021
Net sales:				
Sales of goods	$ 1,584	$ 1,588	$ 3,089	$ 3,073
Sales of services	464	424	886	769
Total net sales	2,048	2,012	3,975	3,842
Cost of sales:				
Cost of goods	(1,147)	(1,185)	(2,231)	(2,293)
Cost of services	(256)	(247)	(504)	(435)
Total cost of sales	(1,403)	(1,432)	(2,735)	(2,728)
Gross profit	645	580	1,240	1,114
Operating expenses:				
Selling, general and administrative expenses	(259)	(263)	(497)	(497)
Engineering expenses	(50)	(42)	(95)	(80)
Amortization expense	(72)	(72)	(145)	(142)
Total operating expenses	(381)	(377)	(737)	(719)
Income from operations	264	203	503	395
Other income and expenses:				
Interest expense, net	(44)	(45)	(87)	(93)
Other income, net	7	11	11	25
Income before income taxes	227	169	427	327
Income tax expense	(58)	(44)	(108)	(87)
Net income	169	125	319	240
Less: Net income attributable to noncontrolling interest	(3)	—	(4)	(3)
Net income attributable to Wabtec shareholders	$ 166	$ 125	$ 315	$ 237
Earnings Per Common Share				
Basic				
Net income attributable to Wabtec shareholders	$ 0.91	$ 0.66	$ 1.71	$ 1.25
Diluted				
Net income attributable to Wabtec shareholders	$ 0.91	$ 0.66	$ 1.71	$ 1.25
Weighted average shares outstanding				
Basic	181.9	188.6	183.2	188.5
Diluted	182.4	188.9	183.7	188.9

The accompanying notes are an integral part of these statements.

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Unaudited Three Months Ended June 30,		Unaudited Six Months Ended June 30,	
In millions	**2022**	**2021**	**2022**	**2021**
Net income attributable to Wabtec shareholders	$ 166	$ 125	$ 315	$ 237
Foreign currency translation (loss) gain	(195)	34	(182)	(28)
Unrealized gain (loss) on derivative contracts	—	—	3	(8)
Unrealized gain (loss) on pension benefit plans and post-retirement benefit plans	4	(1)	5	(4)
Other comprehensive (loss) income before tax	(191)	33	(174)	(40)
Income tax (expense) benefit related to components of other comprehensive (loss) income	(1)	—	(1)	3
Other comprehensive (loss) income, net of tax	(192)	33	(175)	(37)
Comprehensive (loss) income attributable to Wabtec shareholders	$ (26)	$ 158	$ 140	$ 200

The accompanying notes are an integral part of these statements.

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

In millions	Unaudited Six Months Ended June 30, 2022	2021
Operating Activities		
Net income	$ 319	$ 240
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	240	246
Stock-based compensation expense	20	24
Below market intangible amortization	(25)	(20)
Net loss on disposal of property, plant and equipment	3	3
Changes in operating assets and liabilities, net of acquisitions		
Accounts receivable and unbilled accounts receivable	45	(29)
Inventories	(256)	8
Accounts payable	185	82
Accrued income taxes	32	19
Accrued liabilities and customer deposits	(93)	(38)
Other assets and liabilities	(46)	(20)
Net cash provided by operating activities	424	515
Investing Activities		
Purchase of property, plant and equipment	(50)	(55)
Proceeds from disposal of property, plant and equipment	2	8
Acquisitions of businesses, net of cash acquired	(69)	(405)
Net cash used for investing activities	(117)	(452)
Financing Activities		
Proceeds from debt, net of issuance costs	3,416	3,008
Payments of debt	(3,216)	(3,170)
Repurchase of stock	(399)	(1)
Cash dividends	(55)	(46)
Other financing activities	(2)	(4)
Net cash used for financing activities	(256)	(213)
Effect of changes in currency exchange rates	(23)	5
Increase (decrease) in cash	28	(145)
Cash and cash equivalents, beginning of period	473	599
Cash and cash equivalents, end of period	$ 501	$ 454

The accompanying notes are an integral part of these statements.

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(Unaudited)

In millions	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Treasury Stock Shares	Treasury Stock Amount	Retained Earnings	Accumulated Other Comprehensive Loss	Non-controlling Interest	Total
Balance, December 31, 2021	226.9	$ 2	$ 7,916	(41.1)	$ (1,306)	$ 4,055	$ (466)	$ 38	$ 10,239
Cash dividends ($0.15 dividend per share)	—	—	—	—	—	(28)	—	—	(28)
Proceeds from treasury stock issued from the exercise of stock options and other benefit plans, net of tax	—	—	(9)	0.2	5	—	—	—	(4)
Stock based compensation	—	—	10	—	—	—	—	—	10
Net income	—	—	—	—	—	149	—	1	150
Other comprehensive income, net of tax	—	—	—	—	—	—	17	—	17
Stock repurchase	—	—	—	(3.1)	(296)	—	—	—	(296)
Balance, March 31, 2022	226.9	$ 2	$ 7,917	(44.0)	$ (1,597)	$ 4,176	$ (449)	$ 39	$ 10,088
Cash dividends ($0.15 dividend per share)	—	—	—	—	—	(27)	—	—	(27)
Proceeds from treasury stock issued from the exercise of stock options and other benefit plans, net of tax	—	—	(1)	0.1	4	—	—	—	3
Stock based compensation	—	—	10	—	—	—	—	—	10
Net income	—	—	—	—	—	166	—	3	169
Other comprehensive loss, net of tax	—	—	—	—	—	—	(192)	—	(192)
Stock repurchase	—	—	—	(1.1)	(103)	—	—	—	(103)
Balance, June 30, 2022	226.9	$ 2	$ 7,926	(45.0)	$ (1,696)	$ 4,314	$ (641)	$ 42	$ 9,947
Balance, December 31, 2020	226.9	$ 2	$ 7,881	(38.0)	$ (1,010)	$ 3,589	$ (339)	$ 30	$ 10,153
Cash dividends ($0.12 dividend per share)	—	—	—	—	—	(23)	—	—	(23)
Proceeds from treasury stock issued from the exercise of stock options and other benefit plans, net of tax	—	—	(6)	—	—	—	—	—	(6)
Stock based compensation	—	—	9	—	—	—	—	—	9
Net income	—	—	—	—	—	112	—	3	115
Other comprehensive loss, net of tax	—	—	—	—	—	—	(70)	—	(70)
Stock repurchase	—	—	—	—	(1)	—	—	—	(1)
Balance, March 31, 2021	226.9	$ 2	$ 7,884	(38.0)	$ (1,011)	$ 3,678	$ (409)	$ 33	$ 10,177
Cash dividends ($0.12 dividend per share)	—	—	—	—	—	(23)	—	—	(23)
Proceeds from treasury stock issued from the exercise of stock options and other benefit plans, net of tax	—	—	(1)	0.1	2	—	—	—	1
Stock based compensation	—	—	14	—	—	—	—	—	14
Net income	—	—	—	—	—	125	—	—	125
Other comprehensive income, net of tax	—	—	—	—	—	—	33	—	33
Balance, June 30, 2021	226.9	$ 2	$ 7,897	(37.9)	$ (1,009)	$ 3,780	$ (376)	$ 33	$ 10,327

The accompanying notes are an integral part of these statements.

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2022 (UNAUDITED)

1. BUSINESS

Westinghouse Air Brake Technologies Corporation ("Wabtec" or the "Company") is one of the world's largest providers of value-added, technology-based locomotives, equipment, systems, and services for the global freight rail and passenger transit industries, as well as the mining, marine and industrial markets. Our highly engineered products, which are intended to enhance safety, improve productivity and reduce maintenance costs for customers, can be found on most locomotives, freight cars, passenger transit cars and buses around the world. Our core products and services are essential in the safe and efficient operation of freight rail and passenger transit vehicles. Wabtec is a global company with operations in over 50 countries and our products can be found in more than 100 countries throughout the world. In the first six months of 2022, approximately 55% of the Company's net sales came from customers outside the United States.

2. ACCOUNTING POLICIES

Basis of Presentation The unaudited condensed consolidated interim financial statements have been prepared in accordance with generally accepted accounting principles ("GAAP") in the United States of America and the rules and regulations of the Securities and Exchange Commission and include the accounts of Wabtec and its subsidiaries in which Wabtec has a controlling interest. These condensed consolidated interim financial statements do not include all of the information and footnotes required for complete financial statements. In management's opinion, these financial statements reflect all adjustments of a normal, recurring nature necessary for a fair presentation of the results for the interim periods presented. Certain prior year amounts have been reclassified, where necessary, to conform to the current year presentation.

Results for these interim periods are not necessarily indicative of results to be expected for the full year particularly in light of the ongoing COVID-19 pandemic, supply chain disruptions, labor availability, broad-based inflation, and the impacts resulting from Russia's invasion of Ukraine. These factors continue to impact our sales channels, supply chain, manufacturing operations, workforce, and other key aspects of our operations. We are unable to reasonably predict the full impact of these factors due to the high degree of uncertainty regarding their duration and severity, their potential impact on global economic activity, and the impact that current and new sanctions may have on our business, global supply chain operations and our customers, suppliers, and end-markets.

For the year ended December 31, 2021, Wabtec had earnings of approximately $40 million attributable to customers in Russia, while earnings from customers in Ukraine and Belarus were not significant. As of June 30, 2022, Wabtec had approximately $18 million of assets related to Russian operations, which were primarily cash and inventory. Assets related to Ukraine and Belarus operations are not significant.

The Company operates on a four-four-five week accounting quarter, and the quarters end on or about March 31, June 30, September 30 and December 31.

The notes included herein should be read in conjunction with the audited consolidated financial statements included in Wabtec's Annual Report on Form 10-K for the year ended December 31, 2021. The December 31, 2021 information has been derived from the Company's Annual Report on Form 10-K for the year ended December 31, 2021.

Use of Estimates The preparation of financial statements in conformity with GAAP in the United States requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual amounts could differ from the estimates. On an ongoing basis, management reviews its estimates based on currently available information. Changes in facts and circumstances may result in revised estimates.

Revenue Recognition A majority of the Company's revenues are derived from performance obligations that are satisfied at a point in time when control passes to the customer. The remaining revenues are earned over time. Generally, for performance obligations satisfied at a point in time control passes at the time of shipment in accordance with agreed upon delivery terms.

The Company also has long-term customer agreements involving the design and production of highly engineered products that require revenue to be recognized over time because these products have no alternative use without significant economic loss and the agreements contain an enforceable right to payment including a reasonable profit margin from the customer in the event of contract termination. Additionally, the Company has customer agreements involving the creation or enhancement of an asset that the customer controls which also require revenue to be recognized over time. Generally, the Company uses an input method for determining the amount of revenue, cost and gross margin to recognize over time for these customer agreements. The input methods used for these agreements include costs of material and labor, both of which give an accurate representation of the progress made toward complete satisfaction of a particular performance obligation. Contract revenues and cost estimates are reviewed and revised periodically throughout the year and adjustments are reflected in the accounting period as such amounts are determined.

Due to the nature of work required to be performed on the Company's long-term projects, the estimation of total revenue and cost at completion is subject to many variables and requires significant judgment. Contract estimates related to long-term projects are based on various assumptions to project the outcome of future events that could span several years. These assumptions include cost of materials; labor availability and productivity; complexity of the work to be performed; and the performance of suppliers, customers and subcontractors that may be associated with the contract. We have a disciplined process where management reviews the progress of long term-projects periodically throughout the year. As part of this process, management reviews information including key contract matters, progress towards completion, identified risks and opportunities and any other information that could impact the Company's estimates of revenue and costs. After completing this analysis, any adjustments to net sales, cost of goods sold, and the related impact to operating income are recognized as necessary in the period they become known.

Generally, the Company's revenue contains a single performance obligation for each distinct good or service; however, a single contract may have multiple performance obligations comprising multiple promises to customers. When there are multiple performance obligations, revenue is allocated based on the relative stand-alone selling price. Pricing is defined in our contracts on a line item basis and includes an estimate of variable consideration when required by the terms of the individual customer contract. Types of variable consideration the Company typically has include volume discounts, prompt payment discounts, liquidating damages and performance bonuses. Sales returns and allowances are also estimated and recognized in the same period the related revenue is recognized, based upon the Company's experience.

Remaining performance obligations represent the transaction price of firm customer orders subject to standard industry cancellation provisions and substantial scope-of-work adjustments. As of June 30, 2022, the Company's remaining performance obligations were approximately $22.8 billion. The Company expects to recognize revenue of approximately 25% of the remaining performance obligations over the next 12 months, with the remainder recognized thereafter.

Revolving Receivables Program The Company utilizes a revolving agreement to transfer up to $200 million of certain receivables of certain subsidiaries of the Company (the "Originators") through our bankruptcy-remote subsidiary to a financial institution on a recurring basis in exchange for cash equal to the gross receivables transferred. The bankruptcy remote subsidiary is a separate legal entity with its own creditors, and its assets are not available to pay creditors of the Company or any other affiliates of the Company. As customers pay their balances, we transfer additional receivables into the program, which resulted in our gross receivables sold exceeding collections reinvested for the periods presented. The sold receivables are fully guaranteed by our bankruptcy-remote subsidiary, which holds additional receivables that are pledged as collateral under this agreement.

At June 30, 2022 and 2021 the bankruptcy-remote subsidiary held receivables of $410 million and $333 million, respectively. The transfers are recorded at the fair value of the proceeds received and obligations assumed less derecognized receivables. No obligation was recorded at June 30, 2022 or 2021 as the estimated expected credit losses on receivables sold is insignificant. Our maximum exposure to losses related to these receivables transferred is limited to the amount outstanding. The Company has agreed to guarantee the performance of the Originators respective obligations under the revolving agreement. Neither the Company (except for the bankruptcy-remote consolidated subsidiary referenced above) nor the Originators guarantees the collectability of the receivables under the revolving agreements.

The following table sets forth a summary of receivables sold:

In millions	**Six Months Ended June 30, 2022**	**Six Months Ended June 30, 2021**
Gross receivables sold/cash proceeds received	$ 864	$ 569
Collections reinvested under revolving agreement	(684)	(487)
Net cash proceeds received	$ 180	$ 82

Depreciation Expense Depreciation of property, plant and equipment related to the manufacturing of products or services provided is included in Cost of goods or Cost of services. Depreciation of other property, plant and equipment that is not attributable to the manufacturing of products or services provided is included in Selling, general and administrative expenses or Engineering expenses depending on how the property, plant and equipment is used.

Goodwill and Intangible Assets Goodwill and other intangible assets with indefinite lives are not amortized. Other intangibles (with definite lives) are amortized on a straight-line basis over their estimated economic lives. Amortizable intangible assets are reviewed for impairment when indicators of impairment are present. The Company tests goodwill and indefinite-lived intangible assets for impairment at the reporting unit level and at least annually. The Company performs its annual impairment test during the fourth quarter after the annual forecasting process is completed, and also tests for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. Periodically, management of the Company assesses whether or not an indicator of impairment is present that would necessitate an impairment analysis to be performed.

Accounting Standards Recently Issued In October 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers.* The amendments in this update provide specific guidance on how to recognize and measure acquired contract assets and contract liabilities from revenue contracts in a business combination and address how to determine whether a contract liability is recognized by the acquirer in a business combination. The amendments in this update will be effective for Wabtec on January 1, 2023 and will be applied prospectively to business combinations occurring on or after the effective date.

Accumulated Other Comprehensive Loss Comprehensive income comprises both net income and Other comprehensive (loss) income resulting from the change in equity from transactions and other events and circumstances from non-owner sources.

The changes in Accumulated other comprehensive loss by component, including any tax impacts, for the three months ended June 30, 2022 and 2021 are as follows:

	Foreign currency translation		Derivative contracts		Pension and postretirement benefit plans		Total	
In millions	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Balance at March 31	$ (383)	$ (322)	$ (2)	$ (3)	$ (64)	$ (84)	$ (449)	$ (409)
Other comprehensive (loss) income before reclassifications	(195)	34	—	—	3	(2)	(192)	32
Amounts reclassified from Accumulated other comprehensive loss	—	—	—	—	—	1	—	1
Other comprehensive (loss) income, net	(195)	34	—	—	3	(1)	(192)	33
Balance at June 30	$ (578)	$ (288)	$ (2)	$ (3)	$ (61)	$ (85)	$ (641)	$ (376)

The changes in Accumulated other comprehensive loss by component, including any tax impacts, for the six months ended June 30, 2022 and 2021 are as follows:

	Foreign currency translation		Derivative contracts		Pension and postretirement benefit plans		Total	
In millions	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Balance at beginning of year	$ (396)	$ (260)	$ (5)	$ 3	$ (65)	$ (82)	$ (466)	$ (339)
Other comprehensive (loss) income before reclassifications	(182)	(28)	3	(6)	3	(5)	(176)	(39)
Amounts reclassified from Accumulated other comprehensive loss	—	—	—	—	1	2	1	2
Other comprehensive (loss) income, net	(182)	(28)	3	(6)	4	(3)	(175)	(37)
Balance at June 30	$ (578)	$ (288)	$ (2)	$ (3)	$ (61)	$ (85)	$ (641)	$ (376)

Amounts reclassified from Accumulated other comprehensive loss are recognized in "Other income, net" with the tax impact recognized in "Income tax expense."

3. ACQUISITIONS

Nordco

On March 31, 2021, the Company acquired Nordco, a leading North American supplier of new, rebuilt and used maintenance of way equipment. Nordco's products and services portfolio includes mobile railcar movers and ultrasonic rail flaw detection technologies. The purchase price paid for 100% ownership of Nordco was approximately $410 million.

The following table summarizes the fair value of the Nordco assets acquired and liabilities assumed:

In millions		
Assets acquired		
Cash and cash equivalents	$	5
Accounts receivable		23
Inventory		34
Other current assets		2
Property, plant and equipment		17
Goodwill		215
Other intangible assets		168
Other noncurrent assets		12
Total assets acquired		476
Liabilities assumed		
Current liabilities		20
Noncurrent liabilities		46
Total liabilities assumed		66
Net assets acquired	$	410

The fair values of the assets acquired and liabilities assumed were determined using the income, cost and market approaches. Discounted cash flow models were used to estimate the fair values of acquired intangibles. The fair value measurements were primarily based on significant inputs that are not observable in the market and are considered Level 3 in the fair value hierarchy. Intangible assets acquired include customer relationships and acquired technology that are subject to amortization, and trade names that were assigned an indefinite life and are not subject to amortization. Contingent liabilities assumed as part of the transaction were not material.

Goodwill was calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired, and represents the assembled workforce and the future economic benefits, including synergies, that are expected to be achieved as a result of the acquisition. The purchased goodwill is not expected to be deductible for tax purposes. The results of this business since the date of acquisition are reported within the Services product line of the Freight Segment. The pro forma impact on Wabtec’s sales and results of operations, including the pro forma effect of events that are directly attributable to the acquisition, was not significant.

During the second quarter of 2022 the Company made two strategic acquisitions for a combined purchase price of $69 million within the Digital Electronics product line of the Freight Segment which are individually and collectively immaterial. The Company also made acquisitions in prior periods not listed above which are individually and collectively immaterial.

4. INVENTORIES

The components of inventory, net of reserves, were:

In millions		June 30, 2022		December 31, 2021
Raw materials	$	882	$	757
Work-in-progress		427		316
Finished goods		609		616
Total inventories	$	1,918	$	1,689

5. GOODWILL AND INTANGIBLE ASSETS

The change in the carrying amount of goodwill by segment is as follows:

In millions	Freight Segment	Transit Segment	Total
Balance at December 31, 2021	$ 7,073	$ 1,514	$ 8,587
Additions/adjustments	17	(2)	15
Foreign currency impact	(20)	(123)	(143)
Balance at June 30, 2022	$ 7,070	$ 1,389	$ 8,459

As of June 30, 2022 and December 31, 2021, the Company's trade names had a net carrying amount of $597 million and $635 million, respectively. The Company believes these intangibles have indefinite lives, with the exception of the right to use the GE Transportation trade name, to which the Company has assigned a useful life of 5 years.

Intangible assets of the Company, other than goodwill and trade names, consist of the following:

In millions	June 30, 2022	December 31, 2021
Backlog, net of accumulated amortization of $366 and $309	$ 1,065	$ 1,114
Customer relationships, net of accumulated amortization of $352 and $331	935	979
Acquired technology, net of accumulated amortization of $386 and $334	934	977
Total	$ 2,934	$ 3,070

The weighted average remaining useful lives of backlog, customer relationships and acquired technology were 10 years, 16 years and 9 years, respectively. The backlog intangible asset primarily consists of in-place long-term service agreements acquired by the Company in conjunction with the acquisition of GE Transportation in 2019. Amortization expense for intangible assets was $72 million and $145 million for the three and six months ended June 30, 2022, respectively, and $72 million and $142 million for the three and six months ended June 30, 2021, respectively.

Amortization expense for the five succeeding years is estimated to be as follows:

In millions	
Remainder of 2022	$ 147
2023	$ 293
2024	$ 284
2025	$ 266
2026	$ 262

6. CONTRACT ASSETS AND CONTRACT LIABILITIES

Contract assets include unbilled amounts resulting from sales under long-term contracts where revenue is recognized over time and revenue exceeds the amount that can be billed to the customer based on the terms of the contract. The current portion of the contract assets are classified as current assets under the caption “Unbilled accounts receivable” while the noncurrent contract assets are classified as other assets under the caption "Other noncurrent assets" on the consolidated balance sheets. Noncurrent contract assets were $190 million at June 30, 2022 and $153 million at December 31, 2021. Included in noncurrent contract assets are certain costs that are specifically related to a contract but do not directly contribute to the transfer of control of the tangible product being created, such as non-recurring engineering costs. The Company has elected to use the practical expedient and does not consider unbilled amounts anticipated to be paid within one year as significant financing components.

Contract liabilities include customer deposits that are made prior to the incurrence of costs related to a newly agreed upon contract and advanced customer payments that are in excess of revenue recognized. The current portion of contract liabilities are classified as current liabilities under the caption “Customer deposits” while the noncurrent contract liabilities are classified as noncurrent liabilities under the caption "Other long-term liabilities" on the consolidated balance sheets. Noncurrent contract liabilities were $89 million at June 30, 2022 and $88 million at December 31, 2021. These contract liabilities are not considered a significant financing component because they are used to meet working capital demands that can be higher in the early stages of a contract or revenue associated with the contract liabilities is expected to be recognized within one year. Contract liabilities also include provisions for estimated losses from uncompleted contracts. Provisions for loss contracts were $110 million and $107 million at June 30, 2022 and December 31, 2021, respectively. These provisions for estimated losses are classified as current liabilities and included within the caption “Other accrued liabilities” on the consolidated balance sheets.

The change in the carrying amount of contract assets and contract liabilities for the six months ended June 30, 2022 and 2021 is as follows:

	Contract Assets	
In millions	**2022**	**2021**
Balance at beginning of year	$ 545	$ 544
Acquisitions	28	—
Recognized in current year	284	370
Reclassified to accounts receivable	(225)	(364)
Foreign currency impact	(20)	(5)
Balance at June 30	$ 612	$ 545

	Contract Liabilities	
In millions	**2022**	**2021**
Balance at beginning of year	$ 824	$ 832
Acquisitions	12	2
Recognized in current year	453	339
Amounts in beginning balance reclassified to revenue	(277)	(317)
Current year amounts reclassified to revenue	(169)	(63)
Foreign currency impact	(17)	(7)
Balance at June 30	$ 826	$ 786

7. LEASES

The Company leases certain property, buildings and equipment. For leases with terms greater than 12 months, the Company records the related asset and obligation at the present value of lease payments. Many of the Company's leases include rental escalation clauses, renewal options, and/or termination options that are factored into our determination of lease payments when appropriate. The Company does not separate lease and non-lease components. The right-of-use assets are classified as noncurrent and included within the caption "Other noncurrent assets" on the consolidated balance sheets. The current portion of lease liabilities are classified under the caption "Other accrued liabilities," while the noncurrent portion of lease liabilities are classified under the caption "Other long-term liabilities" on the consolidated balance sheets.

Operating lease expense was $14 million and $29 million for the three and six months ended June 30, 2022, respectively, and $14 million and $28 million for the three and six months ended June 30, 2021, respectively. New operating leases of $22 million and $24 million were added during the three and six months ended June 30, 2022, respectively. Wabtec does not have material financing leases, short-term or variable leases or sublease income.

As most of the Company's leases do not provide a readily stated discount rate, the Company must estimate the rate to discount lease payments using its incremental borrowing rate. The Company has established discount rates by geographic region ranging from 1% to 9%.

Scheduled payments of lease liabilities are as follows:

In millions	Operating Leases
Remaining 2022	$ 30
2023	54
2024	48
2025	42
2026	35
Thereafter	117
Total lease payments	326
Less: Present value discount	(25)
Present value of lease liabilities	$ 301

The following table summarizes the remaining lease term and discount rate assumptions used to develop the present value of operating lease liabilities:

	June 30, 2022	December 31, 2021
Weighted-average remaining lease term (years)	7.9	8.2
Weighted-average discount rate	2.3 %	2.3 %

8. LONG-TERM DEBT

Long-term debt consisted of the following:

			June 30, 2022		December 31, 2021	
In millions	Effective Interest Rate	Face Value	Book Value	Fair Value[1]	Book Value	Fair Value[1]
Senior Credit Facility:						
Multi-Currency Revolving loan facility	2.9 %	N/A	$ 217	$ 217	$ —	$ —
Senior Notes:						
4.375% Senior Notes, due 2023	4.5 %	$ 250	250	249	250	260
4.15% Senior Notes, due 2024	4.6 %	$ 725	723	726	747	796
3.20% Senior Notes, due 2025	3.4 %	$ 500	497	480	497	523
3.45% Senior Notes, due 2026	3.5 %	$ 750	749	700	749	795
1.25% Senior Notes (EUR), due 2027	1.5 %	€ 500	515	430	560	574
4.70% Senior Notes, due 2028	5.0 %	$ 1,250	1,243	1,213	1,243	1,423
Other Borrowings			19	19	12	12
Total			4,213	4,034	4,058	4,383
Less: current portion			226	226	2	2
Long-term portion			$ 3,987	$ 3,808	$ 4,056	$ 4,381

1. See Note 13 for information on the fair value measurement of the Company's long-term debt.

Variances between Face Value and Book Value are the result of unamortized discounts and debt issuance fees.

For those debt securities that have a premium or discount at the time of issuance, the Company amortizes the amount through interest expense based on the maturity date or the first date the holders may require the Company to repurchase the debt securities, if applicable. A premium would result in a decrease in interest expense, and a discount would result in an increase in interest expense in future periods. Additionally, the Company has debt issuance costs related to certain financing transactions which are also amortized through interest expense. As of June 30, 2022 and December 31, 2021, the Company had total combined unamortized discount and debt issuance costs of $20 million and $23 million, respectively.

Senior Credit Facility

On June 8, 2018, the Company entered into a credit agreement ("Senior Credit Facility"), which replaced the Company's then-existing credit agreement. The Senior Credit Facility is with a syndicate of lenders and provides for borrowings consisting of (i) term loans denominated in euros and U.S. dollars ("Term Loans"); and (ii) a multi-currency revolving loan facility, providing for an equivalent in U.S. dollars of up to $1,200 million in multi-currency revolving loans (inclusive of swingline loans of up to $75 million and letters of credit of up to $450 million (the "Revolving Credit Facility")). The Revolving Credit Facility will mature on June 8, 2023. The Company is currently negotiating an extension of the maturity of the Senior Credit Facility and management expects that this can be accomplished at market rates.

Under the Senior Credit Facility, we can elect to receive advances bearing interest based on either the Alternate Base Rate ("ABR"), the London Interbank Offered Rate ("LIBOR") or the adjusted risk-free rate (each as defined in the Senior Credit Facility) plus applicable margin that is determined based on our credit ratings or the Company's Leverage (as defined in the Senior Credit Facility). The agreement contains affirmative, negative and financial covenants, and events of default customary for facilities of this type. The obligations under the Senior Credit Facility are guaranteed by Wabtec and certain of Wabtec's U.S. subsidiaries, as guarantors.

The Company has agreed that, so long as any lender has any commitment under the Senior Credit Facility, any letter of credit is outstanding under the Senior Credit Facility, or any loan or other obligation is outstanding under the Senior Credit Facility, it will maintain the following as of the end of each fiscal quarter or the period of four quarters then ended:

Interest Coverage Ratio [1]	3.0x
Leverage Ratio [2]	3.25x

1. The interest coverage ratio is defined as EBITDA (earnings before interest, taxes, depreciation, and amortization) to net interest expense (each as defined in the Senior Credit Facility) for the four quarters then ended.
2. The leverage ratio is defined as net debt as of the last day of such fiscal quarter to EBITDA, as defined in the Senior Credit Facility, for the four quarters then ended.

The Senior Credit Facility was amended in the second quarter of 2021 so the Company may increase the maximum leverage ratio to (x) 3.75 to 1.00 at the end of the fiscal quarter in which the Nordco acquisition was consummated and each of the three fiscal quarters immediately following such fiscal quarter and (y) 3.50 to 1.00 at the end of each of the fourth and fifth full fiscal quarters after the consummation of the Nordco acquisition upon the Company's request. The Company has not requested any increase in the leverage ratio at this time.

The Company was in compliance with all covenants in the Senior Credit Facility as of June 30, 2022.

The following table presents availability under the Senior Credit Facility at June 30, 2022:

In millions	Senior Credit Facility
Maximum Availability	$ 1,200
Outstanding Borrowings	(217)
Letters of Credit Under Credit Agreement	(3)
Current Availability	$ 980

Senior Notes

The Company or its subsidiaries may issue senior notes from time to time. These notes are comprised of our 4.375% Senior Notes due 2023 (the "2023 Notes"), 4.15% Senior Notes due 2024 (the "2024 Notes"), 3.20% Senior Notes due 2025 (the "2025 Notes"), 3.45% Senior Notes due 2026 (the "2026 Notes"), 1.25% Senior Notes (EUR) due 2027 (the "Euro Notes"), and 4.70% Senior Notes due 2028 (the "2028 Notes"). The 2023 Notes, 2024 Notes, 2025 Notes, 2026 Notes and 2028 Notes are the “US Notes”, and collectively with the Euro Notes, the “Senior Notes.” Interest on the US Notes is payable semi-annually and interest on the Euro Notes is paid annually. Each series of the Senior Notes may be redeemed at any time in whole or from time to time in part in accordance with the provisions of the indenture, under which such series of notes was issued. Each of the Senior Notes may be redeemed at a redemption price of 100% of the principal amount plus a specified make-whole premium and accrued interest. The US Notes and the Company's guarantee of the Euro Notes are senior unsecured obligations of the Company and rank pari passu with all existing and future senior debt, and are senior to all existing and future subordinated indebtedness of the Company.

During the second quarter of 2022, the Company redeemed $25 million of principal from the 2024 Notes plus a premium and the related accrued interest.

The indentures under which the Senior Notes were issued contain covenants and restrictions which limit, subject to certain exceptions, certain sale and leaseback transactions with respect to principal properties, the incurrence of secured debt without equally and ratably securing the Senior Notes, and certain merger and consolidation transactions. The covenants do not require the Company to maintain any financial ratios or specified levels of net worth or liquidity. The US Notes are fully and unconditionally guaranteed, jointly and severally, on an unsecured basis by each of the Company's subsidiaries that is a guarantor under the Senior Credit Facility. The Euro Notes were issued by Wabtec Transportation Netherlands B.V. and are fully and unconditionally guaranteed by the Company.

The Company is in compliance with the restrictions and covenants in the indentures under which the Senior Notes were issued and expects that these restrictions and covenants will not be any type of limiting factor in executing our operating activities.

9. STOCK-BASED COMPENSATION

As of June 30, 2022, the Company maintains employee stock-based compensation plans for stock options, restricted stock, and incentive stock units as governed by the 2011 Stock Incentive Compensation Plan, as amended and restated (the “2011 Plan”) and the 2000 Stock Incentive Plan, as amended (the “2000 Plan”). The 2011 Plan has a term through May 15, 2030, and as of June 30, 2022 the number of shares available for future grants under the 2011 Plan was 6.0 million shares, which includes remaining shares available under the 2000 Plan. The Company also maintains a 1995 Non-Employee Directors’ Fee and Stock Option Plan as amended and restated (“the Directors Plan”).

Stock-based compensation expense was $12 million and $23 million for the three and six months ended June 30, 2022, respectively, and $16 million and $24 million for the three and six months ended June 30, 2021, respectively. At June 30, 2022, unamortized compensation expense related to stock options, non-vested restricted shares and incentive stock units expected to vest totaled $69 million.

Stock Options Stock options are granted to eligible employees at an exercise price equivalent to the stock's fair market value, which is the average of the high and low Wabtec stock price on the date of grant. New options granted become exercisable over a three-year vesting period. Options expire 10 years from the date of grant. No stock options were granted during the six months ended June 30, 2022.

The following table summarizes the Company’s stock option activity and related information for the 2011 Plan, the 2000 Plan and the Directors Plan for the six months ended June 30, 2022:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic value (in millions)
Outstanding at December 31, 2021	531,915	$ 75.40	6.5	$ 9
Exercised	(55,057)	$ 74.63		
Canceled	(15,132)	$ 73.40		
Outstanding at June 30, 2022	461,726	$ 75.56	6.0	$ 4
Exercisable at June 30, 2022	350,898	$ 74.39	5.8	$ 3

Restricted Stock, Restricted Units and Incentive Stock As provided for under the 2011 Plan and 2000 Plan, eligible employees are granted restricted stock that generally vests over three years from the date of grant. Under the Directors Plan, restricted stock awards vest one year from the date of grant.

In addition, the Company has issued incentive stock units to eligible employees that vest upon attainment of certain cumulative three-year performance goals. Based on the Company’s performance for each three-year period then ended, the incentive stock units can vest, with underlying shares of common stock being awarded in an amount ranging from 0% to 200% of the amount of initial incentive stock units granted. The incentive stock units included in the table below represent the number of incentive stock units that are expected to vest based on the Company’s estimate for meeting those established performance targets. As of June 30, 2022, the Company estimates that it will achieve 132%, 117% and 103% for the incentive stock awards expected to vest based on performance for the three-year periods ending December 31, 2022, 2023, and 2024, respectively, and has recorded incentive compensation expense accordingly. If the estimate of the number of these incentive stock units expected to vest changes in a future accounting period, cumulative compensation expense could increase or decrease resulting in recognition in the current period for the elapsed portion of the vesting period and would change future expense for the remaining vesting period.

Compensation expense for the non-vested restricted stock and incentive stock units is based on the average of the high and low Wabtec stock price on the date of grant and recognized over the applicable vesting period.

The following table summarizes the restricted stock activity and incentive stock units' activity for the six months ended June 30, 2022:

	Restricted Stock and Units	Incentive Stock Units	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2021	507,698	607,101	$ 78.06
Granted	439,683	176,657	$ 91.18
Vested	(208,525)	(43,039)	$ 74.91
Adjustment for incentive stock awards expected to vest	—	10,962	$ 83.91
Canceled	(21,812)	(25,362)	$ 78.42
Outstanding at June 30, 2022	717,044	726,319	$ 84.25

10. INCOME TAXES

The overall effective tax rate of 25.5% and 25.3% for the three and six months ended June 30, 2022, respectively, differs from the U.S. Federal statutory rate of 21.0% primarily due to the impact of state and foreign taxes.

11. EARNINGS PER SHARE

The computation of basic and diluted earnings per share for Net income attributable to Wabtec shareholders is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions, except per share data	**2022**	**2021**	**2022**	**2021**
Numerator				
Net income attributable to Wabtec shareholders	$ 166	$ 125	$ 315	$ 237
Denominator				
Weighted average shares outstanding - basic	181.9	188.6	183.2	188.5
Effect of dilutive securities:				
Assumed conversion of dilutive stock-based compensation plans	0.5	0.3	0.5	0.4
Weighted average shares outstanding - diluted	182.4	188.9	183.7	188.9
Net income attributable to Wabtec shareholders per common share				
Basic	$ 0.91	$ 0.66	$ 1.71	$ 1.25
Diluted	$ 0.91	$ 0.66	$ 1.71	$ 1.25

Approximately 0.2 million outstanding shares of stock options for the three and six months ended June 30, 2021 were not included in the computation of quarterly diluted earnings per share because their exercise price exceeded the average market price of the Company's common stock.

12. WARRANTIES

The following table reconciles the changes in the Company’s product warranty reserve for the six months ended June 30, 2022 and 2021:

In millions	**2022**	**2021**
Balance at beginning of year	$ 259	$ 279
Acquisitions	3	2
Warranty expense	41	59
Warranty claim payments	(49)	(51)
Foreign currency impact/other	(10)	(7)
Balance at June 30	$ 244	$ 282

13. FAIR VALUE MEASUREMENT AND DERIVATIVE INSTRUMENTS

ASC 820 “Fair Value Measurements and Disclosures” defines fair value, establishes a framework for measuring fair value and explains the related disclosure requirements. ASC 820 indicates, among other things, that a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability and defines fair value based upon an exit price model.

Valuation Hierarchy. ASC 820 establishes a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; and, Level 3 inputs are unobservable inputs based on the Company’s assumptions used to measure assets and liabilities at fair value. A financial asset or liability’s classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The Company’s cash and cash equivalents are highly liquid investments purchased with an original maturity of three months or less and are considered Level 1 on the fair value valuation hierarchy. The fair value of cash and cash equivalents approximated the carrying value at June 30, 2022 and December 31, 2021. The Company’s defined benefit pension plan assets consist primarily of equity security funds, debt security funds, insurance contracts, and temporary cash and cash equivalent investments. These investments are comprised of a number of investment funds that invest in a diverse portfolio of assets including equity securities, corporate and governmental bonds, and money markets. Trusts are valued at the net asset value (“NAV”) as determined by their custodian. NAV represents the accumulation of the unadjusted quoted close prices on the reporting date for the underlying investments divided by the total shares outstanding at the reporting dates. The Senior Notes are considered Level 2 based on the fair value valuation hierarchy. Contingent consideration related to the GE Transportation acquisition is considered Level 3 based on the fair value valuation hierarchy. At June 30, 2022 and December 31, 2021, $110 million was classified as "Other accrued liabilities" on the Company's Consolidated Balance Sheets and $143 million and $141 million, respectively, was included within long-term liabilities classified as "Contingent consideration" on the Company's Consolidated Balance Sheets. The fair value approximates the carrying value at June 30, 2022 and December 31, 2021.

Hedging Activities In the normal course of business, the Company is exposed to market risk related to interest rates, commodity prices and foreign currency exchange rate fluctuations, which may adversely affect our operating results and financial position. At times, we limit these risks through the use of derivatives such as cross-currency swaps, foreign currency forward contracts, interest rate swaps, commodity swaps and options. These hedging contracts are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. In accordance with our policy, derivatives are only used for hedging purposes. We do not use derivatives for trading or speculative purposes.

Foreign Currency Exchange Risk

The Company uses forward contracts to hedge forecasted foreign currency denominated sales of finished goods and future settlement of foreign currency denominated assets and liabilities. Derivatives used to hedge firm commitments relevant to sales and purchases and forecasted transactions to be realized with high probability that meet the criteria for hedge accounting are designated as cash flow hedges. The effective portion of gains and losses is deferred as a component of Accumulated other comprehensive loss and is recognized in earnings at the time the hedged item affects earnings, in the same line item as the underlying hedged item. For the three and six months ended June 30, 2022 and 2021, the amounts reclassified into income were not material.

The Company has also established balance sheet risk management and net investment hedging programs to protect its balance sheet against foreign currency exchange rate volatility. We conduct our business worldwide in U.S. dollars and the functional currencies of our foreign subsidiaries, including euro, Indian rupee, British pound sterling, Australian dollars and several other foreign currencies. Changes in these foreign currency exchange rates could have a material adverse impact on our financial results that are reported in U.S. dollars. We are also exposed to foreign currency exchange rate risk related to our foreign subsidiaries, including intercompany loans denominated in non-functional currencies. We hedge these exposures using foreign currency swap contracts and cross-currency swaps to offset the potential income statement effects on intercompany loans denominated in non-functional currencies. These programs reduce but do not eliminate foreign currency exchange rate risk entirely.

The Company enters into certain derivative contracts in accordance with its risk management strategy that do not meet the criteria for hedge accounting, but which have the impact of largely mitigating foreign currency exposure. These foreign exchange contracts are accounted for on a full mark to market basis through earnings, with gains and losses recorded as a component of Other income, net. The net loss related to these contracts was $7 million and $8 million for the three and six months ended June 30, 2022, respectively, and a net loss of $1 million and $3 million for the three and six months ended June 30, 2021, respectively. These contracts typically mature within one year.

The following table summarizes the gross notional amounts and fair values of the designated and non-designated hedges discussed in the above sections as of June 30, 2022, which are included in "Other current assets" and "Other accrued liabilities" on the Consolidated Balance Sheets:

		Fair Value		Gross Notional Amount	
In millions	**Level**	**Designated**	**Non-Designated**	**Designated**	**Non-Designated**
Foreign Exchange Contracts					
Other current assets	2	$ 9	$ 3	$ 419	$ 292
Other current liabilities	2	(1)	—	512	
Cross-currency Swaps					
Other current liabilities	2	—	—	13	—
Total		$ 8	$ 3	$ 944	$ 292

The following table summarizes the gross notional amounts and fair values of the designated and non-designated hedges discussed in the above sections as of December 31, 2021, which are included in "Other current assets" and "Other accrued liabilities" on the Consolidated Balance Sheets:

		Fair Value		Gross Notional Amount	
In millions	**Level**	**Designated**	**Non-Designated**	**Designated**	**Non-Designated**
Foreign Exchange Contracts					
Other current assets	2	$ 8	$ —	$ 627	$ —
Other current liabilities	2	(1)	(2)	613	289
Cross-currency Swaps					
Other current assets	2	—	—	14	—
Total		$ 7	$ (2)	$ 1,254	$ 289

Interest Rate Risk

The Company may use interest rate swap contracts on certain investing and borrowing transactions to manage its net exposure to interest rate changes and to reduce its overall cost of borrowing. The Company does not use leveraged swaps and, in general, does not leverage any of its investment activities that would put principal capital at risk. For the six months ended June 30, 2022 and 2021 the amounts reclassified into income were not material.

Commodity Price Risk

The Company may use commodity forward contracts and futures to mitigate its exposure to commodity price changes and to reduce its overall cost of manufacturing. For the six months ended June 30, 2022 and 2021 the amounts recognized as income or expense were not material.

14. COMMITMENTS AND CONTINGENCIES

The Company is subject to a variety of environmental laws and regulations governing discharges to air and water, the handling, storage and disposal of hazardous or solid waste materials and the remediation of contamination associated with releases of hazardous substances. The Company believes its operations currently comply in all material respects with all of the various environmental laws and regulations applicable to our business; however, there can be no assurance that environmental requirements will not change in the future or that we will not incur significant costs to comply with such requirements.

Claims have been filed against the Company and certain of its affiliates in various jurisdictions across the United States by persons alleging bodily injury as a result of exposure to asbestos-containing products. The vast majority of the claims are submitted to insurance carriers for defense and indemnity, or to non-affiliated companies that retain the liabilities for the asbestos-containing products at issue. We cannot, however, assure that all of these claims will be fully covered by insurance, or that the indemnitors or insurers will remain financially viable. Our ultimate legal and financial liability with respect to these claims, as is the case with other pending litigation, cannot be estimated. A limited number of claims are not covered by insurance, nor are they subject to indemnity from non-affiliated parties. Management believes that the costs of the Company’s asbestos-related cases will not be material to the Company’s overall financial position, results of operations and cash flows.

Xorail, Inc., a wholly owned subsidiary of the Company (“Xorail”), has received notices from Denver Transit Constructors (“DTC”) alleging breach of contract related to the operating of constant warning wireless crossings, and late delivery of the Train Management & Dispatch System (“TMDS”) for the Denver Eagle P3 Project, which is owned by the Denver Regional Transit District ("RTD"). No damages have been asserted for the alleged late delivery of the TMDS, and no formal claim has been filed; Xorail has successfully completed a remediation plan concerning the TMDS issues. With regard to the wireless crossing issue, as of September 8, 2017, DTC alleged that total damages were $37 million through July 31, 2017 and are continuing to accumulate. The majority of the damages stems from a delay in approval of the wireless crossing system by the Federal Railway Administration ("FRA") and the Public Utility Commission ("PUC"), resulting in the use of flaggers at all of the crossings pending approval of the wireless crossing system and certification of the crossings. DTC has alleged that the delay is due to Xorail's failure to achieve constant warning times for the crossings in accordance with the approval requirements imposed by the FRA and PUC. Xorail has denied DTC's assertions, stating that its system satisfied the contractual requirements. Xorail has worked with DTC to modify its system and implement the FRA's and PUC's previously undefined approval requirements; the FRA and PUC have both approved modified wireless crossing system, and as of August 2018, DTC completed the process of certifying the crossings and eliminated the use of flaggers. DTC has not updated its notices against Xorail, nor have they filed any formal claim against Xorail. On September 21, 2018, DTC filed a complaint against RTD in Colorado state court for breach of contract related to non-payments and the costs for the flaggers, asserting a change-in-law arising from the FRA/PUC’s new certification requirements. DTC’s complaint generally supports Xorail’s position and does not name or implicate Xorail. DTC's claim against RTD proceeded to trial on September 21, 2020; the trial has been completed, included post-trial submission.

From time to time the Company is involved in litigation relating to claims arising out of its operations in the ordinary course of business. As of the date hereof, the Company is involved in no litigation that the Company believes will have a material adverse effect on its financial condition, results of operations or liquidity.

15. SEGMENT INFORMATION

Wabtec has two reportable segments—the Freight Segment and the Transit Segment. The key factors used to identify these reportable segments are the organization and alignment of the Company’s internal operations, the nature of the products and services and customer type.

Freight Segment primarily builds new locomotives, manufactures and services components for new and existing freight cars and locomotives, rebuilds freight locomotives, supplies railway electronics, positive train control equipment, signal design and engineering services and provides related heat exchange and cooling systems. Customers include large, publicly traded railroads, leasing companies, manufacturers of original equipment such as locomotives and freight cars and utilities. We refer to sales of both goods, such as spare parts and equipment upgrades, and related services, such as monitoring, maintenance and repairs, as sales in our Services product line.

Transit Segment primarily manufactures and services components for new and existing passenger transit vehicles, typically regional trains, high speed trains, subway cars, light-rail vehicles and buses. It also refurbishes subway cars and provides heating, ventilation, and air conditioning equipment and doors for buses and subway cars. Customers include public transit authorities and municipalities, leasing companies and manufacturers of subway cars and buses around the world.

The Company evaluates its business segments’ operating results based on income from operations. Intersegment sales are accounted for at prices that are generally established by reference to similar transactions with unaffiliated customers. Corporate activities include general corporate expenses, elimination of intersegment transactions, interest income and expense, and other unallocated charges.

Segment financial information for the three months ended June 30, 2022 is as follows:

In millions	**Freight Segment**	**Transit Segment**	**Corporate Activities and Elimination**	**Total**
Sales to external customers	$ 1,490	$ 558	$ —	$ 2,048
Intersegment sales/(elimination)	12	9	(21)	—
Total sales	$ 1,502	$ 567	$ (21)	$ 2,048
Income (loss) from operations	$ 233	$ 50	$ (19)	$ 264
Interest expense and other, net	—	—	(37)	(37)
Income (loss) before income taxes	$ 233	$ 50	$ (56)	$ 227

Segment financial information for the three months ended June 30, 2021 is as follows:

In millions		Freight Segment		Transit Segment		Corporate Activities and Elimination		Total
Sales to external customers	$	1,336	$	676	$	—	$	2,012
Intersegment sales/(elimination)		12		7		(19)		—
Total sales	$	1,348	$	683	$	(19)	$	2,012
Income (loss) from operations	$	173	$	45	$	(15)	$	203
Interest expense and other, net		—		—		(34)		(34)
Income (loss) before income taxes	$	173	$	45	$	(49)	$	169

Segment financial information for the six months ended June 30, 2022 is as follows:

In millions		Freight Segment		Transit Segment		Corporate Activities and Elimination		Total
Sales to external customers	$	2,812	$	1,163	$	—	$	3,975
Intersegment sales/(elimination)		25		17		(42)		—
Total sales	$	2,837	$	1,180	$	(42)	$	3,975
Income (loss) from operations	$	422	$	115	$	(34)	$	503
Interest expense and other, net		—		—		(76)		(76)
Income (loss) before income taxes	$	422	$	115	$	(110)	$	427

Segment financial information for the six months ended June 30, 2021 is as follows:

In millions		Freight Segment		Transit Segment		Corporate Activities and Elimination		Total
Sales to external customers	$	2,519	$	1,323	$	—	$	3,842
Intersegment sales/(elimination)		24		17		(41)		—
Total sales	$	2,543	$	1,340	$	(41)	$	3,842
Income (loss) from operations	$	315	$	115	$	(35)	$	395
Interest expense and other, net		—		—		(68)		(68)
Income (loss) before income taxes	$	315	$	115	$	(103)	$	327

Sales to external customers by product line are as follows:

	Three Months Ended June 30,				Six Months Ended June 30,			
In millions		2022		2021		2022		2021
Freight Segment								
Services	$	711	$	622	$	1,377	$	1,184
Equipment		381		328		655		590
Components		234		224		463		427
Digital Electronics		164		162		317		318
Total Freight Segment	$	1,490	$	1,336	$	2,812	$	2,519
Transit Segment								
Original Equipment Manufacturer	$	259	$	320	$	551	$	607
Aftermarket		299		356		612		716
Total Transit Segment	$	558	$	676	$	1,163	$	1,323

16. OTHER INCOME, NET

The components of Other income, net are as follows:

In millions	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Foreign currency (loss) gain	$ (2)	$ 2	$ 1	$ 11
Equity income	7	4	7	7
Expected return on pension assets/amortization	2	2	5	5
Other miscellaneous income (expense), net	—	3	(2)	2
Total Other income, net	$ 7	$ 11	$ 11	$ 25

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the information in the unaudited condensed consolidated financial statements and notes thereto included herein and Westinghouse Air Brake Technologies Corporation's Financial Statements and Management's Discussion and Analysis of Financial Condition and Results of Operations included in its Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission on February 17, 2022.

OVERVIEW

Wabtec is one of the world's largest providers of value-added, technology-based locomotives, equipment, systems, and services for the global freight rail and passenger transit industries, as well as the mining, marine and industrial markets. Our highly engineered products, which are intended to enhance safety, improve productivity and reduce maintenance costs for customers, can be found on most locomotives, freight cars, passenger transit cars and buses around the world. Our core products and services are essential in the safe and efficient operation of freight rail and passenger transit vehicles. Wabtec is a global company with operations in over 50 countries and our products can be found in more than 100 countries throughout the world. In the first six months of 2022, approximately 55% of the Company's net sales came from customers outside the United States.

Business Update

The unfavorable global economic conditions driven by the impacts of the COVID-19 pandemic and supply chain disruptions, and further intensified by the Russian invasion of Ukraine, continue to have an adverse impact on our operations and business results. Impacts for the three and six months ended June 30, 2022 and 2021, are discussed in more detail in the Results of Operations section below. Supply chain disruptions and labor availability have caused component, raw material and chip shortages resulting in an adverse effect on the timing of the Company's revenue generation. Additionally, broad-based inflation, escalation of diesel, metals and other commodity costs, transportation and logistics costs, and labor costs all continue to impact our results.

The Russian invasion of Ukraine and the resultant sanctions related to Russia and Belarus have further impacted our supply and distribution channels and caused significant price inflation which had, and are expected to continue to have, adverse effects on Wabtec's business results. For the year ended December 31, 2021, Wabtec had earnings of approximately $40 million attributable to customers in Russia, while earnings from customers in Ukraine and Belarus were not significant. As of June 30, 2022, Wabtec had approximately $18 million of assets related to Russian operations, which were primarily cash and inventory. Management has determined, based on information currently available, that these assets are expected to be recoverable and therefore no impairment was recorded during the first six months of 2022. This will continue to be monitored and may result in a future impairment charge based on changes in the situation. Management determined that inventory related to operations in Ukraine were not expected to be recoverable and were written off resulting in an insignificant charge during the first quarter of 2022. Remaining assets related to Ukraine and those in Belarus were not significant.

The Company has implemented various mitigating actions intended to lessen the impact of these unfavorable economic conditions. These actions include implementing price escalations and surcharges, driving operational efficiencies through various cost mitigation efforts and discretionary spend management, strategically sourcing materials, reviewing and modifying distribution logistics, and accelerating integration synergies where possible. The Company expects to continue to incur increased costs in future quarters. Management will continue to monitor the evolving situations but, as a result of the numerous uncertainties surrounding the COVID-19 pandemic, recent supply chain disruptions and the Russian invasion of Ukraine, we are unable to specifically predict the extent and length of time that our business may be negatively impacted. We also face the possibility that additional actions may be taken by governmental authorities and private industry, or government policies may become more restrictive in response to the COVID-19 pandemic, especially if COVID-19 transmission rates increase in certain areas. Changes in trade regulations and sanctions including retaliatory measures, advancements or changes in the conflict in Ukraine, the impact of variants of COVID-19, actions taken in response to COVID-19 including curtailing operations of our plants, or significant adverse impacts to our customers, suppliers, distribution channels and operating locations, could result in material adverse impacts to the business, including impairment charges from changes in estimates.

Cyber Incident

As previously announced, on June 26, 2022, we detected a cyber security incident which impacted the Company's network. The Company promptly activated incident response protocols, which included shutting down certain systems, and commenced an investigation of the incident, which is ongoing. The Company also notified law enforcement and engaged legal counsel and other third-party incident response and cybersecurity professionals.

Based on its preliminary assessment and on the information currently known, the incident has not had a significant financial impact and the Company does not believe the incident will have a material impact on its business, operations or financial results. The Company maintains cyber insurance, subject to certain deductibles and policy limitations typical for its size and industry.

Integration 2.0

During the first quarter of 2022, Wabtec announced a three-year strategic review expected to target incremental run rate synergies estimated to be between $75 million and $90 million by 2025. The scope of the review will include consolidating our operating footprint, reducing headcount, streamlining the end-to-end manufacturing process, restructuring the North America distribution channels, expanding operations in low-cost countries and simplifying the business through systems enablement, including the source-to-pay process. Management will also consider additional capital investments to further simplify and streamline the business. The Company anticipates that it will incur one-time restructuring charges in the future to execute on decisions resulting from the review, currently estimated to be approximately $135 million to $165 million. The estimate could change based on the specific programs approved or changes to the scope of the review. During the second quarter of 2022, no significant programs related to the strategic review were initiated.

RESULTS OF OPERATIONS

Consolidated Results

SECOND QUARTER 2022 COMPARED TO SECOND QUARTER 2021

The following table shows our Consolidated Statements of Operations for the periods indicated.

In millions	Three Months Ended June 30, 2022	2021
Net sales:		
Sales of goods	$ 1,584	$ 1,588
Sales of services	464	424
Total net sales	2,048	2,012
Cost of sales:		
Cost of goods	(1,147)	(1,185)
Cost of services	(256)	(247)
Total cost of sales	(1,403)	(1,432)
Gross profit	645	580
Operating expenses:		
Selling, general and administrative expenses	(259)	(263)
Engineering expenses	(50)	(42)
Amortization expense	(72)	(72)
Total operating expenses	(381)	(377)
Income from operations	264	203
Other income and expenses:		
Interest expense, net	(44)	(45)
Other income, net	7	11
Income before income taxes	227	169
Income tax expense	(58)	(44)
Net income	169	125
Less: Net income attributable to noncontrolling interest	(3)	—
Net income attributable to Wabtec shareholders	$ 166	$ 125

The following table shows the major components of the change in sales in the three months ended June 30, 2022 from the three months ended June 30, 2021:

In millions	Freight Segment	Transit Segment	Total
Second Quarter 2021 Net Sales	$ 1,336	$ 676	$ 2,012
Acquisitions	5	1	6
Foreign Exchange	(16)	(60)	(76)
Organic	165	(59)	106
Second Quarter 2022 Net Sales	$ 1,490	$ 558	$ 2,048

Net sales

Net sales for the three months ended June 30, 2022 increased by $36 million, or 1.8%, to $2.05 billion compared to the same period in 2021. Freight Segment organic sales increased $165 million driven primarily by Services sales from higher locomotive modernizations and a decrease in locomotive parkings. In addition, Equipment sales increased due to higher international locomotive deliveries and higher mining equipment sales, and Components sales increased due to a higher railcar build and growth in industrial end-markets. Transit Segment organic sales decreased $59 million primarily due to supply chain issues caused by the COVID-19 pandemic and the prior year exit of low margin businesses and contracts in the United

Kingdom. Sales from acquisitions contributed $6 million and unfavorable exchange rates, primarily in the Transit Segment, decreased sales by $76 million.

Cost of sales

Cost of sales for the three months ended June 30, 2022 decreased by $29 million, or 2.0%, to $1.40 billion compared to the same period in 2021. Cost of sales as a percentage of sales was 68.5% and 71.2% for the three months ended June 30, 2022 and 2021, respectively, representing a 2.7 percentage point decrease. The decrease can be attributed to favorable product mix, increased pricing and strong productivity, partially offset by increased metals, transportation and labor costs. Cost of sales for the three months ended June 30, 2022 and 2021 included $2 million and $21 million, respectively, of restructuring costs, primarily for headcount actions and footprint rationalization.

Operating expenses

Total operating expenses increased $4 million, or 1.1%, for the three months ended June 30, 2022 compared to the same period in 2021. Operating expenses as a percentage of sales was 18.6% and 18.7% for the three months ended June 30, 2022 and 2021, respectively. Selling, general and administrative expenses ("SG&A") decreased $4 million due to lower restructuring and transaction costs, partially offset by higher employee compensation and benefit costs. Restructuring and transaction costs included in SG&A were $2 million and $9 million for the three months ended June 30, 2022 and 2021, respectively, and were primarily for headcount actions and footprint rationalization programs. Engineering expenses increased $8 million primarily due to investments in new technology. Amortization expense remained flat year over year.

Interest expense, net

Interest expense, net, decreased $1 million for the three months ended June 30, 2022 compared to the same period in 2021 from changes in outstanding balances and effective interest rates.

Other income, net

Other income, net, was $7 million of income for the three months ended June 30, 2022 compared to $11 million of income in the same period of 2021. The variance is primarily driven by foreign exchange losses in the current year compared to gains in the prior year.

Income taxes

The effective income tax rate was 25.5% and 25.8% for the three months ended June 30, 2022 and 2021, respectively. The decrease in the quarterly effective tax rate is primarily the result of a more favorable earnings mix for the period ended June 30, 2022.

Freight Segment

The following table shows our Consolidated Statements of Operations for our Freight Segment for the periods indicated:

In millions	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021
Net sales:		
Sales of goods	$ 1,031	$ 918
Sales of services	459	418
Total net sales	1,490	1,336
Cost of sales:		
Cost of goods	(745)	(680)
Cost of services	(252)	(242)
Total cost of sales	(997)	(922)
Gross profit	493	414
Operating expenses	(260)	(241)
Income from operations ($)	$ 233	$ 173
Income from operations (% of net sales)	15.7 %	13.0 %

The following table shows the major components of the change in net sales for the Freight Segment in the second quarter of 2022 from the second quarter of 2021:

In millions	
Second Quarter 2021 Net Sales	$ 1,336
Acquisitions	5
Foreign Exchange	(16)
Changes in Sales by Product Line:	
Equipment	58
Components	17
Digital Electronics	1
Services	89
Second Quarter 2022 Net Sales	$ 1,490

Net sales

Freight Segment sales increased by $154 million or 11.5%, to $1.49 billion, compared to the same period in 2021. Services sales increased from higher locomotive modernizations and a decrease in locomotive parkings, Equipment sales increased due to higher international locomotive deliveries and higher mining equipment sales, and Components sales increased due to a higher railcar build and growth in industrial end-markets. Sales from acquisitions contributed $5 million and the effects of unfavorable foreign exchange rates decreased sales by $16 million.

Cost of sales

Freight Segment cost of sales for the three months ended June 30, 2022 increased by $75 million, or 8.1%, to $997 million, compared to the same period in 2021. The increase is primarily due to the increase in sales and increased metals, transportation and labor costs. Cost of sales as a percentage of sales was 66.9% and 69.0% for the three months ended June 30, 2022 and 2021, respectively, representing a 2.1 percentage point decrease which benefited from favorable product mix, increased pricing and strong productivity. Cost of sales for the three months ended June 30, 2022 includes $1 million, of restructuring costs, primarily for headcount actions. Cost of sales for the three months ended June 30, 2021 includes $4 million of restructuring and transaction costs, primarily for purchase price accounting for the step-up of Nordco inventory.

Operating expenses

Freight Segment operating expenses increased $19 million, or 7.9%, for the three months ended June 30, 2022 compared to the same period in 2021. SG&A increased $11 million due to higher employee compensation and benefit costs and incremental expense from acquisitions, partially offset by a decrease in restructuring and transaction costs. There were no restructuring and transaction costs included in SG&A for the three months ended June 30, 2022 compared to $3 million for the same period in 2021 primarily for headcount actions as part of the integration of GE Transportation. Engineering expenses increased $8 million primarily due to investments in new technology. Amortization expense remained flat year over year.

Transit Segment

The following table shows our Consolidated Statements of Operations for our Transit Segment for the periods indicated:

In millions	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021
Net sales	$ 558	$ 676
Cost of sales	(406)	(510)
Gross profit	152	166
Operating expenses	(102)	(121)
Income from operations ($)	$ 50	$ 45
Income from operations (% of net sales)	9.0 %	6.7 %

The following table shows the major components of the change in net sales for the Transit Segment in the second quarter of 2022 from the second quarter of 2021:

In millions	
Second Quarter 2021 Net Sales	$ 676
Acquisitions	1
Foreign Exchange	(60)
Changes in Sales by Product Line:	
Original Equipment Manufacturing	(37)
Aftermarket	(22)
Second Quarter 2022 Net Sales	$ 558

Net sales

Transit Segment sales for the three months ended June 30, 2022 decreased by $118 million, or 17.5%, to $558 million compared to the same period in 2021. The effects of unfavorable foreign exchange rates decreased sales by $60 million. Sales of Original Equipment Manufacturing decreased due to supply chain issues caused by the COVID-19 pandemic while Aftermarket sales have decreased due to lower maintenance and overhauls driven by the prior year exit of low margin businesses and contracts in the United Kingdom. Additionally, a late second quarter manufacturing disruption caused by a cyber incident negatively impacted net sales by approximately 5%.

Cost of sales

Transit Segment cost of sales for the three months ended June 30, 2022 decreased by $104 million, or 20.3%, to $406 million compared to the same period in 2021. The decrease is primarily due to the decrease in sales discussed above. Cost of sales as a percentage of sales was 72.7% and 75.4% for the three months ended June 30, 2022 and 2021, respectively, representing a 2.7 percentage point decrease. This can be attributed to product mix, improved productivity, higher pricing, the exit of low margin business in the United Kingdom, and prior year structured cost actions taken through restructuring programs, partially offset by increased metals, transportation and labor costs. Cost of sales for the three months ended June 30, 2022 and 2021 includes $1 million and $17 million, respectively, of restructuring costs, primarily for footprint rationalization in the UK and headcount actions.

Operating expenses

Transit Segment operating expenses decreased $19 million, or 15.7%, for the three months ended June 30, 2022 compared to the same period in 2021. SG&A decreased $18 million for the three months ended June 30, 2022 compared to the same period in 2021 due to the decrease in sales and the effects of foreign exchange rates. SG&A for the three months ended June 30, 2022 and 2021 includes $2 million and $6 million of restructuring costs, respectively, primarily for footprint rationalization and related headcount actions. Additionally, engineering and amortization expenses remained consistent year over year.

FIRST SIX MONTHS OF 2022 COMPARED TO FIRST SIX MONTHS OF 2021

The following table shows our Consolidated Statements of Operations for the periods indicated.

In millions	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales:		
Sales of goods	$ 3,089	$ 3,073
Sales of services	886	769
Total net sales	3,975	3,842
Cost of sales:		
Cost of goods	(2,231)	(2,293)
Cost of services	(504)	(435)
Total cost of sales	(2,735)	(2,728)
Gross profit	1,240	1,114
Operating expenses:		
Selling, general and administrative expenses	(497)	(497)
Engineering expenses	(95)	(80)
Amortization expense	(145)	(142)
Total operating expenses	(737)	(719)
Income from operations	503	395
Other income and expenses:		
Interest expense, net	(87)	(93)
Other income, net	11	25
Income before income taxes	427	327
Income tax expense	(108)	(87)
Net income	319	240
Less: Net income attributable to noncontrolling interest	(4)	(3)
Net income attributable to Wabtec shareholders	$ 315	$ 237

The following table shows the major components of the change in sales in the six months ended June 30, 2022 from the six months ended June 30, 2021:

In millions	Freight Segment	Transit Segment	Total
First Six Months of 2021 Net Sales	$ 2,519	$ 1,323	$ 3,842
Acquisitions	44	2	46
Foreign Exchange	(20)	(93)	(113)
Organic	269	(69)	200
First Six Months of 2022 Net Sales	$ 2,812	$ 1,163	$ 3,975

Net sales

Net sales for the six months ended June 30, 2022 increased by $133 million, or 3.5%, to $3.98 billion compared to the same period in 2021. Freight Segment organic sales increased $269 million driven primarily by Services sales from higher locomotive modernizations and a decrease in locomotive parkings. In addition, Equipment sales increased due to higher volumes for mining equipment and Components sales increased due to a higher railcar build, lower railcar parkings and growth in industrial end-markets. Transit Segment organic sales decreased $69 million primarily due to supply chain issues caused by the COVID-19 pandemic and the prior year exit of low margin businesses and contracts in the United Kingdom. Sales from acquisitions contributed $46 million, primarily in the Freight Segment and unfavorable exchange rates, primarily in the Transit Segment, decreased sales by $113 million.

Cost of sales

Cost of sales for the six months ended June 30, 2022 increased by $7 million, or 0.3%, to $2.74 billion compared to the same period in 2021. The increase is primarily due to the increase in sales and increased metals, labor and transportation costs, partially offset due to favorable product mix between operating segments and product lines. Cost of sales as a percentage of sales was 68.8% and 71.0% for the six months ended June 30, 2022 and 2021, respectively, representing a 2.2 percentage point decrease. The decrease as a percentage of sales can be attributed to favorable product mix, higher pricing and strong productivity, partially offset by higher sales and the increase in the costs described above. Cost of sales for the six months ended June 30, 2022 and 2021 included $7 million and $25 million, respectively, of restructuring costs, primarily for headcount actions and footprint rationalization.

Operating expenses

Total operating expenses increased $18 million, or 2.5%, for the six months ended June 30, 2022 compared to the same period in 2021. Operating expenses as a percentage of sales was 18.5% and 18.7% for the six months ended June 30, 2022 and 2021, respectively. SG&A remained flat from lower restructuring and transaction costs, offset by higher compensation costs, higher technology costs and incremental expense for acquisitions primarily Nordco. Restructuring and transaction costs included in SG&A were $4 million and $20 million for the six months ended June 30, 2022 and 2021, respectively, and were primarily for headcount actions and footprint rationalization programs. Engineering expenses increased $15 million primarily due to investments in new technology and incremental expense from acquisitions. Amortization expense increased $3 million primarily due to the acquisition of Nordco.

Interest expense, net

Interest expense, net, decreased $6 million for the six months ended June 30, 2022 compared to the same period in 2021 primarily attributable to lower effective interest rates.

Other income, net

Other income, net, was $11 million of income for the six months ended June 30, 2022 compared to $25 million of income in the same period of 2021 primarily driven by lower foreign exchange gains in the current year.

Income taxes

The effective income tax rate was 25.3% and 26.6% for the six months ended June 30, 2022 and 2021, respectively. The decrease in the effective tax rate is primarily the result of a more favorable earnings mix for the six months ended June 30, 2022.

Freight Segment

The following table shows our Consolidated Statements of Operations for our Freight Segment for the periods indicated:

In millions	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales:		
Sales of goods	$ 1,935	$ 1,763
Sales of services	877	756
Total net sales	2,812	2,519
Cost of sales:		
Cost of goods	(1,398)	(1,323)
Cost of services	(497)	(426)
Total cost of sales	(1,895)	(1,749)
Gross profit	917	770
Operating expenses	(495)	(455)
Income from operations ($)	$ 422	$ 315
Income from operations (% of net sales)	15.0 %	12.5 %

The following table shows the major components of the change in net sales for the Freight Segment in the first six months of 2022 from the first six months of 2021:

In millions	
First Six Months of 2021 Net Sales	$ 2,519
Acquisitions	44
Foreign Exchange	(20)
Changes in Sales by Product Line:	
Equipment	71
Components	47
Digital Electronics	(2)
Services	153
First Six Months of 2022 Net Sales	$ 2,812

Net sales

Freight Segment sales increased by $293 million or 11.6%, to $2.81 billion, compared to the same period in 2021. Services sales increased from higher locomotive modernizations and a decrease in locomotive parkings, Equipment sales increased due to higher volumes for mining equipment, and Components sales increased due to a higher railcar build and lower railcar parkings. Sales from acquisitions, primarily Nordco, contributed $44 million and the effects of unfavorable foreign exchange rates decreased sales by $20 million.

Cost of sales

Freight Segment cost of sales for the six months ended June 30, 2022 increased by $146 million, or 8.3%, to $1.90 billion, compared to the same period in 2021. The increase is primarily due to the increase in sales and increased metals, transportation and labor costs. Cost of sales as a percentage of sales was 67.4% and 69.4% for the six months ended June 30, 2022 and 2021, respectively, representing a 2.0 percentage point decrease which benefited from favorable product mix, increased pricing, improved productivity and synergy savings. Cost of sales for the six months ended June 30, 2022 and 2021 includes $3 million and $5 million, respectively, of restructuring and transaction costs, primarily for headcount actions. The six months ended June 30, 2021 also included amounts related to purchase price accounting for the step-up of Nordco inventory.

Operating expenses

Freight Segment operating expenses increased $40 million, or 8.8%, for the six months ended June 30, 2022 compared to the same period in 2021. SG&A increased $21 million primarily due to higher employee compensation and benefit costs, incremental expense from acquisitions and higher technology costs, partially offset by a decrease in restructuring and transaction costs. There were no restructuring and transaction costs included in SG&A for the six months ended June 30, 2022 compared to $9 million for the same period in 2021 primarily for headcount actions as part of the integration of GE Transportation. Engineering expenses increased $16 million primarily due to investments in new technology and incremental expense from acquisitions. Amortization expense increased $3 million due to the acquisitions, primarily Nordco.

Transit Segment

The following table shows our Consolidated Statements of Operations for our Transit Segment for the periods indicated:

In millions	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Net sales	$ 1,163	$ 1,323
Cost of sales	(840)	(979)
Gross profit	323	344
Operating expenses	(208)	(229)
Income from operations ($)	$ 115	$ 115
Income from operations (% of net sales)	9.9 %	8.7 %

The following table shows the major components of the change in net sales for the Transit Segment in the first six months of 2022 from the first six months of 2021:

In millions	
First Six Months of 2021 Net Sales	$ 1,323
Acquisitions	2
Foreign Exchange	(93)
Changes in Sales by Product Line:	
Original Equipment Manufacturing	(21)
Aftermarket	(48)
First Six Months of 2022 Net Sales	$ 1,163

Net sales

Transit Segment sales for the six months ended June 30, 2022 decreased by $160 million, or 12.1%, to $1.16 billion compared to the same period in 2021, with foreign exchange rates being the primary driver of the decrease. Sales of Original Equipment Manufacturing decreased due to supply chain issues caused by the COVID-19 pandemic partially offset by higher demand and an increase in government transportation spending. Aftermarket sales decreased from lower maintenance and overhaul driven by the prior year exit of low margin businesses and contracts in the United Kingdom, as well as supply chain issues caused by the COVID-19 pandemic. Additionally, both Original Equipment Manufacturing and Aftermarket sales were impacted by a late second quarter manufacturing disruption caused by a cyber incident.

Cost of sales

Transit Segment cost of sales for the six months ended June 30, 2022 decreased by $139 million, or 14.2%, to $840 million compared to the same period in 2021. The decrease is primarily due to the decrease in sales discussed above and decreased restructuring costs. Cost of sales as a percentage of sales was 72.2% and 74.0% for the six months ended June 30, 2022 and 2021, respectively, representing a 1.8 percentage point decrease. This can be attributed to improved productivity, higher pricing, the exit of low margin business in the United Kingdom, and prior year structured cost actions taken through restructuring programs, partially offset by increased metals, transportation and labor costs. Cost of sales for the six months ended June 30, 2022 and 2021 included $4 million and $20 million, respectively, of restructuring costs, primarily for headcount actions in Europe and footprint rationalization in the UK.

Operating expenses

Transit Segment operating expenses decreased $21 million, or 9.2%, for the six months ended June 30, 2022 compared to the same period in 2021. SG&A decreased $18 million due to the decrease in sales, the effects of foreign exchange rates and decreased restructuring cost. SG&A for the six months ended June 30, 2022 and 2021 included $3 million and $7 million, respectively, of restructuring costs, primarily for headcount actions in Europe. Additionally, engineering and amortization expenses remained consistent year over year.

Liquidity and Capital Resources

Liquidity is provided primarily by operating cash flow and borrowings under the Company's Senior Notes and unsecured credit facility with a consortium of commercial banks. Additionally, the Company utilizes the revolving receivables program and supply chain financing program described below for added flexibility as part of our liquidity management strategy. The following is a summary of selected cash flow information and other relevant data:

In millions	Six Months Ended June 30, 2022	2021
Cash provided by (used for):		
Operating activities	$ 424	$ 515
Investing activities	$ (117)	$ (452)
Financing activities	$ (256)	$ (213)

Operating activities In the first six months of 2022, cash provided by operating activities was $424 million compared to $515 million in the first six months of 2021. Significant changes to the sources and (uses) of cash for the six month periods include the following:

- $64 million attributable to higher Net income and other changes in the related statements of income;
- $(87) million from net changes in working capital primarily driven by: $74 million related to changes in receivables due to timing and volume of sales and the net change in the Revolving Receivables Program, $(264) million unfavorable change in inventory primarily from proactive inventory build-ups ahead of expected growth and in response to supply chain challenges, and $103 million in accounts payable, primarily due to the timing of payments to suppliers; and,
- $(84) million from higher employee related benefit payments, inclusive of payments related to severance accruals, and $39 million from changes in the timing of customer deposits.

Investing activities In the first six months of 2022 and 2021, cash used for investing activities was $(117) million and $(452) million, respectively. The major components of the cash outflow in 2022 were $(50) million in additions to property, plant and equipment for investments in our facilities and manufacturing processes and $(69) million for strategic acquisitions. This compares to $(55) million in additions to property, plant, and equipment and $(405) million in net cash paid for acquisitions in the first six months of 2021. Additional information with respect to acquisitions is included in Note 3 of the "Notes to Condensed Consolidated Financial Statements" included in Part I, Item 1 of this report.

Financing activities In the first six months of 2022, cash used for financing activities was $(256) million which included $3,416 million in proceeds from debt, $(3,216) million in repayments of debt, $(399) million in stock repurchases, and $(55) million of dividend payments. In the first six months of 2021, cash provided by financing activities was $(213) million, which included $3,008 million in proceeds from debt, $(3,170) million in repayments of debt, $(1) million in stock repurchases and $(46) million of dividend payments.

During the second quarter of 2022, the Company redeemed $25 million of principal from the 2024 Notes plus a premium and the related accrued interest.

As of June 30, 2022, the Company held approximately $501 million of cash and cash equivalents. Of the $501 million, approximately $5 million was held within the United States and approximately $496 million was held outside of the United States, primarily in India, Europe, China, and Brazil. While repatriation of some cash held outside the United States may be restricted by local laws, most of the Company's foreign cash could be repatriated to the United States net of any tax impacts.

Additional information with respect to credit facilities and long-term debt is included in Note 8 of the "Notes to Condensed Consolidated Financial Statements" included in Part I, Item 1 of this report.

We or our affiliates may, from time to time, seek to retire or purchase outstanding debt through negotiated or open-market cash purchases, exchanges, or otherwise, and such transactions, if any, will be upon such terms and at such prices as we may determine, and will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors.

Revolving Receivables Program

The Company utilizes a revolving agreement to transfer up to $200 million of certain receivables to a financial institution on a recurring basis in exchange for cash equal to the gross receivables transferred. As customers pay their balances, we transfer additional receivables into the program, which resulted in our gross receivables sold exceeding collections reinvested for the periods presented. Net cash proceeds from the revolving receivables program were $180 million and $82 million for the six months ended June 30, 2022 and 2021, respectively. Additional information with respect to the Revolving Receivables Program is included in Note 2 of "Notes to Consolidated Financial Statements" included in Part I, Item 1 of this report.

Supply Chain Financing Program

The Company has entered into supply chain financing arrangements with third-party financial institutions to provide our vendors with enhanced payment options while providing the Company with added working capital flexibility. The Company does not provide any guarantees under these arrangements, does not have an economic interest in our supplier's voluntary participation and does not receive an economic benefit from the financial institutions. The arrangements do not change the payable terms negotiated by the Company and our vendors and does not result in a change in the classification of amounts due as accounts payable in the consolidated balance sheets.

Guarantor Summarized Financial Information

The obligations under the Company's US Notes and Senior Credit Facility have been fully and unconditionally guaranteed by certain of the Company's U.S. subsidiaries. Each guarantor is 100% owned by the parent company, with the exception of GE Transportation, a Wabtec Company, which has 15,000 shares outstanding of Class A Non-Voting Preferred Stock held by General Electric Company. The Euro Notes are issued by Wabtec Netherlands and are fully and unconditionally guaranteed by the Company.

On January 1, 2022, the Company completed an internal legal entity reorganization that resulted in changes to the subsidiaries and operating divisions serving as guarantors under the Company's US Notes and Senior Credit Facility. As such, certain prior year amounts have been reclassified, where necessary, to conform to the current year presentation in line with the legal reorganization. Refer to Exhibit 22.1 for the updated list of guarantor subsidiaries.

The following tables present summarized financial information of the parent and the guarantor subsidiaries on a combined basis for the Company's US Notes and Senior Credit Facility. The combined summarized financial information eliminates intercompany balances and transactions among the parent and guarantor subsidiaries and equity in earnings and investments in any guarantor subsidiaries or non-guarantor subsidiaries. The summarized financial information is provided in accordance with the reporting requirements of Rule 13-01 under SEC Regulation S-X for the issuer and guarantor subsidiaries.

Summarized Statement of Income

In millions	Unaudited Westinghouse Air Brake Technologies Corp. and Guarantor Subsidiaries Six Months Ended June 30, 2022
Net sales	$ 2,219
Gross profit	$ 499
Net income attributable to Wabtec shareholders	$ 118

Summarized Balance Sheet

	Unaudited Westinghouse Air Brake Technologies Corp. and Guarantor Subsidiaries	
In millions	June 30, 2022	December 31, 2021
Current assets	$ 1,161	$ 1,057
Noncurrent assets	$ 2,402	$ 2,344
Current liabilities	$ 1,450	$ 1,414
Long-term debt	$ 3,677	$ 3,483
Other non-current liabilities	$ 613	$ 592

The following is a description of the transactions between the combined Westinghouse Air Brake Technologies Corp. and guarantor subsidiaries with non-guarantor subsidiaries.

In millions	Unaudited Westinghouse Air Brake Technologies Corp. and Guarantor Subsidiaries Six Months Ended June 30, 2022
Net sales to non-guarantor subsidiaries	$ 395
Purchases from non-guarantor subsidiaries	$ 704

In millions	Unaudited Westinghouse Air Brake Technologies Corp. and Guarantor Subsidiaries June 30, 2022
Amount due from/(to) non-guarantor subsidiaries	$ (7,192)

Summarized Financial Information—Euro Notes

The obligations under Wabtec Netherlands' Euro Notes are fully and unconditionally guaranteed by the Company. Wabtec Netherlands is a wholly-owned, indirect subsidiary of the Company. Wabtec Netherlands is a holding company and does not have any independent operations. Its assets consist of its investments in subsidiaries, which are separate and distinct legal entities that are not guarantors of the Euro Notes and have no obligations to pay amounts due under Wabtec Netherlands' obligations.

On January 1, 2022, the Company completed an internal legal entity reorganization that resulted in changes to the operating divisions serving as the parent guarantor under the Company's Euro Notes. As such, certain prior year amounts have been reclassified, where necessary, to conform to the current year presentation in line with the legal reorganization.

The following tables present summarized financial information of Wabtec Netherlands, as the Issuer of the Euro Notes, and the Company, as the parent Guarantor, on a combined basis. The combined summarized financial information eliminates all intercompany balances and transactions among Wabtec Netherlands and the Company as well as all equity in earnings from and investments in any subsidiary of the Company, other than Wabtec Netherlands, which we refer to below as the Non-Issuer and Non-Guarantor Subsidiaries. The summarized financial information is provided in accordance with the reporting requirements of Rule 13-01 under SEC Regulation S-X for the issuer and parent guarantor.

Summarized Statement of Income

In millions	Unaudited Issuer and Guarantor Six Months Ended June 30, 2022
Net sales	$ 202
Gross profit	$ 26
Net income attributable to Wabtec shareholders	$ (176)

Summarized Balance Sheet

	Unaudited Issuer and Guarantor	
In millions	June 30, 2022	December 31, 2021
Current assets	$ 154	$ 217
Noncurrent assets	$ 764	$ 770
Current liabilities	$ 407	$ 479
Long-term debt	$ 4,193	$ 4,044
Other non-current liabilities	$ 206	$ 207

The following is a description of the transactions between the combined Westinghouse Air Brake Technologies Corp. and Wabtec Netherlands, with the subsidiaries of Westinghouse Air Brake Technologies Corp., other than Wabtec Netherlands, none of which are guarantors of the Euro Notes.

In millions		Unaudited Issuer and Guarantor Six Months Ended June 30, 2022
Net sales to non-guarantor subsidiaries	$	14
Purchases from non-guarantor subsidiaries	$	41

In millions		Unaudited Issuer and Guarantor June 30, 2022
Amount due from/(to) non-guarantor subsidiaries	$	(8,344)

Company Stock Repurchase Plan

On February 10, 2022, the Board of Directors increased its stock repurchase authorization to increase the amount available for stock repurchases to $750 million of the Company's outstanding shares. This new stock repurchase authorization superseded the previous authorization of $500 million of which approximately $155 million remained. No time limit was set for the completion of the program which conforms to the requirements under the Senior Credit Facility and the Senior Notes currently outstanding. The Company may repurchase shares in the future at any time, depending upon market conditions, our capital needs and other factors. Purchases of shares may be made by open market purchases or privately negotiated purchases and may be made pursuant to Rule 10b5-1 plan or otherwise.

Forward Looking Statements

We believe that all statements other than statements of historical facts included in this report, including certain statements under "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," may constitute forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that our assumptions made in connection with the forward-looking statements are reasonable, we cannot assure that our assumptions and expectations are correct.

These forward-looking statements are subject to various risks, uncertainties and assumptions about us, including, among other things:

Economic and industry conditions

- prolonged unfavorable economic and industry conditions in the markets served by us, including North America, South America, Europe, Australia, Asia and Africa;
- decline in demand for freight cars, locomotives, passenger transit cars, buses and related products and services;
- reliance on major original equipment manufacturer customers;
- original equipment manufacturers' program delays;
- demand for services in the freight and passenger rail industry;
- demand for our products and services;
- orders either being delayed, canceled, not returning to historical levels, or reduced or any combination of the foregoing;
- consolidations in the rail industry;
- continued outsourcing by our customers;
- industry demand for faster and more efficient braking equipment;
- fluctuations in interest rates and foreign currency exchange rates;
- availability of credit; or
- changes in market consensus as to what attributes are required for projects to be considered "green" or "sustainable" or negative perceptions regarding determinations in such regard with respect to our Green Finance Framework;

Operating factors

- supply disruptions;

- technical difficulties;
- changes in operating conditions and costs;
- increases in raw material costs;
- successful introduction of new products;
- performance under material long-term contracts;
- labor availability and relations;
- the outcome of our existing or any future legal proceedings, including litigation involving our principal customers and any litigation with respect to environmental matters, asbestos-related matters, pension liabilities, warranties, product liabilities, competition and anti-trust matters or intellectual property claims;
- completion and integration of acquisitions;
- the development and use of new technology; or
- cybersecurity and data protection risks;

Competitive factors

- the actions of competitors; or
- the outcome of negotiations with partners, suppliers, customers or others;

Political/governmental factors

- political stability in relevant areas of the world, including the impacts of war and conflicts;
- future regulation/deregulation of our customers and/or the rail industry;
- levels of governmental funding on transit projects, including for some of our customers;
- political developments and laws and regulations, including those related to Positive Train Control;
- federal and state income tax legislation;
- sanctions imposed on countries and persons; or
- the outcome of negotiations with governments;

COVID-19 factors

- the severity and duration of the pandemic;
- deterioration of general economic conditions;
- shutdown of one or more of our operating facilities;
- supply chain and sourcing disruptions;
- ability of our customers to pay timely for goods and services delivered;
- health of our employees;
- ability to retain and recruit talented employees; or
- difficulty in obtaining debt or equity financing;

Statements in this Quarterly Report on Form 10-Q apply only as of the date on which such statements are made, and we undertake no obligation to update any statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. Reference is also made to the risk factors set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 and the risk factor added in Part II, Item 1A of this report on Form 10-Q.

Critical Accounting Estimates

A summary of critical accounting estimates is included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021. In particular, judgment is used in areas such as accounts receivable and the allowance for doubtful accounts, inventories, goodwill and indefinite-lived intangibles, business combinations, warranty reserves, stock-based compensation, income taxes, and revenue recognition. There have been no significant changes in the related accounting policies since December 31, 2021.

Contractual Obligations

During the second quarter of 2022, the Company redeemed $25 million of principal from the 2024 Notes plus a premium and the related accrued interest. As a result, as of June 30, 2022, contractual obligations related to the repayment of Long-term debt for 2023-2024 were reduced from $1,012 million to $987 million.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Quantitative and Qualitative Disclosures About Market Risk" in Item 7A of Part II of our Annual Report on Form 10-K for the year ended December 31, 2021. Our exposure to market risk has not changed materially since December 31, 2021. Refer to Note 13 - Fair Value Measurement and Derivative Instruments of "Notes to Condensed Consolidated Financial Statements" included in Part I, Item 1 of this report for additional information regarding interest rate and foreign currency exchange risk.

Item 4. CONTROLS AND PROCEDURES

Wabtec’s principal executive officer and its principal financial officer have evaluated the effectiveness of Wabtec’s “disclosure controls and procedures,” (as defined in Exchange Act Rule 13a-15(e)) as of June 30, 2022. Based upon their evaluation, the principal executive officer and principal financial officer concluded that Wabtec’s disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed by Wabtec in the reports filed or submitted by it under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and to provide reasonable assurance that information required to be disclosed by Wabtec in such reports is accumulated and communicated to Wabtec’s Management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

There was no change in Wabtec’s “internal control over financial reporting” (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended June 30, 2022, that has materially affected, or is reasonably likely to materially affect, Wabtec’s internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

Additional information with respect to legal proceedings is included in Note 14 of “Notes to Condensed Consolidated Financial Statements” included in Part I, Item 1 of this report.

Item 1A. RISK FACTORS

In response to the Russian invasion of Ukraine and the impact of the conflict on the Company and the global markets, the Company is providing the below additional risk factor. Other than the below, there have been no material changes in our risk factors from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2021.

The ongoing conflict between Russia and Ukraine may adversely affect our business and results of operations.

Given the nature of our business and our global operations, political, economic, and other conditions in foreign countries and regions, including geopolitical risks such as those arising from the current conflict between Russia and Ukraine, may adversely affect our business and results of operations. The broader consequences of this conflict, which may include further sanctions, embargoes, regional instability, and geopolitical shifts; disruptions to transportation and distribution routes, or strategic decisions to alter certain routes; potential retaliatory action by the Russian government against companies, including us, including nationalization of foreign businesses and/or assets in Russia; increased tensions between the United States and countries in which we operate; and the extent of the conflict’s effect on our business and results of operations as well as the global economy, cannot be predicted.

Additionally, Wabtec has operations and a strategic joint venture in Kazakhstan that have continued operating but have incurred supply, distribution and currency impacts as an indirect result from the Russian invasion of Ukraine. To date, the operations in Kazakhstan have not been significantly impacted by the ongoing conflict outside of the overall unfavorable impact to economic conditions; however, the future impact to these operations cannot be predicted.

To the extent the current conflict between Russia and Ukraine adversely affects our business, particularly in Russia and Kazakhstan, it may also have the effect of heightening many other risks disclosed in our Annual Report, any of which could materially and adversely affect our business and results of operations. Such risks include, but are not limited to, adverse effects on macroeconomic conditions, including inflation and business spending; disruptions to our global technology infrastructure, including through cyberattack, ransom attack, or cyber-intrusion; adverse changes in international trade policies and relations; our ability to maintain or increase our prices, our ability to implement and execute our business strategy, disruptions in global supply chains, our exposure to foreign currency fluctuations, and constraints, volatility, or disruption in the capital markets, difficulty staffing and managing impacted operations, and the recoverability of assets in the region.

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

The following table summarizes the Company's stock repurchase activity for the three months ended June 30, 2022:

Issuer Purchases of Common Stock

In millions, except shares and price per share	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs (1)	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Programs (1)
April 2022	380,167	$ 91.44	380,167	$ 465
May 2022	391,100	$ 88.49	391,100	$ 430
June 2022	377,600	$ 89.18	377,600	$ 396
Total quarter ended June 30, 2022	1,148,867	$ 89.69	1,148,867	$ 396

(1) On February 10, 2022, the Board of Directors increased its stock repurchase authorization to increase the amount available for stock repurchases to $750 million of the Company’s outstanding shares. This new stock repurchase authorization superseded the previous authorization of $500 million, of which approximately $155 million remained at the reauthorization date. No time limit was set for the completion of the program which conforms to the requirements under the Senior Credit Facility and the Senior Notes currently outstanding. The Company may repurchase shares in the future at any time, depending upon market conditions, our capital needs and other factors. Purchases of shares may be made by open market purchases or privately negotiated purchases and may be made pursuant to Rule 10b5-1 plan or otherwise.

Item 4. MINE SAFETY DISCLOSURES

Not Applicable

Item 6. EXHIBITS

The following exhibits are being filed with this report:

10.1	Westinghouse Air Brake Technologies Corporation 2011 Stock Incentive Plan as amended and restated, as of March 31, 2022*
22.1	List of Subsidiary Guarantors
31.1	Rule 13a-14(a) Certification of Chief Executive Officer.
31.2	Rule 13a-14(a) Certification of Chief Financial Officer.
32.1	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Compensatory plan

SIGNATURES

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

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION

By: /s/ JOHN A. OLIN

John A. Olin
Executive Vice President and
Chief Financial Officer

(Duly Authorized Officer and Principal Financial Officer)

DATE: August 5, 2022

WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION

2011 STOCK INCENTIVE PLAN

(as amended and restated effective March 31, 2022)

SECTION 1
Purpose; Definitions

1.1 Purpose. The purposes of the 2011 Stock Incentive Plan, as amended and restated effective March 31, 2022 (the "Plan"), are to encourage eligible employees of Westinghouse Air Brake Technologies Corporation (the "Corporation") and its Subsidiaries to increase their efforts to make the Corporation and each Subsidiary more successful, to provide an additional inducement for such employees to remain with the Corporation or a Subsidiary, to reward such employees by providing an opportunity to acquire shares of Common Stock on favorable terms and to provide a means through which the Corporation may attract able persons to enter the employ of the Corporation or one of its Subsidiaries.

1.2 Certain Definitions. In addition to terms defined herein in a place where they are used, the following terms are defined as set forth below:

(a) "Award" means a stock option, a stock appreciation right, restricted stock, restricted stock units, performance units or other stock-based award granted under the Plan.

(b) "Base Price" shall have the meaning set forth in Section 5.3.

(c) "Common Stock" shall mean the Common Stock, par value $0.01 per share, of the Corporation.

(d) "Fair Market Value" with respect to a share of the Common Stock shall mean the mean between the following prices, as applicable, for the date as of which Fair Market Value is to be determined as quoted in such reliable publication as the Committee, in its sole discretion, may determine to rely upon: (i) if the Common Stock is listed on the New York Stock Exchange, the highest and lowest sales prices per share of the Common Stock as quoted in the NYSE-Composite Transactions listing for such date, (ii) if the Common Stock is not listed on such exchange, the highest and lowest sales prices per share of Common Stock for such date on (or on any composite index including) the NASDAQ Exchange or the principal United States of America securities exchange registered under the Securities Exchange Act of 1934, as amended (the "1934 Act") on which the Common Stock is listed. If there are no such sale price quotations for the date as of which Fair Market Value is to be determined but there are such sale price quotations within a reasonable period both before and after such date, then Fair Market Value shall be determined by taking a weighted average of the means between the highest and lowest sales prices per share of the Common Stock as so quoted on the nearest date before and the nearest date after the date as of which Fair Market Value is to be determined. The average should be weighted inversely by the respective numbers of trading days between the selling dates and the date as of which Fair Market Value is to be determined. If there are no such sale price quotations on or within a reasonable period both before and after the date as of which Fair Market Value is to be determined, then Fair Market Value of the Common Stock shall be the weighted average of the means between such bona fide bid and asked prices on the nearest trading date before and the nearest trading date after the date as of which Fair Market Value is to be determined, if both such dates are within a reasonable period. The average is to be determined in the manner described above in this definition. If the Fair Market Value of the Common Stock cannot be determined on the basis previously set forth in this definition on the date as of which Fair Market Value is to be determined, the Committee shall in good faith and in conformance with the requirements of Section 409A of the Code, to the extent applicable to an Award, determine the Fair Market Value of the Common Stock on such date. Fair Market Value shall be determined without regard to any restriction other than a restriction which, by its terms, will never lapse.

(e) "Free-Standing SARs" shall have the meaning set forth in Section 5.2.

(f) "Participant" means an eligible employee selected by the Committee who has received an Award under the Plan and any transferee or transferees of such employee to the extent the transfer is permitted under the Plan.

(g) "Performance Goals" means the performance goals, if any, established by the Committee in connection with the grant of restricted stock, restricted stock units, performance units or other Awards. In the case of Qualified Performance-Based Awards, the "Performance Goals" means such performance goals based on one or more of the following: (i) cash flow; (ii) earnings per share; (iii) earnings or income measures (including EBIT and EBITDA)); (iv) return measures (including return on assets, capital, invested capital, equity, sales, or revenue); (v) total shareholder return; (vi) share price performance; (vii) revenue; (viii) profit margin; (ix) customer metrics (including customer satisfaction, customer retention, or customer profitability); (x) productivity; (xi) expense targets; (xii) market share; (xiii) cost control measures; (xiv) balance sheet metrics; (xv) strategic initiatives; (xvi) implementation, completion or attainment of measurable objectives with respect to recruitment or retention of personnel, employee satisfaction or diversity; (xvii) successful completion of, or achievement of milestones or objectives related to, financing or capital raising transactions, strategic acquisitions or divestitures, joint ventures, partnerships, collaborations, or other transactions; (xviii) debt levels or reduction or debt ratios; (xix) operating efficiency; (xx) working capital targets; (xxi) quantifiable, objective measures of individual performance relevant to the particular individual's job responsibilities; (xxii) environmental missions improvement; (xxiii) innovation as measured by a percentage of sales from new products; (xxiv) safety performance; (xxv) number of accounts; or (xvi) any combination of the forgoing business criteria; provided, however, that such business criteria shall include any derivations of business criteria listed above (e.g., income shall include pre-tax income, net income, or operating income). Any business criteria that are financial metrics may be determined in accordance with United States Generally Accepted Accounting Principles ("GAAP") or may be adjusted when established (or to the extent permitted under Section 162(m), at any time thereafter) to include or exclude any items otherwise includable or excludable under GAAP. Performance Goals may, in the discretion of the Committee, be established on a Company-wide basis, or with respect to one or more business units, divisions, subsidiaries or business segments, as applicable. Performance Goals may be absolute or relative (to the performance of one or more comparable companies or indices or based on year- over-year growth).

(h) "Qualified Performance-Based Award" means an Award intended to qualify for the Section 162(m) Exemption, as provided in Section 12.

(i) "Subsidiary" means any corporation, partnership, joint venture, limited liability company or other entity in an unbroken chain of entities beginning with the Corporation if each of the entities other than the last entity in the unbroken chain owns an equity interest possessing at least fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other entities in the chain.

(j) "Tandem SARs" shall have the meaning set forth in Section 5.2.

SECTION 2
Administration

2.1 Committee. The Plan shall be administered by a Committee (the "Committee") appointed by the Board of Directors of the Corporation (the "Board") and consisting of not less than two members of the Board, who, at the time of their appointment to the Committee and at all times during their service as members of the Committee, are (a) "Non-Employee Directors" as then defined under Rule 16b-3 under the 1934 Act, or any successor rule, (b) "outside directors" under Section 162(m)(4)(C) of the Internal Revenue Code of 1986 as amended (the "Code") or any successor provision, and (c) independent directors under the applicable rules of any applicable stock exchange, if the Common Stock is subject to such rules. The Committee shall have plenary authority to interpret the Plan and prescribe such rules, regulations and procedures in connection with the operations of the Plan as it shall deem to be necessary and advisable for the administration of the Plan consistent with the purposes of the Plan. Without limitation of the foregoing, the Committee shall have the authority, subject to the terms and conditions of the Plan:

(a) to select the employees to whom Awards may be made;

(b) to determine whether and to what extent incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, other Awards of or based upon Common Stock, or any combination thereof, are to be granted hereunder;

(c) to determine the number of shares of Common Stock to be covered by each Award made hereunder;

(d) to determine the terms and conditions of each Award made hereunder, based on such factors as the Committee shall determine;

(e) subject to Section 2.5, to modify, amend or adjust the terms and conditions of any Award;

(f) to adopt, alter and repeal such administrative rules, guidelines and practices governing the Plan as it shall from time to time deem advisable;

(g) to interpret the terms and provisions of the Plan and any Award under the Plan (and any agreement under Section 2.5 relating thereto);

(h) subject to Section 2.5, to accelerate the vesting or lapse of restrictions on any outstanding Award, other than a Qualified Performance-Based Award, based in each case on such considerations as the Committee in its sole discretion determines;

(i) to decide all other matters that must be determined in connection with an Award;

(j) to determine whether, to what extent and under what circumstances cash, shares of Common Stock and other property and other amounts payable with respect to an Award under this Plan shall be deferred either automatically or at the election of the employee;

(k) to establish any "blackout" period that the Committee in its sole discretion deems necessary or advisable; and

(l) to otherwise administer the Plan.

In determining any Award to be made to any eligible employee, the Committee shall consider the position and the responsibilities of the employee being considered, the nature and value to the Corporation or a Subsidiary of his or her services, his or her present and/or potential contribution to the success of the Corporation or a Subsidiary and such other factors as the Committee may deem relevant. The Committee may, except to the extent prohibited by applicable law or the listing standards of the stock exchange which is the principal market for the Common Stock, allocate all or any portion of its responsibilities and powers to any one or more of its members and may delegate all or any part of its responsibilities and powers to any officers of the Corporation or committee of officers of the Corporation selected by it, except with respect to Awards (including Qualified Performance- Based Awards) to any covered employees as defined in Section 162(m)(3) of the Code ("Covered Employees") or persons subject to Section 16 of the 1934 Act.

2.2 Committee Action. The Committee shall keep records of action taken at its meetings. A majority of the Committee shall constitute a quorum at any meeting and the acts of a majority of the members present at any meeting at which a quorum is present, or acts approved in writing by all members of the Committee, shall be the acts of the Committee.

2.3 Committee Discretion. Any determination made by the Committee or by an appropriately delegated officer pursuant to delegated authority under the provisions of the Plan with respect to any Award shall be made in the sole discretion of the Committee or such officer at the time of the Award or, unless in contravention of any express term of the Plan, at any time thereafter. All decisions made by the Committee or any appropriately delegated officer pursuant to the provisions of the Plan shall be final and binding on all persons, including the Corporation and the employees eligible under the Plan. No member of the Committee shall be liable for any action or determination made in good faith with respect to the Plan, any Award or Award agreement.

2.4 Cancellation; Suspension; Clawback. Any or all outstanding Awards to a Participant may, at any time between the date of grant and the third anniversary of any exercise, payment or vesting of such Awards, in the Committee's sole discretion and subject to such terms and conditions established by the Committee, be cancelled, suspended, or required to be repaid to the Corporation if, to the extent permitted by applicable law, the Participant (whether during or after termination of employment with the Corporation and its Subsidiaries) (i) engages in the operation or management of a business (whether as owner, partner, officer, director, employee or otherwise) which is in competition with the Corporation or any of its Subsidiaries, (ii) induces or attempts to induce any customer, supplier, licensee or other individual, corporation or other business organization having a business relationship with the Corporation or any of its Subsidiaries to cease doing business with the Corporation or any of its Subsidiaries or in any way interferes with the relationship between any such customer, supplier, licensee or other person and the Corporation or any of its Subsidiaries, (iii) solicits any employee of the Corporation or any of its Subsidiaries to leave the employment thereof or in any way interferes with the relationship of such employee with the Corporation or any of its Subsidiaries, or (iv) makes any statements or comments, orally or in writing, of a defamatory or disparaging nature regarding the Corporation or any of its Subsidiaries (including but not limited to regarding any of their respective businesses, officers, directors, personnel, products or policies), provided, however, that this sentence shall not apply following the occurrence of a Section 11 Event (as defined in Section 11) unless the agreement under Section 2.5 specifically so provides. Whether a Participant has engaged in any such activities shall also be determined, in its sole discretion, by the Committee, and any such determination by the Committee shall be final and binding. In addition, Awards shall be subject to the requirements of (i) Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (regarding recovery of erroneously awarded compensation) and any implementing rules and regulations thereunder, (ii) similar rules under the laws of any other jurisdiction, (iii) any compensation recovery policies adopted by the Company to implement any such requirements or (iv) any other compensation recovery policies as may be adopted from time to time by the Company, all to the extent determined by the Committee in its discretion to be applicable to a Participant.

2.5 Agreements. The terms and conditions of each Award shall be set forth in a written (or electronic) agreement, which shall be delivered to the Participant receiving such Award upon, or as promptly as is reasonably practicable following, the making of such Award. The effectiveness of an Award shall be subject to the agreement being signed by the Corporation and the Participant receiving the Award unless otherwise provided in the agreement. Unless otherwise provided in the agreement, each agreement or amendment thereto shall be executed on behalf of the Corporation by the Chief Executive Officer (if other than the President), the President or any Vice President and by the Participant. The agreement confirming a stock option shall specify whether the stock option is an incentive stock option or a nonstatutory stock option. The provisions of such agreements need not be identical. Without the consent of the Participant, upon notice to the Participant thereof, the Committee may amend any Award to the Participant and the corresponding agreement in any respect not materially adverse to the Participant. All other amendments to the agreement shall be in writing (including electronic amendments) and executed on behalf of the Corporation and by the Participant. Any reference in the Plan to the agreement under Section 2.5 shall include any amendment to such agreement.

2.6 Minimum Vesting Requirements. Notwithstanding any other provision of the Plan to the contrary, share-settled Awards granted under the Plan shall vest no earlier than the first anniversary of the date the Award is granted, excluding, for this purpose, any (i) substitute awards, and (ii) shares delivered in lieu of fully vested cash compensation; provided, that, the Board may grant share-settled Awards without regard to the foregoing minimum vesting requirement with respect to a maximum of five percent (5%) of the available share reserve authorized for issuance under the Plan pursuant to Section 4.1 (subject to adjustment under Section 4.5); and, provided further, for the avoidance of doubt, that the foregoing restriction does not apply to the Committee's discretion to provide for accelerated exercisability or vesting of any Award, including in cases of retirement, death, disability or a Section 11 Event, in the terms of the Award or otherwise.

SECTION 3
Eligibility

Those employees of the Corporation or any Subsidiary (including, but not limited to, Covered Employees) who share responsibility for the management, growth or protection of the business of the Corporation or any Subsidiary shall be eligible to receive Awards as described herein; provided, however, that incentive stock options may be granted only to employees of the Corporation and Subsidiaries which are its subsidiaries within the meaning of Section 424(f) of the Code.

SECTION 4
Shares Subject to the Plan

4.1 Number of Shares. Subject to adjustment as provided in Section 4.5, the maximum aggregate number of shares of the Common Stock for which Awards may be made under the Plan shall be (i) 3,800,000 shares (after giving effect to the 2-for-1 stock split in the form of a stock dividend in June 2013), plus (ii) any shares which remained available for grant under the Corporation's 2000 Stock Incentive Plan as of the original effective date of this Plan (also after giving effect to the 2-for-1 stock split in the form of a stock dividend in June 2013), plus (iii) effective as of May 10, 2017, an additional 1,000,000 shares, plus (iv) effective as of May 15, 2020 upon stockholder approval, an additional 5,300,000 shares. The maximum number of shares of Common Stock that may be granted pursuant to options intended to be incentive stock options shall be 5,300,000 shares.

4.2 Individual Limits. Subject to adjustment under Section 4.5, the maximum number of each type of Award (other than cash-based performance units) granted to any Participant in any calendar year shall not exceed the following number of shares of Common Stock: (i) options and stock appreciation rights: 600,000 shares; and (ii) all Awards of restricted stock, restricted stock units, share-based performance units and other stock-based awards that are intended to be Qualified Performance-Based Awards: 600,000 shares. The maximum amount of cash-based performance unit Awards intended to be Qualified Performance-Based Awards granted to any Participant in any calendar year shall not exceed the following: (x) any cash-based performance unit Award with a performance period that is the Company's fiscal year or other 12-month (or shorter) performance period as specified under the terms of the Award as approved by the Committee (an "annual incentive award"): $5,000,000; and (y) all other cash-based performance unit Awards: $5,000,000.

4.3 Share Counting.

(a) To the extent that any Award is forfeited, or any option and the Tandem SAR (if any) or any Free- Standing SAR terminates, expires or lapses without being exercised, or any Award is settled for cash, the shares of Common Stock subject to such Awards shall again be available for Awards under the Plan under Section 4.1. However, shares of Common Stock subject to such Awards shall continue to be counted for purposes of Section 4.2 or Section 9, as applicable.

(b) If the exercise price of any option and/or the tax withholding obligations relating to any Awards are satisfied by delivering shares (either actually or through attestation) or withholding shares relating to such Award, the gross number of shares subject to the Award shall nonetheless be deemed to have been granted for purposes of Sections 4.1 and 4.2 and any shares which are delivered will not be added to the aggregate number of shares under Section 4.1 for which Awards may be made under the Plan. Shares of Common Stock that the Company may repurchase from time to time with proceeds from the exercise of options or otherwise shall not be added to the aggregate number of shares under Section 4.1 for which Awards may be made under the Plan.

(c) If a Tandem SAR is granted, each share of Common Stock subject to both the Tandem SAR and related stock option shall be counted as only one share of Common Stock for purposes of Sections 4.1 and 4.2.

(d) Each share of Common Stock subject to a stock option (with or without a Tandem SAR) or a Free- Standing SAR shall be counted as one share of Common Stock for purposes of Sections 4.1 and 4.2.

(e) All shares of Common Stock covered by a stock appreciation right, to the extent it is exercised and shares of Common Stock are actually issued upon exercise of the right, shall be counted for purposes of Sections 4.1 and 4.2, regardless of the number of shares used to settle the stock appreciation right upon exercise.

(f) Awards granted in assumption of or in substitution for an award of a company or business acquired by the Company or a Subsidiary or with which the Company or a Subsidiary combines ("substitute awards") shall not be counted against the number of shares reserved under the Plan.

4.4 Common Stock. To the extent that the Corporation has such shares of Common Stock available to it and can issue such shares without violating any law or regulation, the Corporation will reserve Common Stock for issuance with respect to an Award payable in Common Stock. The shares of Common Stock which may be issued under the Plan may be either authorized but unissued shares or shares previously issued and thereafter acquired by the Corporation or partly each, as shall be determined from time to time by the Board.

4.5 Adjustment and Substitution of Shares. In the event of a merger, consolidation, acquisition of shares, stock rights offering, liquidation, separation, spinoff, disaffiliation of a Subsidiary from the Corporation, extraordinary dividend of cash or other property, or similar event affecting the Corporation or any of its Subsidiaries (each, a "Corporate Transaction"), the Committee or the Board shall make such substitutions or adjustments as it deems appropriate and equitable to prevent the dilution or enlargement of the rights of Participants to (A) the aggregate number and kind of shares of Common Stock reserved for issuance and delivery under the Plan, (B) the various maximum limitations set forth in Sections 4.1 and 4.2 upon certain types of Awards and upon the Awards to individuals, (C) the number and kind of shares of Common Stock subject to outstanding Awards; and (D) the exercise price of outstanding Awards. In the event of a stock dividend, stock split, reverse stock split, reorganization, share combination, or recapitalization or similar event affecting the capital structure of the Corporation (each, a "Share Change"), the Committee or the Board shall make such substitutions or adjustments as it deems appropriate and equitable to prevent the dilution or enlargement of the rights of Participants to (A) the aggregate number and kind of shares of Common Stock reserved for issuance and delivery under the Plan, (B) the various maximum limitations set forth in Sections 4.1 and 4.2 upon certain types of Awards and upon the Awards to individuals, (C) the number and kind of shares of Common Stock subject to outstanding Awards; and (D) the exercise price of outstanding Awards. In the case of Corporate Transactions, such adjustments may include, without limitation, (1) the cancellation of outstanding Awards in exchange for payments of cash, property or a combination thereof having an aggregate value equal to the value of such Awards, as determined by the Committee or the Board in its sole discretion (it being understood that in the case of a Corporate Transaction with respect to which shareholders of Common Stock receive consideration other than publicly-traded equity securities of the ultimate surviving entity, any such determination by the Committee that the value of an option or stock appreciation right shall for this purpose be deemed to equal the excess, if any, of the value of the consideration being paid for each share pursuant to such Corporate Transaction over the exercise price of such option or stock appreciation right shall conclusively be deemed valid); (2) the substitution of other property (including, without limitation, cash or other securities of the Corporation and securities of entities other than the Corporation) for the shares subject to outstanding Awards; and (3) in connection with any disaffiliation of a Subsidiary, arranging for the assumption of Awards, or replacement of Awards with new Awards based on other property or other securities (including, without limitation, other securities of the Corporation and securities of entities other than the Corporation), by the affected Subsidiary, or by the entity that controls such Subsidiary following such disaffiliation (as well as any corresponding adjustments to Awards that remain based upon Corporation securities). The Committee shall adjust the Performance Goals applicable to any Awards to reflect any unusual or non-recurring events and other extraordinary items, impact of charges for restructurings, discontinued operations, and the cumulative effects of accounting or tax changes, each as defined by generally accepted accounting principles or as identified in the Corporation's financial statements, notes to the financial statements, management's discussion and analysis or other of the Corporation's SEC filings, provided that in the case of Performance Goals applicable to any Qualified Performance-Based Awards, such adjustment does not violate Section 162(m) of the Code or cause such Awards not to qualify for the Section 162(m) Exemption, as defined in Section 12.1. No adjustment or substitution provided in this Section 4.5 shall require the Corporation or any other entity to issue or sell a fraction of a share or other security. Except as provided in this Section 4.5, a Participant shall not have any rights with respect to any Corporate Transaction or Share Change.

4.6 <u>Section 409A; Section 162(m); Incentive Stock Options</u>. Notwithstanding the foregoing: (i) any adjustments made pursuant to Section 4.5 to Awards that are considered "deferred compensation" within the meaning of Section 409A of the Code shall be made in compliance with the requirements of Section 409A of the Code; (ii) any adjustments made pursuant to Section 4.5 to Awards that are not considered "deferred compensation" subject to Section 409A of the Code shall be made in such a manner as to ensure that after such adjustment, the Awards either (A) continue not to be subject to Section 409A of the Code or (B) comply with the requirements of Section 409A of the Code; and (iii) in any event, neither the Committee nor the Board shall have the authority to make any adjustments pursuant to Section 4.5 to the extent the existence of such authority would cause an Award that is not intended to be subject to Section 409A of the Code at the grant date of the Award to be subject thereto. If any such adjustment or substitution provided for in Section 4.5 requires the approval of shareholders in order to enable the Corporation to grant incentive stock options or to comply with Section 162(m) of the Code, then no such adjustment or substitution shall be made without the required shareholder approval. Notwithstanding the foregoing, in the case of incentive stock options, if the effect of any such adjustment or substitution would be to cause the option to fail to continue to qualify as an incentive stock option or to cause a modification, extension or renewal of such option within the meaning of Section 424 of the Code, the Committee may determine that such adjustment or substitution not be made but rather shall use reasonable efforts to effect such other adjustment of each then outstanding incentive stock option as the Committee, in its sole discretion, shall deem equitable and which will not result in any disqualification, modification, extension or renewal (within the meaning of Section 424 of the Code) of such incentive stock option.

SECTION 5
Grant of Stock Options and Stock Appreciation Rights

5.1 Types of Options; Limit on Incentive Stock Options. The Committee shall have authority, in its sole discretion, to grant "incentive stock options" pursuant to Section 422 of the Code, to grant "nonstatutory stock options" (i.e., stock options which do not qualify under Sections 422 or 423 of the Code) or to grant both types of stock options (but not in tandem). Notwithstanding any other provision contained in the Plan or in any agreement under Section 2.5, but subject to the possible exercise of the Committee's discretion contemplated in the last sentence of this Section 5.1, the aggregate Fair Market Value on the date of grant of the shares with respect to which such incentive stock options are exercisable for the first time by a Participant during any calendar year under all plans of the corporation employing such Participant, any parent or subsidiary corporation of such corporation and any predecessor corporation of any such corporation shall not exceed $100,000. If the date on which one or more incentive stock options could first be exercised would be accelerated pursuant to any provision of the Plan or any agreement under Section 2.5 and the acceleration of such exercise date would result in a violation of the $100,000 restriction set forth in the preceding sentence, then, notwithstanding any such provision, but subject to the provisions of the next succeeding sentence, the exercise dates of such incentive stock options shall be accelerated only to the extent, if any, that does not result in a violation of such restriction and, in such event, the exercise dates of the incentive stock options with the lowest option prices shall be accelerated to the earliest such dates. The Committee may, in its sole discretion, authorize the acceleration of the exercise date of one or more incentive stock options even if such acceleration would violate the $100,000 restriction set forth in the second sentence of this Section 5.1 and even if one or more such incentive stock options are thereby converted in whole or in part to nonstatutory stock options.

5.2 Types and Nature of Stock Appreciation Rights. Stock appreciation rights may be tandem stock appreciation rights which are granted in conjunction with incentive stock options or nonstatutory stock options ("Tandem SARs"), or stock appreciation rights which are not granted in conjunction with options ("Free-Standing SARs"). Upon the exercise of a stock appreciation right, the Participant shall be entitled to receive an amount in cash, shares of Common Stock, or both, in value equal to the product of (i) the excess of the Fair Market Value of one share of Common Stock on the date of exercise of the stock appreciation right over, in the case of a Tandem SAR, the exercise price of the related option, or in the case of a Free-Standing SAR, the Base Price per share (the "Spread"), multiplied by (ii) the number of shares of Common Stock in respect of which the stock appreciation right has been exercised. Notwithstanding the foregoing, the Committee at the time it grants a stock appreciation right may provide that the Spread covered by such stock appreciation right may not exceed a lower specified amount. The applicable agreement under Section 2.5 governing the stock appreciation rights shall specify whether such payment is to be made in cash or Common Stock or both, or shall reserve to the Committee or the Participant the right to make that determination prior to or upon the exercise of the stock appreciation right. Tandem SARs may be granted at the grant date of the related stock options or, in the case of a related nonstatutory stock option, also at a later date. At the time a Tandem SAR is granted, the Committee may limit the exercise period for such Tandem SAR, before and after which period no Tandem SAR shall attach to the underlying stock option. In no event shall the exercise period for a Tandem SAR exceed the exercise period for the related stock option. A Tandem SAR shall be exercisable only at such time or times and to the extent that the related option is exercisable in accordance with the provisions of this Section 5. A Tandem SAR shall terminate or be forfeited upon the exercise or forfeiture of the related stock option, and the related stock option shall terminate or be forfeited upon the exercise or forfeiture of the Tandem SAR. Any Tandem SAR granted with a related incentive stock option shall be exercisable only when the Fair Market Value of a share of Common Stock exceeds the exercise price for a share of Common Stock under the related incentive stock option.

5.3 Exercise Price and Base Price.

(a) The exercise price per share of Common Stock subject to an option and any Tandem SAR, and the base price per share for any Free-Standing SAR (the "Base Price"), shall be determined by the Committee and set forth in the applicable agreement under Section 2.5, and shall not be less than the Fair Market Value of a share of the Common Stock on the applicable grant date, except that in the case of an incentive stock option granted to a Participant who, immediately prior to such grant, owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Corporation or any Subsidiary which is a corporation (a "Ten Percent Employee"), the exercise price shall not be less than one hundred ten percent (110%) of the Fair Market Value on the date of grant. For purposes of this Section 5.3, an individual (i) shall be considered as owning not only shares of stock owned individually but also all shares of stock that are at the time owned, directly or indirectly, by or for the spouse, ancestors, lineal descendants and brothers and sisters (whether by the whole or half blood) of such individual and (ii) shall be considered as owning proportionately any shares owned, directly or indirectly, by or for any corporation, partnership, estate or trust in which such individual is a shareholder, partner or beneficiary.

(b) In no event may any option or stock appreciation right granted under this Plan, other than pursuant to Section 4.5, be amended to decrease the exercise price or Base Price thereof, be cancelled in conjunction with the grant of any new option or stock appreciation right with a lower exercise price or Base Price, be cancelled or repurchased for cash, property, or another Award at a time when the exercise price or Base Price is greater than the Fair Market Value of the underlying Common Stock, or otherwise be subject to any action that would be treated, for accounting purposes, as a "repricing" of such option or stock appreciation right, unless such amendment, cancellation, or action is approved by the Corporation's shareholders.

5.4 Term; Vesting and Exercisability. The term of each option and each stock appreciation right shall be fixed by the Committee, but shall not exceed ten years from the date of grant (five years in the case of an incentive stock option granted to a Ten Percent Employee). Except as otherwise provided herein, options and stock appreciation rights shall be exercisable at such time or times and subject to such terms and conditions as shall be determined by the Committee and may be exercisable commencing with the grant date.

5.5 Method of Exercise. Subject to the provisions of this Section 5, options and stock appreciation rights may be exercised, in whole or in part (unless otherwise specified by the Committee in its sole discretion), at any time during the applicable term by giving written notice of exercise to the Corporation specifying the number of shares of Common Stock as to which the option or stock appreciation rights is being exercised. In the case of the exercise of an option, such notice shall be accompanied by payment in full of the exercise price in United States of America dollars by certified or bank check or wire of immediately available funds. If approved by the Committee (at the time of grant in the case of an incentive stock option or at any time in the case of a nonstatutory stock option), payment, in full or in part, may also be made as follows:

(a) Payment may be made in the form of unrestricted shares of Common Stock (by delivery of such shares or by attestation) of the same class as the Common Stock subject to the option already owned by the Participant (based on the Fair Market Value of the Common Stock on the date the option is exercised); provided, however, that any portion of the exercise price representing a fraction of a share shall be paid in cash;

(b) To the extent permitted by applicable law, payment may be made by delivering a properly executed exercise notice to the Corporation, together with a copy of irrevocable instructions to a broker to deliver promptly to the Corporation the amount of sale or loan proceeds necessary to pay the exercise price, and, if requested, the amount of any federal, state, local or foreign withholding taxes. To facilitate the foregoing, the Corporation may, to the extent permitted by applicable law, enter into agreements for coordinated procedures with one or more brokerage firms. In the event the broker sells any shares on behalf of a Participant, the broker shall be acting solely as the agent of the Participant, and the Corporation disclaims any responsibility for the actions of the broker in making any such sales;

(c) To the extent permitted by applicable law and if authorized by the Corporation, payment may be made by a "net exercise" by the Corporation withholding shares of Common Stock otherwise due to the Participant upon exercise; and/or

(d) With such other instrument as approved by the Committee, including Corporation loans, to the extent permitted by applicable law.

5.6 Delivery; Rights of Shareholders. No shares shall be delivered pursuant to the exercise of an option until the exercise price for the option has been fully paid and applicable taxes have been withheld. Unless otherwise specified by the Committee, the applicable Participant shall have all of the rights of a shareholder of the Corporation holding Common Stock with respect to the shares of Common Stock to be issued upon the exercise of the option or stock appreciation right (including the right to vote the applicable shares and the right to receive dividends), when the Participant (i) has given written notice of exercise in accordance with the procedures established by the Committee, (ii) if requested, has given the representation described in Section 10, and (iii) in the case of an option, has paid in full the exercise price for such shares.

5.7 Nontransferability of Options and Stock Appreciation Rights. Unless the Committee shall otherwise determine in the case of nonstatutory stock options and stock appreciation rights and limited to a transfer without the payment of value or consideration to the Participant, (i) no option or stock appreciation right shall be transferable by a Participant other than by will, or if the Participant dies intestate, by the laws of descent and distribution of the state of domicile of the Participant at the time of death, and (ii) all stock options and stock appreciation rights shall be exercisable during the lifetime of the Participant only by the Participant (or the Participant's guardian or legal representative). Any Tandem SAR shall be transferable only when the related stock option is transferable and with the related stock option.

5.8 Termination of Employment. Unless the Committee, in its sole discretion, shall otherwise determine at the time of grant of the Award or, other than in the case of incentive stock options, thereafter, but subject to the provisions of Section 5.1 in the case of incentive stock options and Section 11.3:

(a) If the employment of a Participant who is not disabled within the meaning of Section 422(c)(6) of the Code (a "Disabled Participant") is voluntarily terminated with the consent of the Corporation or a Subsidiary or a Participant retires under any retirement plan of the Corporation or a Subsidiary, any then outstanding incentive stock option held by such Participant shall be exercisable by the Participant (but only to the extent exercisable by the Participant immediately prior to the termination of employment) at any time prior to the expiration date of such incentive stock option or within three months after the date of termination of employment, whichever is the shorter period;

(b) If the employment of a Participant who is not a Disabled Participant is voluntarily terminated with the consent of the Corporation or a Subsidiary or a Participant retires under any retirement plan of the Corporation or a Subsidiary, any then outstanding nonstatutory stock option or stock appreciation right held by such Participant shall be exercisable by the Participant (but only to the extent exercisable by the Participant immediately prior to the termination of employment) at any time prior to the expiration date of such nonstatutory stock option or stock appreciation right or within one year after the date of termination of employment, whichever is the shorter period;

(c) If the employment of a Participant who is a Disabled Participant is voluntarily terminated with the consent of the Corporation or a Subsidiary, any then outstanding stock option or stock appreciation right held by such Participant shall be exercisable in full (whether or not so exercisable by the Participant immediately prior to the termination of employment) by the Participant at any time prior to the expiration date of such stock option or stock appreciation right or within one year after the date of termination of employment, whichever is the shorter period;

(d) Following the death of a Participant during employment, any outstanding stock option or stock appreciation right held by the Participant at the time of death shall be exercisable in full (whether or not so exercisable by the Participant immediately prior to the death of the Participant) by the person entitled to do so under the will of the Participant, or, if the Participant shall fail to make testamentary disposition of the stock option or stock appreciation right or shall die intestate, by the legal representative of the Participant at any time prior to the expiration date of such stock option or stock appreciation right or within one year after the date of death, whichever is the shorter period;

(e) Following the death of a Participant after termination of employment during a period when a stock option or stock appreciation right is exercisable, any outstanding stock option or stock appreciation right held by the Participant at the time of death shall be exercisable by such person entitled to do so under the will of the Participant or by such legal representative (but only to the extent the stock option or stock appreciation right was exercisable by the Participant immediately prior to the death of the Participant) at any time prior to the expiration date of such stock option or stock appreciation right or within one year after the date of death, whichever is the shorter period; and

(f) Unless the exercise period of a stock option or stock appreciation right following termination of employment has been extended as provided in Section 11.4, if the employment of a Participant terminates for any reason other than voluntary termination with the consent of the Corporation or a Subsidiary, retirement under any retirement plan of the Corporation or a Subsidiary or death, all outstanding stock options and stock appreciation rights held by the Participant at the time of such termination of employment shall automatically terminate.

Whether termination of employment is a voluntary termination with the consent of the Corporation or a Subsidiary and whether a Participant is a Disabled Participant shall be determined in each case, in its sole discretion, by the Committee (or, in the case of Participants who are not (i) Covered Employees as of the end of the Corporation's immediately preceding fiscal year or (ii) the Chief Executive Officer of the Corporation, by such Chief Executive Officer, in his sole discretion) and any such determination by the Committee or such Chief Executive Officer shall be final and binding. Without limitation of the foregoing, a termination of employment by the Participant shall not be a voluntary termination with the consent of the Corporation unless the Committee or, if applicable, such Chief Executive Officer, in its or his sole discretion, specifically consents to the termination of employment in writing.

5.9 <u>Other Terms and Conditions</u>. Subject to the foregoing provisions of this Section 5 and the other provisions of the Plan, any stock option or stock appreciation right granted under the Plan may be exercised at such times and in such amounts and be subject to such restrictions and other terms and conditions, if any, as shall be determined, in its sole discretion, by the Committee and set forth in the agreement under Section 2.5.

SECTION 6
Restricted Stock

6.1 Restricted Stock Awards; Certificates. Shares of restricted stock are actual shares of Common Stock issued to a Participant, and shall be evidenced in such manner as the Committee may deem appropriate, including book- entry registration or issuance of one or more stock certificates. Any certificate issued in respect of shares of restricted stock shall be registered in the name of the applicable Participant and, unless held by or on behalf of the Corporation in escrow or custody until the restrictions lapse or the shares are forfeited, shall bear an appropriate conspicuous legend referring to the terms, conditions, and restrictions applicable to such Award, substantially in the following form:

> "The transferability of this certificate and the shares of stock represented hereby are subject to the terms and conditions (including forfeiture) of the Westinghouse Air Brake Technologies Corporation 2011 Stock Incentive Plan and a corresponding agreement. Copies of such Plan and agreement are on file at the offices of Westinghouse Air Brake Technologies Corporation, 1001 Air Brake Avenue, Wilmerding, PA 15148."

The Committee may require that the certificates evidencing such shares be held in escrow or custody by or on behalf of the Corporation until the restrictions thereon shall have lapsed or the shares are forfeited and that, as a condition of any Award of restricted stock, the applicable Participant deliver to the Corporation a stock power, endorsed in blank, relating to the Common Stock covered by such Award.

6.2 Terms and Conditions. Shares of restricted stock shall be subject to the following terms and conditions:

(a) The Committee shall, prior to or at the time of grant, condition the vesting of an Award of restricted stock upon (i) the continued service of the applicable Participant, (ii) the attainment of Performance Goals, or (iii) the attainment of Performance Goals and the continued service of the applicable Participant. The Committee shall establish at the time the restricted stock is granted the performance periods during which any Performance Goals specified by the Committee with respect to the restricted stock Award are to be measured. In the event that the Committee conditions the vesting of an Award of restricted stock upon the attainment of Performance Goals or the attainment of Performance Goals and the continued service of the applicable Participant, the Committee may, prior to or at the time of grant, designate an Award of restricted stock as a Qualified Performance-Based Award. The conditions for vesting and the other provisions of restricted stock Awards (including without limitation any applicable Performance Goals) need not be the same with respect to each recipient, and shall be established by the Committee in its sole discretion. Except in the case of a Qualified Performance-Based Award, the Committee at any time after the date of grant, in its sole discretion, may modify or waive any of the conditions applicable to an Award of restricted stock.

(b) Subject to the provisions of the Plan (including Section 6.3) and the applicable agreement under Section 2.5, during the period, if any, set by the Committee, commencing with the date of such restricted stock Award for which such vesting restrictions apply (the "Restriction Period"), and until the expiration of the Restriction Period, the Participant shall not be permitted to sell, assign, transfer, pledge or otherwise encumber shares of such restricted stock. A restricted stock Award may vest in part on a pro rata basis prior to the expiration of any Restriction Period.

(c) Except as provided in this Section 6 and in the applicable agreement under Section 2.5, the applicable Participant shall have, with respect to the shares of restricted stock, all of the rights of a shareholder of the Corporation holding the Common Stock that is the subject of the restricted stock, including, if applicable, the right to vote the shares and the right to receive any cash dividends. If so determined by the Committee and set forth in the applicable agreement under Section 2.5 and subject to Section 15.4, cash dividends on the Common Stock that is the subject of the restricted stock Award may be (i) automatically deferred and reinvested in additional restricted stock, and held subject to the same vesting and forfeiture conditions of the underlying restricted stock, or (ii) held by the Corporation in cash (without any payment of interest thereon) subject to the same vesting and forfeiture conditions of the restricted stock with respect to which the dividends are payable. Unless otherwise determined by the Committee and set forth in the applicable agreement under Section 2.5, any Common Stock or other securities payable with respect to any restricted stock as a result of or pursuant to Section 4.5, shall be held subject to the same vesting and forfeiture conditions of the underlying restricted stock.

(d) As soon as practicable after the applicable Restriction Period has ended, the Committee shall determine and certify (in writing in the case of Qualified Performance-Based Awards) whether and the extent to which the service period and/or the Performance Goals were met for the applicable restricted stock. If the vesting condition or conditions applicable to the restricted stock are not satisfied by the time the Restriction Period has expired, such restricted stock shall be forfeited. If and when the Restriction Period expires without a prior forfeiture of the shares of restricted stock (i) if legended certificates have been issued, unlegended certificates for such shares shall be delivered to the Participant upon surrender of the legended certificates, (ii) if legended certificates have not yet been issued, unlegended certificates (and any related blank stock powers previously executed by the Participant) shall be delivered to the Participant, and (iii) any cash dividends held by the Corporation pursuant to Section 6.2(c) shall be delivered to the Participant.

6.3 Permitted Transfers. Neither this Section 6 nor any other provision of the Plan shall preclude a Participant from transferring or assigning restricted stock, without the payment of value or consideration to the Participant, to (i) the trustee of a trust that is revocable by such Participant alone, both at the time of the transfer or assignment and at all times thereafter prior to such Participant's death or (ii) the trustee of any other trust to the extent approved in advance by the Committee, in its sole discretion, in writing. A transfer or assignment of restricted stock from such trustee to any person other than such Participant shall be permitted only to the extent approved in advance by the Committee, in its sole discretion, in writing, and restricted stock held by such trustee shall be subject to all of the conditions and restrictions set forth in the Plan and in the applicable agreement under Section 2.5 as if such trustee were a party to such agreement.

SECTION 7
Restricted Stock Units

7.1 Restricted Stock Unit Awards. Restricted stock units are Awards denominated in shares of Common Stock that will be settled, subject to the terms and conditions of the restricted stock units and at the sole discretion of the Committee, in an amount in cash, shares of Common Stock, or both, based upon the Fair Market Value of a specified number of shares of Common Stock.

7.2 Terms and Conditions. Restricted stock units shall be subject to the following terms and conditions:

(a) The Committee shall, prior to or at the time of grant, condition the vesting of restricted stock units upon (i) the continued service of the applicable Participant, (ii) the attainment of Performance Goals or (iii) the attainment of Performance Goals and the continued service of the applicable Participant. In the event that the Committee conditions the vesting of restricted stock units upon the attainment of Performance Goals or the attainment of Performance Goals and the continued service of the applicable Participant, the Committee may, prior to or at the time of grant, designate the restricted stock units as a Qualified Performance-Based Award. The Committee shall determine the performance period(s) during which any Performance Goals are to be achieved. The conditions for grant or vesting and the other provisions of restricted stock units (including without limitation any applicable Performance Goals) need not be the same with respect to each recipient. An Award of restricted stock units shall be settled as and when the restricted stock units vest, as determined and certified (in writing in the case of Qualified Performance-Based Awards) by the Committee, or at a later time specified by the Committee or in accordance with an election of the Participant, if the Committee so permits. Except in the case of a Qualified Performance-Based Award, the Committee at any time after the date of grant, in its sole discretion, may modify or waive any of the conditions applicable to an Award of restricted stock units.

(b) Subject to the provisions of the Plan and the applicable agreement under Section 2.5, during the period, if any, set by the Committee, commencing with the date of grant of such restricted stock units for which such vesting restrictions apply (the "Units Restriction Period"), and until the expiration of the Units Restriction Period, the Participant shall not be permitted to sell, assign, transfer, pledge or otherwise encumber restricted stock units. A restricted stock unit may vest in part prior to the expiration of any Units Restriction Period.

(c) Participants granted restricted stock units shall not be entitled to any dividends payable on the Common Stock unless the agreement under Section 2.5 for restricted stock units specifies to what extent and on what terms and conditions the applicable Participant shall be entitled to receive current or deferred payments of cash, Common Stock or other property corresponding to the dividends payable on the Common Stock (subject to Section 15.4 below). Restricted stock units shall not have any voting rights, and holders of restricted stock units shall not be shareholders of the Corporation unless and until shares of Common Stock are issued by the Corporation (in book-entry form or otherwise).

SECTION 8
Performance Units

Performance units may be granted hereunder to eligible employees, for no cash consideration or for such minimum consideration as may be required by applicable law, either alone or in addition to other Awards granted under the Plan. Performance units may be share-based or cash-based, including annual incentive awards. The Committee shall establish at the time the performance unit is granted the performance period(s) during which any Performance Goals specified by the Committee with respect to the Award are to be measured. The Performance Goals to be achieved during any performance period(s) and the length of the performance period(s) shall be determined by the Committee upon the grant of each performance unit. The Committee may, in connection with the grant of performance units, designate them as Qualified Performance-Based Awards. The conditions for grant or vesting and the other provisions of performance units (including without limitation any applicable Performance Goals) need not be the same with respect to each Participant. Performance units may be paid in cash, shares of Common Stock, other property or any combination thereof, in the sole discretion of the Committee as set forth in the applicable agreement under Section 2.5. Performance units shall not have any voting rights, and holders of performance units shall not be shareholders of the Corporation unless and until shares of Common Stock are issued by the Corporation (in book-entry form or otherwise). The Performance Goals to be achieved for each performance period, whether the Performance Goals have been achieved, and the amount of the Award to be distributed shall be conclusively determined and certified (in writing in the case of Qualified Performance-Based Awards) by the Committee. Performance units may be paid in a lump sum or in installments following the close of the performance period(s). The Participant shall not be permitted to sell, assign, transfer, pledge or otherwise encumber performance units. Except in the case of a Qualified Performance- Based Award, the Committee at any time after the grant of performance units, in its sole discretion, may modify or waive any of the conditions applicable to an Award of performance units.

SECTION 9
Other Stock-Based Awards

The Committee may award Common Stock and other Awards that are valued in whole or in part by reference to, or are otherwise based upon, Common Stock, including but not limited to, unrestricted stock or dividend equivalents. Any such Award shall be subject to such terms and conditions as established by the Committee, and may include Qualified Performance-Based Awards.

SECTION 10
Issuance of Shares

The Committee may require each person purchasing or receiving shares of Common Stock pursuant to an Award to represent to and agree with the Corporation in writing that such person is acquiring the shares without a view to the distribution thereof. The certificates for such shares may include any legend which the Committee deems appropriate to reflect any restrictions on transfer. The obligation of the Corporation to issue shares of Common Stock under the Plan shall be subject to (i) the effectiveness of a registration statement under the Securities Act of 1933, as amended, with respect to such shares, if deemed necessary or appropriate by counsel for the Corporation, (ii) the condition that the shares shall have been listed (or authorized for listing upon official notice of issuance) upon each stock exchange, if any, on which the shares of Common Stock may then be listed, (iii) all other applicable laws, regulations, rules and orders which may then be in effect and (iv) obtaining any other consent, approval, or permit from any state or federal governmental agency which the Committee shall, in its sole discretion, determine to be necessary or advisable.

SECTION 11
Additional Rights in Certain Events

11.1 Definitions.

For purposes of this Section 11, the following terms shall have the following meanings:

(1) The term "Person" shall be used as that term is used in Sections 13(d) and 14(d) of the 1934 Act as in effect on the effective date of the Plan.

(2) "Beneficial Ownership" shall be determined as provided in Rule 13d-3 under the 1934 Act as in effect on the effective date of the Plan.

(3) A specified percentage of "Voting Power" of a company shall mean such number of the Voting Shares as shall enable the holders thereof to cast such percentage of all the votes which could be cast in an annual election of directors (without consideration of the rights of any class of stock other than the common stock of the company to elect directors by a separate class vote); and "Voting Shares" shall mean all securities of a company entitling the holders thereof to vote in an annual election of directors (without consideration of the rights of any class of stock other than the common stock of the company to elect directors by a separate class vote).

(4) "Continuing Directors" shall mean a director of the Corporation who either (a) was a director of the Corporation on the effective date of the Plan or (b) is an individual whose election, or nomination for election, as a director of the Corporation was approved by a vote of at least two-thirds of the directors then still in office who were Continuing Directors (other than an individual whose initial assumption of office is in connection with an actual or threatened election contest relating to the election of directors of the Corporation which would be subject to Rule 14a-11 under the 1934 Act, or any successor rule).

(5) "Section 11 Event" shall mean the date upon which any of the following events occurs:

(a) The Corporation acquires actual knowledge that any Person, other than the Corporation, a Subsidiary, or any employee benefit plan(s) sponsored by the Corporation or a Subsidiary, has acquired the Beneficial Ownership, directly or indirectly, of securities of the Corporation entitling such Person to 30% or more of the Voting Power of the Corporation;

(b) At any time less than 51% of the members of the Board (excluding vacant seats) shall be Continuing Directors; or

(c) The consummation of a merger, consolidation, share exchange, division or sale or other disposition of assets of the Corporation as a result of which the stockholders of the Corporation immediately prior to such transaction shall not hold, directly or indirectly, immediately following such transaction a majority of the Voting Power of (i) in the case of a merger or consolidation, the surviving or resulting corporation, (ii) in the case of a share exchange, the acquiring corporation or (iii) in the case of a division or a sale or other disposition of assets, each surviving, resulting or acquiring corporation which, immediately following the transaction, holds more than 30% of the consolidated assets of the Corporation immediately prior to the transaction;

provided, however, that if securities beneficially owned by a Participant are included in determining the Beneficial Ownership of a Person referred to in paragraph 6(a) above, then no Section 11 Event with respect to such Participant shall be deemed to have occurred by reason of such event.

11.2 Vesting Upon Section 11 Event if Awards Do Not Remain Outstanding. Subject to the provisions of Section 5 in the case of incentive stock options and Section 11.5, unless the agreement under Section 2.5 shall otherwise provide, notwithstanding any other provision contained in the Plan, in the event that a Section 11 Event occurs and Awards do not remain outstanding after the Section 11 Event (and are not assumed by, or converted to similar awards with equivalent value as of the date of the Section 11 Event of, the surviving, resulting, or acquiring corporation (or a parent or subsidiary of such corporation)), then all outstanding stock options and stock appreciation rights shall become immediately vested and fully exercisable, any restrictions applicable to restricted stock Awards shall lapse, and all other Awards shall be considered to be earned and payable in full as of the date of the Section 11 Event.

11.3 Vesting Upon Certain Terminations of Employment. Subject to the provisions of Section 5 in the case of incentive stock options and Section 11.5, unless the agreement under Section 2.5 shall otherwise provide, notwithstanding any other provision contained in the Plan, in the event that a Section 11 Event occurs and Awards remain outstanding after the Section 11 Event (or are assumed by, or converted to similar awards with equivalent value as of the date of the Section 11 Event of, the surviving, resulting, or acquiring corporation (or a parent or subsidiary of such corporation)), and upon or within one year after the Section 11 Event (a) the Corporation or a Subsidiary (or their respective successor) terminates a Participant's employment without cause (as defined in the agreement under Section 2.5) or (b) a Participant resigns from employment for good reason (as defined in the agreement under Section 2.5), then the Participant's outstanding stock options and stock appreciation rights shall become immediately vested and fully exercisable, any restrictions applicable to restricted stock Awards shall lapse, and other Awards shall be considered to be earned and payable in full.

11.4 Extension of the Expiration Date of Stock Options and Stock Appreciation Rights. Subject to the provisions of Section 5 in the case of incentive stock options and Section 11.5, unless the agreement under Section 2.5 shall otherwise provide, notwithstanding any other provision contained in the Plan, all stock options and stock appreciation rights held by a Participant whose employment with the Corporation or a Subsidiary terminates within one year of any Section 11 Event for any reason other than voluntary termination with the consent of the Corporation or a Subsidiary, retirement under any retirement plan of the Corporation or a Subsidiary or death shall be exercisable for a period of three years from the date of such termination of employment, but in no event after the expiration date of the stock option or stock appreciation right.

11.5 Code Section 409A. Notwithstanding the foregoing, if any Award is subject to Section 409A of the Code, this Section 11 shall be applicable only to the extent consistent with Section 409A.

SECTION 12
Qualified Performance-Based Awards; Section 409A

12.1 Qualified Performance-Based Awards.

(a) The provisions of this Plan are intended to ensure that all options and stock appreciation rights granted hereunder to any Participant who is or may be a Covered Employee in the tax year in which such option or stock appreciation right is expected to be deductible to the Corporation qualify for the exemption from the limitation on deductions imposed by Section 162(m) of the Code (the "Section 162(m) Exemption"), and all such Awards shall therefore be considered Qualified Performance-Based Awards and this Plan shall be interpreted and operated consistent with that intention. When granting any Award other than an option or stock appreciation right, the Committee may designate such Award as a Qualified Performance-Based Award, based upon a determination that (i) the recipient is or may be a Covered Employee with respect to such Award, and (ii) the Committee wishes such Award to qualify for the Section 162(m) Exemption, and the terms of any such Award (and of the grant thereof) shall be consistent with such designation. With respect to Qualified Performance-Based Awards, within 90 days after the commencement of a performance period or, if earlier, by the expiration of 25% of a performance period, the Committee will designate one or more performance periods, determine the Participants for the performance periods and establish the Performance Goals for the performance periods.

(b) Each Qualified Performance-Based Award (other than an option or stock appreciation right) shall be earned, vested and/or payable (as applicable) upon certification in writing by the Committee of the achievement of one or more Performance Goals, together with the satisfaction of any other conditions, such as continued employment, as previously established by the Committee with respect to such Award. Subject to the terms of any applicable Award agreement, the Committee may, in its discretion, reduce (but not increase) the amount of a settlement otherwise to be made in connection with a Qualified Performance- Based Award.

(c) Notwithstanding any provision in the Plan or in any agreement under Section 2.5, to the extent that any such provision or action of the Committee would cause any Qualified Performance-Based Award not to qualify for the Section 162(m) Exemption, such provision or action shall be null and void as it relates to Covered Employees, to the extent permitted by law and deemed advisable by the Committee.

12.2 Code Section 409A. It is the intention of the Corporation that no Award shall be "deferred compensation" subject to Section 409A of the Code, unless and to the extent that the Committee specifically determines otherwise as provided in the immediately following sentence, and the Plan and the terms and conditions of all Awards shall be interpreted accordingly. The terms and conditions governing any Awards that the Committee determines will be subject to Section 409A of the Code, including any rules for elective or mandatory deferral of the delivery of cash or shares of Common Stock pursuant thereto and any rules regarding treatment of such Awards in the event of a Section 11 Event, shall be set forth in the applicable agreement under Section 2.5, and shall comply in all respects with Section 409A of the Code.

SECTION 13
Effect of the Plan on the Rights of Employees and Employer

Neither the adoption of the Plan nor any action of the Board or the Committee pursuant to the Plan shall be deemed to give any employee any right to be granted any Award under the Plan. Nothing in the Plan, in any Award under the Plan or in any agreement under Section 2.5 providing for any Award under the Plan shall confer any right to any employee to continue in the employ of the Corporation or any Subsidiary or interfere in any way with the rights of the Corporation or any Subsidiary to terminate the employment of any employee at any time or adjust the compensation of any employee at any time.

SECTION 14
Amendment or Termination

The right to amend the Plan at any time and from time to time and the right to terminate the Plan are hereby specifically reserved to the Board; provided that no such amendment of the Plan shall, without shareholder approval (a) increase the maximum aggregate number of shares of Common Stock for which Awards may be made under Section 4.1 of the Plan, (b) increase the maximum aggregate number of shares of Common Stock as to which incentive stock options may be granted under Section 4.1 of the Plan, (c) make any changes in the class of employees eligible to receive Awards under the Plan, (d) change the maximum number of shares of Common Stock as to which Awards may be made to any Participant under Section 4.2 of the Plan, or the maximum amount that may be paid or distributed to any Participant pursuant to a grant of performance units or other stock- based Awards made in any one calendar year under Section 8 or 9 of the Plan, respectively, (e) change the exercise price or Base Price permitted under Section 5.3 of the Plan or the restrictions regarding repricing under Section 5.3 of the Plan, (f) be made if shareholder approval of the amendment is at the time required for Awards under the Plan to qualify for the exemption from Section 16(b) of the 1934 Act provided by Rule 16b-3 or by the rules of any stock exchange on which the Common Stock may then be listed or (g) be made to the extent such approval is needed for Qualified Performance-Based Awards to qualify for the Section 162(m) Exemption. No amendment or termination of the Plan shall, without the written consent of the holder of an Award under the Plan, adversely affect the rights of such holder with respect thereto.

SECTION 15
General Provisions

15.1 Additional Compensation Arrangements. Nothing contained in the Plan shall prevent the Corporation or any Subsidiary from adopting other or additional compensation arrangements for its employees.

15.2 Tax Withholding. No later than the date as of which an amount first becomes includible in the gross income of a Participant for federal, state, local or foreign income or employment or other tax purposes with respect to any Award under the Plan, such Participant shall pay to the Corporation (or, if applicable, a Subsidiary), or make arrangements satisfactory to the Corporation (or, if applicable, a Subsidiary) regarding the payment of, any federal, state, local or foreign taxes of any kind required by law to be withheld with respect to such amount. Unless otherwise determined by the Committee, withholding obligations may be settled with Common Stock, including Common Stock that is part of the Award that gives rise to the withholding requirement, having a Fair Market Value on the date of withholding equal to the maximum amount required to be withheld for tax purposes, all in accordance with such procedures as the Committee establishes, and provided that any fractional share amount must be paid in cash or withheld from compensation otherwise due to the Participant. The obligations of the Corporation under the Plan shall be conditional on such payment or arrangements, and the Corporation and its Subsidiaries shall, to the extent permitted by law, have the right to deduct any such taxes from any payment otherwise due to such Participant. The Committee may establish such procedures as it deems appropriate, including making irrevocable elections, for the settlement of withholding obligations with Common Stock.

15.3 Limitation of Liability. The grant of any Award shall not:

(a) give a Participant any rights except as expressly set forth in the Plan or in the agreement under Section 2.5;

(b) create any fiduciary or other obligation of the Corporation or any Subsidiary to take any action or provide to the Participant any assistance or dedicate or permit the use of any assets of the Corporation or any Subsidiary that would permit the Participant to be able to attain any Performance Goals associated with any Award;

(c) create any trust, fiduciary or other duty or obligation of the Corporation or any Subsidiary to engage in any particular business, continue to engage in any particular business, engage in any particular business practices or sell any particular product or products; or

(d) create any obligation of the Corporation or any Subsidiary that shall be greater than the obligation of the Corporation or that Subsidiary to any of their general unsecured creditors.

15.4 Limitation on Dividend Reinvestment and Dividend Equivalents. Reinvestment of dividends in additional restricted stock at the time of any dividend payment, and the payment of shares with respect to dividends to Participants holding Awards of restricted stock units, shall only be permissible if authorized by the Committee and if sufficient shares of Common Stock are available under Section 4 for such reinvestment or payment (taking into account then outstanding Awards). In the event that sufficient shares of Common Stock are not available for such reinvestment or payment, such reinvestment or payment shall be made in the form of a grant of restricted stock units equal in number to the shares of Common Stock that would have been obtained by such payment or reinvestment, the terms of which restricted stock units shall provide for settlement in cash and for dividend equivalent reinvestment in further restricted stock units on the terms contemplated by this Section 15.4.

15.5 Governing Law and Interpretation. To the extent not preempted by federal Law, the Plan and all Awards made and actions taken thereunder shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without reference to principles of conflict of laws. The captions of this Plan are not part of the provisions hereof and shall have no force or effect.

15.6 Dispute Resolution. Since Awards are granted in Western Pennsylvania, records relating to the Plan and Awards are located in Western Pennsylvania, and the Plan and Awards are administered in Western Pennsylvania, the Corporation and the Participant to whom an Award is granted, for themselves and their heirs, representatives, successors and assigns (collectively, the "Parties") irrevocably submit to the exclusive and sole jurisdiction and venue of the state courts of Allegheny County, Pennsylvania and the federal courts of the Western District of Pennsylvania with respect to any and all disputes arising out of or relating to the Plan, the subject matter of the Plan or any Awards under the Plan, including but not limited to any disputes arising out of or relating to the interpretation and enforceability of any Awards or the terms and conditions of the Plan. To achieve certainty regarding the appropriate forum in which to prosecute and defend actions arising out of or relating to the Plan, and to ensure consistency in application and interpretation of the governing law under Section 15.5 of the Plan, the Parties agree that (a) sole and exclusive appropriate venue for any such action shall be the Pennsylvania courts described in the immediately preceding sentence, and no other, (b) all claims with respect to any such action shall be heard and determined exclusively in such Pennsylvania courts, and no other, (c) such Pennsylvania courts shall have sole and exclusive jurisdiction over the Parties and over the subject matter of any dispute relating hereto and (d) the Parties waive any and all objections and defenses to bringing any such action before such Pennsylvania courts, including but not limited to those relating to lack of personal jurisdiction, improper venue or *forum non conveniens*.

15.7 Non-Transferability. Except as otherwise specifically provided in the Plan or by the Committee and limited to a transfer without the payment of value or consideration to the Participant, Awards under the Plan are not transferable except by will or by laws of descent and distribution of the state of domicile of the Participant at the time of death.

15.8 Deferrals. The Committee shall be authorized to establish procedures pursuant to which the payment of any Award may be deferred, provided that any such deferral is consistent with all aspects of Section 409A of the Code. Subject to the provisions of this Plan and any agreement under Section 2.5, the recipient of an Award (including, without limitation, any deferred Award) may, if so determined by the Committee, be entitled to receive, currently or on a deferred basis, interest or dividends, or interest or dividend equivalents, with respect to the number of shares covered by the Award, as determined by the Committee, in its sole discretion, and the Committee may provide that such amounts (if any) shall be deemed to have been reinvested in additional shares or otherwise reinvested; provided, however, that in no event shall interest, dividends or dividend equivalents be paid on any unearned performance units or performance share units until such units have vested.

15.9 Integration. The Plan and any written agreements executed by Participants and the Corporation under Section 2.5 contain all of the understandings and representations between the parties and supersede any prior understandings and agreements entered into between them regarding the subject matter within. There are no representations, agreements, arrangements or understandings, oral or written, between the parties relating to the subject matter of the Plan which are not fully expressed in the Plan and the written agreements.

15.10 Foreign Employees and Foreign Law Considerations. The Committee may grant Awards to eligible employees who are foreign nationals, who are located outside the United States of America or who are not compensated from a payroll maintained in the United States of America, or who are otherwise subject to (or could cause the Corporation to be subject to) legal or regulatory provisions of countries or jurisdictions outside the United States of America, on such terms and conditions different from those specified in the Plan as may, in the judgment of the Committee, be necessary or desirable to foster and promote achievement of the purposes of the Plan, and, in furtherance of such purposes, the Committee may make such modifications, amendments, procedures, or subplans as may be necessary or advisable to comply with such legal or regulatory provisions.

SECTION 16
Effective Date and Duration of Plan

The Plan was originally adopted by the Board effective as of March 28, 2011, and was subsequently approved by the Company's stockholders at the 2011 annual meetings of stockholders and re-approved at the 2016, 2017, and 2020 annual meetings of stockholders. The Plan was amended and restated effective as of March 31, 2022, which amendment and restatement applies to Awards granted after the effective date of such amendment and restatement. Awards granted prior to the effective date of this amended and restated Plan shall be treated in accordance with the terms of the Plan in effect prior to such effective date. No Award under the Plan may be made subsequent to May 15, 2030.

Exhibit 22.1

Guarantor Subsidiaries of Westinghouse Air Brake Technologies

The obligations under the Company's US Notes and the Senior Credit Facility have been fully and unconditionally guaranteed by certain of the Company's U.S. subsidiaries. Each guarantor is 100% owned by the parent company, with the exception of GE Transportation, a Wabtec Company, which has 15,000 shares outstanding of Class A Non-Voting Preferred Stock held by General Electric Company. The Euro Notes are issued by Wabtec Netherlands and are fully and unconditionally guaranteed by the Company.

As of June 30, 2022:

The US Notes and Senior Credit Facility
Issuer: Westinghouse Air Brake Technologies Corporation
Guarantors: GE Transportation, a Wabtec Company
RFPC Holding Corp.
Transportation IP Holdings, LLC
Transportation Systems Services Operations Inc.
Wabtec Components, LLC
Wabtec Holding, LLC
Wabtec Railway Electronics Holdings, LLC
Wabtec Transportation Systems, LLC

The Euro Notes
Issuer: Wabtec Transportation Netherlands B.V.
Guarantor: Westinghouse Air Brake Technologies Corporation

Exhibit 31.1

CERTIFICATION

I, Rafael Santana, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Westinghouse Air Brake Technologies Corporation.

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

(d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 officers 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 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 5, 2022

By:	/s/ RAFAEL SANTANA
Name:	**Rafael Santana**
Title:	**President and Chief Executive Officer**

Exhibit 31.2

CERTIFICATION

I, John A. Olin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Westinghouse Air Brake Technologies Corporation.

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

(d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 officers 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 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 5, 2022

By:	/s/ JOHN A. OLIN
Name:	**John A. Olin**
Title:	**Executive Vice President and Chief Financial Officer**

Exhibit 32.1

CERTIFICATION

Pursuant to 18 U.S.C. § 1350, the undersigned officers of Westinghouse Air Brake Technologies Corporation (the "*Company*"), hereby certify, to the best of their knowledge, that the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 (the "*Report*") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By:	/s/ RAFAEL SANTANA
	Rafael Santana **President and Chief Executive Officer**
Date:	August 5, 2022
By:	/s/ JOHN A. OLIN
	John A. Olin, **Executive Vice President and Chief Financial Officer**
Date:	August 5, 2022