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

FORM 10-K

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

For the fiscal year ended September 30, 2021

or

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

Commission file number: 1-31371

Oshkosh Corporation

(Exact name of registrant as specified in its charter)

Wisconsin	**39-0520270**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1917 Four Wheel Drive Oshkosh, Wisconsin	**54902**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(920) 502-3400**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock $0.01 par value	OSK	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
☐ Yes ☒ No

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	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

☐ Yes ☒ No

At March 31, 2021, the aggregate market value of the registrant’s Common Stock held by non-affiliates was $8,142,015,260 (based on the closing price of $118.66 per share on the New York Stock Exchange as of such date).

As of November 9, 2021, 67,487,008 shares of the registrant’s Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Proxy Statement for the 2022 Annual Meeting of Shareholders (to be filed with the Commission under Regulation 14A within 120 days after the end of the registrant’s fiscal year and, upon such filing, to be incorporated by reference into Part III).

OSHKOSH CORPORATION
FISCAL 2021 ANNUAL REPORT ON FORM 10-K

As used herein, the "Company," "we," "us" and "our" refers to Oshkosh Corporation and its consolidated subsidiaries. "Oshkosh" refers to Oshkosh Corporation, not including JLG Industries, Inc. and its wholly-owned subsidiaries (JLG), Oshkosh Defense, LLC (Oshkosh Defense) and its wholly-owned subsidiaries, Pratt & Miller Engineering & Fabrications, LLC (Pratt Miller), Pierce Manufacturing Inc. (Pierce), McNeilus Companies, Inc. (McNeilus) and its wholly-owned subsidiaries, Oshkosh Airport Products, LLC (Airport Products), Kewaunee Fabrications, LLC (Kewaunee), Oshkosh Commercial Products, LLC (Oshkosh Commercial), London Machinery Inc. and its wholly-owned subsidiary (London) and Iowa Mold Tooling Co., Inc. (IMT) or any other subsidiaries.

The "Oshkosh®," "JLG®," "Oshkosh Defense®," "Pierce®," "McNeilus®," "Jerr-Dan®," "Frontline™," "London®," "IMT®," "Pratt Miller®," "Command Zone™," "TAK-4®," "PUC™," "Hercules™," "Husky™," "Ascendant™," "SkyTrak®" and "ProPulse®," "DaVinci™," and "Volterra™" trademarks and related logos are trademarks or registered trademarks of the Company. All other product and service names referenced in this document are the trademarks or registered trademarks of their respective owners.

All references herein to earnings per share refer to earnings per share assuming dilution, unless noted otherwise.

For ease of understanding, the Company refers to types of specialty vehicles for particular applications as "markets." When the Company refers to "market" positions, these comments are based on information available to the Company concerning units sold by those companies currently manufacturing the same types of specialty vehicles and vehicle bodies as the Company and are therefore only estimates. Unless otherwise noted, these market positions are based on sales in the United States of America. There can be no assurance that the Company will maintain such market positions in the future.

Cautionary Statement About Forward-Looking Statements

The Company believes that certain statements in "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other statements located elsewhere in this Annual Report on Form 10-K are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this report, including, without limitation, statements regarding the Company's future financial position, business strategy, targets, projected sales, costs, earnings, capital expenditures, debt levels and cash flows, and plans and objectives of management for future operations, including those under the caption "Overview" in "Management's Discussion and Analysis of Financial Condition and Results of Operations," are forward-looking statements. When used in this Annual Report on Form 10-K, words such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe," "should," "project" or "plan" or the negative thereof or variations thereon or similar terminology are generally intended to identify forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, assumptions and other factors, some of which are beyond the Company's control, which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These factors include the extent of supply chain and logistics disruptions, particularly as demand rebounds from the COVID-19 pandemic; the Company's ability to increase prices or impose surcharges to raise margins or to offset higher input costs, including increased raw material, labor and freight costs; the cyclical nature of the Company's access equipment, commercial and fire & emergency markets, which are particularly impacted by the strength of U.S. and European economies and construction seasons; the Company's estimates of access equipment demand which, among other factors, is influenced by historical customer buying patterns and rental company fleet replacement strategies; the Company's ability to attract production labor in a timely manner; the strength of the U.S. dollar and its impact on Company exports, translation of foreign sales and the cost of purchased materials; the Company's ability to predict the level and timing of orders for indefinite delivery/indefinite quantity contracts with the U.S. federal government; risks related to reductions in government expenditures in light of U.S. defense budget pressures and an uncertain U.S. Department of Defense (DoD) tactical wheeled vehicle strategy; the impact of any DoD solicitation for competition for future contracts to produce military vehicles; the impacts of budget constraints facing the U.S. Postal Service (USPS) and continuously changing demands for postal services; the impact of severe weather, natural disasters or pandemics that may affect the Company, its suppliers or its customers; risks related to the collectability of receivables, particularly for those businesses with exposure to construction markets; the cost of any warranty campaigns related to the Company's products; risks associated with international operations and sales, including compliance with the Foreign Corrupt Practices Act; risks that a trade war and related tariffs could reduce the competitiveness of the Company's products; the Company's ability to comply with complex laws and regulations applicable to U.S. government contractors; cybersecurity risks and costs of defending against, mitigating and responding to data security threats and breaches impacting the Company; the Company's ability to successfully identify, complete and integrate acquisitions and to realize the anticipated benefits associated with the same; and risks related to the Company's ability to successfully execute on its strategic road map and meet its long-term financial goals. Additional information concerning these and other factors that could cause actual results to differ materially from those in the forward-looking statements is contained in Item 1A of Part I of this report.

All forward-looking statements, including those under the caption "Overview" in "Management's Discussion and Analysis of Financial Condition and Results of Operations," speak only as of November 16, 2021. The Company assumes no obligation, and disclaims any obligation, to update information contained in this Annual Report on Form 10-K. Investors should be aware that the Company may not update such information until the Company's next quarterly earnings conference call, if at all.

PART I

ITEM 1. BUSINESS

The Company

Oshkosh Corporation is a leading innovator, manufacturer and marketer of access equipment, specialty vehicles, and truck bodies for the primary markets of access equipment, defense, fire & emergency, refuse hauling and concrete placement. Each of our products and technologies is designed with customers and end-users in mind, from the four-wheel drive system that the Company patented in 1917 to advances in electrification, autonomy & active safety and intelligent products.

The Company comprises 11 brands and maintains four reportable segments for financial reporting purposes: Access Equipment, Defense, Fire & Emergency and Commercial, which comprised 40%, 32%, 16% and 12%, respectively, of the Company's consolidated net sales in fiscal 2021. Oshkosh's leading brands include a wide range of products to serve a diverse group of industries. This allows the Company to leverage innovations and efficiencies across the enterprise, including supply chain, materials integration, manufacturing processes, facilities and cross portfolio innovation creating an industrial technology company that is a leader in its end markets. The Company made approximately 33%, 35% and 24% of its net sales for fiscal 2021, 2020 and 2019, respectively, to the U.S. government, a substantial majority of which were under multi-year contracts and programs in the defense vehicle market. See Note 24 of the Notes to Consolidated Financial Statements for financial information related to the Company's business segments.

JLG, a global designer and manufacturer of aerial work platforms and telehandlers used in a wide variety of construction, industrial, institutional and general maintenance applications to safely position workers and materials at elevated heights, forms the foundation of the Company's Access Equipment segment. JLG's customer base includes equipment rental companies, construction contractors, manufacturing companies and home improvement centers. The Access Equipment segment also includes Jerr-Dan-branded tow trucks (wreckers) and roll-back vehicle carriers (carriers) sold to towing companies.

The Company's Defense segment has designed, manufactured and sold military tactical wheeled vehicles to the DoD for more than 100 years. In 1981, Oshkosh Defense was awarded the first Heavy Expanded Mobility Tactical Truck (HEMTT) contract for the DoD, and thereafter, it developed into the DoD's leading supplier of severe-duty, heavy-payload tactical trucks, manufacturing vehicles that perform a variety of demanding tasks such as hauling tanks, missile systems, ammunition, fuel, troops and cargo for combat units. In August 2009, Oshkosh Defense became the DoD's sole producer of the Family of Medium Tactical Vehicles (FMTV). In February 2018, after successful completion of the original five-year requirements contract and several contract extensions, the DoD awarded Oshkosh Defense the FMTV A2 contract for the design, development, production and support of the next generation of FMTV. The Company is currently in the production verification testing phase of the FMTV A2 contract. In 2015, Oshkosh Defense extended its position into the light-payload tactical wheeled vehicle category by capturing the DoD's Joint Light Tactical Vehicle (JLTV) program. The Company is currently in the full rate production phase of this eight-year contract. In February 2021, the USPS awarded Oshkosh Defense an indefinite delivery, indefinite quantity (IDIQ) contract to produce the Next Generation Delivery Vehicle (NGDV), the USPS's first large-scale fleet procurement in three decades. The competitively awarded contract allows for the delivery of vehicles over a 10 year period. In June 2021, the U.S. Army awarded Oshkosh Defense a six-year contract to integrate a Medium Caliber Weapons System onto Stryker Double V Hull Infantry Carrier Vehicles. In addition, the Defense segment offers engineering and product development services to customers in the motorsports and multiple ground vehicle markets through Pratt Miller. The Defense segment also designs and manufactures airport snow removal equipment.

The Company's Fire & Emergency segment designs and manufactures custom and commercial firefighting vehicles and equipment, aircraft rescue and firefighting (ARFF) vehicles, simulators and other emergency vehicles primarily sold to fire departments, airports and other governmental units and broadcast vehicles sold to broadcasters and television stations.

The Company's Commercial segment designs and manufactures refuse collection vehicles and related components sold to commercial and municipal waste haulers, rear- and front-discharge concrete mixer vehicles and related components sold to ready-mix companies and field service vehicles and truck-mounted cranes sold to mining, construction and other companies.

In October 2021, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31. Accordingly, the Company will report a transition quarter that runs from October 1, 2021 through December 31, 2021 (Stub Period). The Company's next full fiscal year will run from January 1, 2022 through December 31, 2022. All references in Part I of this report to a quarter or year are to the Company's historical fiscal quarter or fiscal year unless otherwise stated.

Competitive Strengths

The following competitive strengths support the Company's business strategy:

Strong Market Positions. The Company has developed strong market positions and brand recognition in its core businesses, which it attributes to its reputation for quality products, advanced engineering, market leading innovation, vehicle performance, reliability, customer service and low total cost of ownership. The Company maintains leading market shares in almost all of its businesses and is the sole-source supplier of a number of vehicles to the DoD.

Diversified Product Offerings. The Company believes its broad product offerings and target markets serve to diversify its sources of revenues, mitigate the impact of economic cycles and provide multiple platforms for potential organic growth and acquisitions. The Company's product offerings provide extensive opportunities to bundle products for sale to customers, co-location of manufacturing, leveraging purchasing power and sharing technology within and between segments. For each of its target markets, the Company has developed or acquired a broad product line in an effort to become a single-source provider of specialty vehicles, vehicle bodies, parts and service and related products to its customers. In addition, the Company has established an extensive domestic and international distribution network for specialty vehicles and vehicle bodies tailored to each market.

Quality Products and Customer Service. The Company has developed strong brand recognition for its products as a result of its commitment to meet the stringent product quality and reliability requirements of its customers in the specialty vehicle and vehicle body markets it serves. The Company frequently achieves premium pricing due to the quality, durability and low total cost of ownership of its products. The Company also provides high quality customer service through its extensive parts and service support programs, which are generally available to customers 365 days a year in all product lines throughout the Company's distribution network.

Innovative and Proprietary Components. The Company's advanced design and engineering capabilities have contributed to the development of innovative and/or proprietary, severe-duty components that enhance vehicle performance, reduce manufacturing costs and strengthen customer relationships. The Company's advanced design and engineering capabilities have also allowed it to integrate many of these components across various segments and product lines, which enhances its ability to compete for new business and reduces its costs to manufacture its products compared to manufacturers who simply assemble purchased components. The Company has been a supplier of electric-powered products for more than 20 years and recently launched several new products that leverage zero emissions electrification for mobility across all segments.

Flexible and Efficient Manufacturing. The Company believes it has competitive advantages over larger vehicle manufacturers in its specialty vehicle markets due to its product quality, manufacturing flexibility, vertical integration, purchasing power in specialty vehicle components and tailored distribution networks. In addition, the Company believes it has competitive advantages over smaller vehicle and vehicle body manufacturers due to its relatively higher volumes of similar products that permit the use of moving assembly lines and allow it to leverage purchasing power and technology opportunities across product lines.

Strong Management Team. The Company is led by President and Chief Executive Officer John C. Pfeifer. Mr. Pfeifer is complemented by an experienced senior management team that has been assembled through internal promotions and external hires. The Company's Board of Directors maintains a robust succession planning process for its Executive Officers to ensure strong continuity.

Business Strategy

The Company has evolved its strategy to focus on its most important priorities. The strategy is grounded in its purpose of making a difference in the lives of those who build, serve, and protect communities around the world. The strategy is reflected in three simple words: Innovate. Serve. Advance.

I*nnovate.* The Company innovates customer solutions by combining leading technology and operational strength to empower and protect the everyday hero. The Company is developing and integrating the most advanced technologies to fulfill its purpose in areas such as electrification and autonomy. Electrification provides enhanced performance and economic benefits, as well as sustainability benefits for customers. Using systems like Light Detection and Ranging, Radio Detection and Ranging and Global Positioning Systems along with advanced machine learning algorithms, the Company is developing autonomous vehicles and active safety systems. The Company is using data science, artificial intelligence, and predictive analytics to deliver better solutions. The Company is leveraging these and other innovations across its businesses to help ensure that it continues to be a market leader.

S*erve.* The Company serves and supports customers and end users with a relentless focus on equipment productivity and safety throughout the product lifecycle. The Company believes aftermarket parts and services provide a robust growth opportunity while offering stability throughout business cycles.

A*dvance.* The Company advances by expanding into new markets and geographies to make a difference around the world. The Company expects to continue to grow across the world and expand into new categories both organically, as with the recent USPS program win in the last mile delivery vehicle market, and inorganically through investments or acquisitions similar to the acquisition of Pratt Miller.

Products

The Company is focused on the following core segments of the specialty vehicle and vehicle body markets:

Access Equipment segment. JLG is a leading designer and manufacturer of aerial work platforms and telehandlers used in a wide variety of construction, industrial, institutional and general maintenance applications to safely position workers and materials at elevated heights. In addition, through a long-term license with Caterpillar Inc. that extends through 2025, JLG produces Caterpillar-branded telehandlers for distribution through the worldwide Caterpillar Inc. dealer network. JLG also offers a broad range of parts and accessories, including technical support and training, and reconditioning services. Access Equipment customers include equipment rental companies, construction contractors, manufacturing companies and home improvement centers. JLG's products are marketed worldwide through independent rental companies and distributors that purchase these products and then rent or sell them and provide service support, as well as through other sales and service branches or organizations.

JLG also arranges equipment financing and leasing solutions for its customers, primarily through third-party funding arrangements with independent financial companies, and occasionally provides credit support in connection with these financing and leasing arrangements. Financing arrangements that JLG offers or arranges through this segment include various types of rental fleet loans and leases, as well as floor plan and retail financing. Terms of these arrangements vary depending on the type of transaction, but typically range from 36 to 72 months and generally require the customer to be responsible for maintenance of the equipment and to bear the risk of damage to or loss of the equipment.

The Company, through its Jerr-Dan brand, is a leading designer, manufacturer and marketer of towing and recovery equipment in the U.S. The Company believes Jerr-Dan is recognized as an industry leader in quality and innovation. Jerr-Dan offers a complete line of both carriers and wreckers. In addition to manufacturing equipment, Jerr-Dan provides its customers with one-stop service for carriers and wreckers and generates revenue from the installation of equipment, as well as the sale of chassis and service parts.

Defense segment. Oshkosh Defense has designed and sold products to the DoD for over 100 years and also exports tactical wheeled vehicles to approved foreign customers. By successfully responding to the DoD's changing vehicle requirements, Oshkosh Defense has become the leading manufacturer of heavy, medium, and light tactical wheeled vehicles and related sustainment services for the DoD. Oshkosh Defense designs and manufactures vehicles that perform a variety of demanding tasks such as hauling tanks, missile systems, ammunition, fuel, troops and cargo for a broad range of missions. Oshkosh Defense's proprietary product line of military heavy-payload tactical wheeled vehicles includes the Heavy Expanded Mobility Tactical Truck (HEMTT), the Heavy Equipment Transporter (HET), the Palletized Load System (PLS), and the Logistic Vehicle System Replacement (LVSR). Oshkosh Defense's proprietary medium-payload military tactical wheeled vehicles include the Medium Tactical Vehicle Replacement (MTVR). Oshkosh Defense's proprietary light-payload military tactical wheeled vehicles include the Mine Resistant Ambush Protected-All Terrain Vehicle (M-ATV), which was specifically designed with superior survivability as well as extreme off-road mobility, and the JLTV, the Company's newest and most technologically advanced member of the light-payload vehicle category designed to protect, sustain and provide mobility for personnel and payloads across the full spectrum of military operations.

In August 2009, the DoD awarded Oshkosh Defense a contract to be the sole producer of FMTVs under the U.S. Army's FMTV Rebuy program. Originally a five-year requirements contract, the DoD extended the FMTV Rebuy program several times to allow for the delivery of vehicles and trailers through the fourth quarter of fiscal 2021. In February 2018, the DoD awarded Oshkosh Defense the FMTV A2 contract for the design, development, production and support of a fleet of future generation FMTVs. The FMTV A2 contract is a firm-fixed price requirements contract that initially covers a five-year delivery period starting in 2021, with a customer option for two additional years.

In June 2015, the DoD awarded Oshkosh Defense a new Family of Heavy Tactical Vehicles (FHTV) contract for the recapitalization of HEMTT, HET and PLS vehicles as well as associated logistics and configuration management support. The contract was a five-year requirements contract for the continued remanufacturing of FHTVs. In April 2021, the DoD awarded Oshkosh Defense an FHTV extension contract. The contract is a three-year requirements contract for FHTVs. This extension contract could extend FHTV deliveries into 2025.

In August 2015, Oshkosh Defense solidified its position in the light-payload tactical wheeled vehicle category when the DoD awarded Oshkosh Defense an eight-year, fixed price JLTV contract valued at $6.7 billion for production and delivery of 16,901 of these technologically enhanced vehicles and related sustainment services. The Company delivered its first production JLTVs to the U.S. Army in September 2016. The program achieved the full rate production milestone decision in fiscal 2019. In fiscal 2021, the Army authorized an increase to the contract ceiling from 16,901 vehicles to 23,163. Under the current JLTV contract, Oshkosh Defense can accept vehicle orders through the first quarter of fiscal 2024 with deliveries into fiscal 2025. The U.S. Army, which purchased Government Purpose Rights to the Oshkosh JLTV design, is conducting a full and open competition for follow-on JLTV production, with a contract award expected in the second half of calendar 2022. The next phase of the JLTV program is expected to be valued at approximately $8.0 billion and to include requirements for more than 25,000 JLTVs and trailers. In total, the JLTV program is expected to be over a 20-year program for the production of up to 55,000 vehicles for the U.S. market and potentially several thousand more units for international allies of the U.S.

In addition to retaining its current defense truck contracts, the Company's objective is to continue to diversify into other areas of the U.S. and international defense vehicle markets by expanding applications, uses and vehicle body styles of its current tactical truck lines and growing aftermarket product and service offerings.

In October 2020, the Company transferred operational responsibility of the airport snow removal vehicle business, a global leader in airport snow removal, from the Fire & Emergency segment to the Defense segment. The Company's specially designed airport snow removal vehicles are used by some of the largest airports in the world and military bases in the United States. The Company believes that the reliability of its high-performance snow removal vehicles and the speed with which they clear airport runways contribute to its strong position in this market.

In January 2021, the Company acquired Pratt Miller for $111.4 million. Through Pratt Miller, which is part of the Defense segment, the Company offers advanced engineering, product development and innovation services to the motorsport and multiple ground vehicle markets.

In February 2021, the Company was notified that the USPS selected Oshkosh Defense to build the NGDV. The IDIQ contract allows the USPS to purchase between 50,000 and 165,000 units over ten years. The NGDV provides the USPS the ability to significantly modernize its delivery fleet with improved safety, reliability, sustainability and cost-efficiency while providing a much better working experience for the nation's postal carriers. The Company's offering provides the USPS with both zero-emission battery electric vehicles (BEV) and fuel efficient, low emission internal combustion engine (ICE) vehicles. The vehicle design also provides the USPS with the flexibility of converting ICE units to BEV in the future. The initial $482 million contract provides for engineering to finalize the production vehicle design, and for tooling and factory build-out activities that are necessary prior to vehicle production. The Company expects to begin delivering production vehicles in the second half of calendar 2023.

In June 2021, the U.S. Army awarded Oshkosh Defense a six-year contract worth up to $943 million to integrate the Medium Caliber Weapons System onto Stryker Double V Hull Infantry Carrier Vehicles. This contract award is important as it represents the Defense segment's entrance into the adjacent combat vehicles market.

Fire & Emergency segment. Through Pierce, the Company is the leading domestic designer and manufacturer of fire apparatus assembled on custom chassis, designed and manufactured to meet the special needs of firefighters. Pierce also designs and manufactures fire apparatus assembled on commercially available chassis, which are produced for multiple end-customer applications. Pierce's engineering expertise allows it to design its vehicles to meet stringent industry guidelines and government regulations for safety and effectiveness. Pierce primarily serves domestic municipal customers, but also sells fire apparatus to the DoD, airports, universities and large industrial companies, and in international markets. Pierce's history of innovation, research and development in consultation with firefighters has resulted in a broad product line that features a wide range of innovative, high-quality custom and commercial firefighting equipment with advanced fire suppression capabilities. In an effort to be a single-source supplier for its customers, Pierce offers a full line of custom and commercial fire apparatus and emergency vehicles, including pumpers, aerial platform, ladder and tiller trucks, tankers, light-, medium- and heavy-duty rescue vehicles, wildland rough terrain response vehicles, mobile command and control centers, bomb squad vehicles, hazardous materials control vehicles and other emergency response vehicles.

The Company, through Airport Products, is a leader in the design and sale of ARFF vehicles to domestic and international airports. These highly-specialized vehicles are required to be in service at most airports worldwide to support commercial airlines in the event of an emergency. Many of the largest airports in the United States, including LaGuardia International Airport, John F. Kennedy International Airport, O'Hare International Airport, Denver International Airport, Baltimore-Washington International Airport, Dallas/Fort Worth International Airport, Tampa International Airport, Philadelphia International Airport and San Francisco International Airport, are served by the Company's ARFF vehicles. The U.S. government also maintains a fleet of ARFF vehicles that are used to support military operations throughout the world. Internationally, the Company's vehicles serve, among others, Beijing, China and more than fifty other airports in China; Singapore; Indonesia; Quebec, Canada; Abu Dhabi, UAE; and Birmingham, Cardiff, Manchester and Liverpool, United Kingdom. In addition, the Company has recently delivered ARFF vehicles to airports in Mexico, Japan, Egypt, Nepal, Iraq and the British Virgin Islands. The Company believes that the performance and reliability of its ARFF vehicles contribute to the Company's strong position in this market.

The Company, through its Frontline brand, is a leading manufacturer, system designer and integrator of broadcast vehicles, including electronic field production trailers, satellite news gathering and electronic news gathering vehicles for broadcasters and command trucks for local and federal governments along with being a leading supplier of military simulator shelters and trailers under the Oshkosh Specialty Vehicles (OSV) brand. The Company's vehicles have been used worldwide to broadcast the NFL Super Bowl, the FIFA World Cup and the Olympics.

The Company offers two- to fifteen-year municipal lease financing programs to its Fire & Emergency segment customers in the U.S. through the Pierce Financial Solutions program, provided by PNC Equipment Finance. Programs include competitive lease financing rates, creative and flexible finance arrangements and the ease of one-stop shopping for customers' equipment and financing. The Company executes the lease financing transactions through a co-branded arrangement with an independent third-party finance company. The Company typically provides credit support in connection with these financing and leasing arrangements.

Commercial segment. Through McNeilus, the Company is a leading designer and manufacturer of refuse collection vehicles for the waste services industry throughout the Americas. Through Oshkosh Commercial, McNeilus and London, the Company is a leading designer and manufacturer of front- and rear-discharge concrete mixers for the concrete ready-mix industry throughout the Americas.

Through IMT, the Company is a leading North American designer and manufacturer of field service vehicles and truck-mounted cranes for the construction, equipment dealer, building supply, utility, tire service, railroad and mining industries. The Company believes its Commercial segment vehicles and equipment have a reputation for market leading innovation, which drives enhanced safety, reliability and lower overall cost of ownership.

The Company also arranges equipment financing and leasing solutions for its customers, primarily through third-party funding arrangements with independent financial companies, and occasionally provides credit support in connection with these financing and leasing arrangements.

Marketing, Sales, Distribution and Service

The Company believes it differentiates itself from many of its competitors by tailoring its distribution to the needs of its specialty vehicle and vehicle body markets and with its national and global sales and service capabilities. Distribution personnel demonstrate to customers how to use the Company's products properly. In addition, the Company's flexible distribution is focused on meeting customers on their terms, whether on a job site, in an evening public meeting or at a municipality's office, compared to the showroom sales approach of the typical dealer of large vehicle manufacturers. The Company backs all products with same-day parts shipment, and its service technicians are available in person or by telephone to domestic customers 365 days a year. The Company believes its dedication to keeping its products in-service in demanding conditions worldwide has contributed to customer loyalty.

The Company provides its salespeople, representatives and distributors with product and sales training on the operation and specifications of its products. The Company's engineers, along with its product managers, develop operating manuals and provide field support at vehicle delivery.

U.S. dealers and representatives enter into agreements with the Company that allow for termination by either party generally upon 90 days' notice, subject to applicable laws. Dealers and representatives, except for those utilized by JLG and IMT, are generally not permitted to market and sell competitive products.

Access Equipment segment. JLG's products are marketed across six continents through independent rental companies and distributors that purchase JLG products and then rent or sell them and provide service support, as well as through other Company owned sales and service branches. JLG maintains a broad worldwide internal sales force. Sales employees are dedicated to specific major customers, channels or geographic regions. JLG's international sales employees are spread among international sales and service offices throughout the world.

The Company markets its Jerr-Dan-branded carriers and wreckers through its extensive network of independent distributors.

Defense segment. While Oshkosh Defense sells a substantial portion of its domestic defense products directly to principal branches of the DoD, it has also sold its defense products to numerous international militaries around the globe and has expanded into adjacent markets, including the last mile delivery vehicle market. Oshkosh Defense maintains a liaison office in Washington, D.C. to represent its interests with the U.S. Congress, the offices of the Executive Branch of the U.S. government, the Pentagon, as well as international embassies and government agencies. Oshkosh Defense locates its business development, consultants and engineering professionals near its customers' principal commands, both domestically and internationally. Oshkosh Defense sells and services defense products to approved international governments as Direct Commercial Sales or Foreign Military Sales via U.S. government channels. Oshkosh Defense supports international sales through international sales offices, as well as through dealers, distributors and representatives.

In addition to marketing its current tactical wheeled vehicle offerings and competing for new contracts, Oshkosh Defense actively works with its customers to develop new applications for its vehicles and expand its services.

Logistics services are increasingly important to Oshkosh Defense. The Company believes that its proven worldwide logistics capabilities, invoicing and electronic payment systems have significantly contributed to the expansion of its defense parts and service business. Oshkosh Defense maintains a large parts distribution warehouse in Milwaukee, Wisconsin to fulfill stringent parts delivery schedule requirements, as well as satellite facilities near DoD bases in the U.S., Europe, Asia and the Middle East.

The Company's snow removal business uses a combination of internal sales and service representatives and distributor locations to focus on the sale of snow removal vehicles, principally to airports, but also to municipalities, counties and other governmental entities in the U.S. and Canada. In addition, the Company maintains offices in Dubai, UAE; Beijing, China; and Singapore to support airport product vehicle sales and aftermarket sales and support in Europe, the Middle East, China and Southeast Asia.

The Company markets Pratt Miller's world class engineering and product development services primarily through internal sales representatives.

Fire & Emergency segment. The Company believes the geographic breadth, size and quality of its Pierce fire apparatus sales and service organization are competitive advantages in a market characterized by a few large manufacturers and numerous small, regional competitors. Pierce's fire apparatus are sold through an extensive network of independent sales and service organizations with hundreds of sales representatives in the U.S. and Canada, which combine broad geographical reach with high frequency of contact with fire departments and municipal government officials. These sales and service organizations are supported by product and marketing support professionals and contract administrators at Pierce. The Company believes high frequency of contact and local presence are important to cultivate major, and typically infrequent, purchases involving the city or town council, fire department, purchasing, finance and mayoral offices, among others, that may participate in a fire apparatus bid and selection process. After the sale, Pierce's nationwide local parts and service capability is available to help municipalities maintain peak readiness for this vital municipal service.

Pierce also sells directly to the DoD and other U.S. government agencies. Many of the Pierce fire apparatus sold to the DoD are placed in service at U.S. military bases, camps and stations overseas. Additionally, Pierce sells fire apparatus to international municipal and industrial fire departments through a network of international dealers.

The Company markets its Frontline-branded broadcast vehicles through sales representatives and its Frontline-branded command vehicles through both sales representatives and dealer organizations that are directed at government and commercial customers.

The Company markets its Oshkosh-branded ARFF vehicles through a combination of direct sales representatives domestically and an extensive network of representatives and distributors in international markets. Certain of these international representatives and distributors also handle Pierce products.

Commercial segment. The Company believes its network of representatives and dealers is a competitive advantage in refuse collection vehicle and concrete mixer markets, particularly in the U.S. waste services industry where principal competitors distribute through dealers and to a lesser extent in the ready mix concrete industry, where several competitors in part use dealers. The Company believes its distribution model allows for a more tailored distribution approach in the U.S. refuse collection vehicle and concrete mixer markets, whereas dealers frequently offer a broad and mixed product line, and accordingly, the time dealers tend to devote to refuse collection vehicle and concrete mixer sales activities is limited.

The Company has also established an extensive network of representatives and dealers throughout the Americas for the sale of McNeilus-branded refuse collection vehicles and Oshkosh-, McNeilus- and London-branded concrete mixers to international customers. The Company coordinates among its various businesses to respond to large international sales tenders with its most appropriate product offering for the tender.

The Company utilizes an extensive network of representatives and dealers supported by hundreds of internal and external sales and service representatives in North America to sell and service refuse collection vehicles and front- and rear-discharge concrete mixers. The Company also performs sales and service activities at the Company's manufacturing facilities. Service centers located throughout the U.S. provide sales, service and parts distribution to customers in their geographic regions. The Company believes this network represents one of the largest refuse collection vehicle and concrete mixer distribution networks in the U.S.

IMT distributes its products through a wide network of dealers in over one hundred locations worldwide. International dealers are primarily located in Central and South America, Australia and Asia and are primarily focused on mining and construction markets.

Manufacturing

The Company manufactures its products at 28 manufacturing facilities. To reduce production costs, the Company maintains a continuing emphasis on the development of proprietary components, self-sufficiency in fabrication, just-in-time inventory management, improvement in production flows and interchangeability of components among product lines, creation of jigs and fixtures to ensure repeatability of quality processes, utilization of robotics, and performance measurement to assure progress toward cost reduction targets. The Company encourages employee involvement to improve production processes and product quality.

The Company uses a common Quality Management System globally to support the delivery of consistent, high quality products and services to customers. The Company requires employees at all levels to understand customer and supplier requirements, measure performance, develop systems and procedures to prevent product nonconformance and continually improve all work processes. The Company educates and trains all employees at its facilities in quality principles. The Company utilizes quality gates in its manufacturing facilities to identify issues early in the process and to analyze root cause at the source, resulting in fewer defects and less rework. The Company’s Quality Management System is based on ISO 9001, a set of internationally-accepted requirements established by the International Organization for Standardization. ISO 9001 certification indicates that a company has established and follows a rigorous set of standards aimed at achieving customer satisfaction by following a process-based approach to identify and control the quality needs of suppliers, inputs, critical processes and outputs. The Quality Management System helps ensure that the Company is continually improving and sharing successful practices across the organization. The following brands are ISO 9001 certified: JLG, Oshkosh Defense, Pierce, McNeilus, Frontline, Jerr-Dan and Airport Products.

The Company has a team of employees dedicated to leading the implementation of the Company’s simplification initiatives. The team is comprised of members with diverse backgrounds in quality, lean, data analytics, product and process engineering, and culture change management. Simplification includes lean tools to eliminate waste and to provide better value for customers. It also guides customer satisfaction assessments to help identify opportunities to improve the customer experience with Oshkosh. Within the Company’s facilities, simplification projects have contributed to manufacturing efficiency gains, materials management improvements, quality enhancements and reduction of lead times. Simplification projects have also freed up manufacturing capacity to support production increases.

Engineering, Research and Development

The Company believes its extensive engineering, research and development capabilities have been key drivers of the Company’s marketplace success. The Company maintains multiple facilities for new product development and testing with a staff of approximately 1,600 engineers and technicians who are dedicated to improving existing products, development and testing of new vehicles, vehicle bodies and components and sustaining its production activities. The Company prepares multi-year new product development and technology plans for each of its markets and measures progress against those plans each month.

Virtually all of the Company’s sales of fire apparatus and broadcast vehicles require some level of custom engineering to meet the customer’s specifications and changing industry standards. Engineering is also a critical factor in defense vehicle markets due to the severe operating conditions under which the Company’s vehicles are utilized, new customer requirements and stringent government documentation requirements. Product innovation is highly important to meeting customers’ changing requirements. Accordingly, in addition to new product development engineers and technicians, the Company maintains an additional permanent staff of engineers and engineering technicians to sustain its production activities.

Recent examples of the Company's product innovation include the DaVinci lift, a fully electric scissor lift that leverages highly sophisticated technology including linear actuators in place of traditional hydraulic cylinders in an elegant design to bring industry defining productivity and serviceability to both rental companies and end users in the access equipment market. The Company believes that by removing unnecessary parts and replacing them with electric components, the DaVinci will require virtually zero maintenance and deliver unprecedented performance, efficiency, and a lower total cost of ownership. The Company's Fire & Emergency segment introduced the revolutionary Volterra platform of electric vehicles that meets the critical needs of fire departments while providing the operational performance customers expect from Pierce fire apparatus. The Volterra platform offers zero emissions, reduced noise, an electro-mechanical infinitely variable transmission (EMIVT), integrated onboard batteries and industry-leading operational range for full-shift operation. The Volterra is available as both a customer pumper for municipal applications and an ARFF vehicle.

Competition

In all of the Company's segments, competitors include smaller, specialized manufacturers as well as large, mass producers. The Company believes that, in its specialty vehicle and vehicle body markets, it has been able to effectively compete against large, mass producers due to its product quality, innovation, manufacturing flexibility, vertical integration, purchasing power in specialty vehicle components and tailored distribution systems. In addition, the Company believes it has competitive advantages over smaller vehicle and vehicle body manufacturers due to its relatively higher volumes of similar products that permit the use of moving assembly lines, which allow it to leverage purchasing power and technology opportunities across product lines. The Company believes that its competitive cost structure, strategic global purchasing capabilities, engineering expertise, product quality and global distribution and service systems have enabled it to compete effectively.

Certain of the Company's competitors have greater financial, marketing, manufacturing, distribution and governmental affairs resources than the Company. There can be no assurance that the Company's products will continue to compete effectively with the products of competitors or that the Company will be able to retain its customer base or improve or maintain its profit margins on sales to its customers, all of which could have a material adverse effect on the Company's financial condition, results of operations and cash flows.

Access Equipment segment. JLG operates in the global construction, maintenance and industrial equipment markets. JLG's competitors range from some of the world's largest multi-national construction equipment manufacturers to small single-product niche manufacturers. Within this global market, competition for sales of aerial work platform equipment includes Genie Industries, Inc. (a subsidiary of Terex Corporation), Skyjack Inc. (a subsidiary of Linamar Corporation), Haulotte Group, Xuzhou Construction Machinery Group Co., Ltd. (XCMG), Zhejiang Dingli Machinery Co., Ltd. and numerous other manufacturers. Global competition for sales of telehandler equipment includes J C Bamford Excavators Ltd., the Manitou Group, Merlo SpA, Genie Industries, Inc., Haulotte Group, Skyjack Inc. and numerous other manufacturers. In addition, JLG faces competition from numerous manufacturers of other niche products such as boom vehicles, cherry pickers, skid steer loaders, mast climbers, straight mast and vehicle-mounted fork-lifts, rough-terrain and all-terrain cranes, vehicle-mounted cranes, portable material lifts, various types of material handling equipment, scaffolding and the common ladder that offer functionality that is similar to or overlaps that of JLG's products. Principal methods of competition include brand awareness, product innovation and performance, price, quality, service and support, product availability and the extent to which a company offers single-source customer solutions. The Company believes its competitive strengths include: premium brand names; broad and single-source product offerings; product quality; product residual values that are generally higher than competitors' units; worldwide distribution; safety record; service and support network; global procurement scale; extensive manufacturing capabilities; and cross-division synergies with other segments within Oshkosh Corporation.

The principal competitor for Jerr-Dan-branded products is Miller Industries, Inc. Principal methods of competition for carriers and wreckers include product quality and innovation, product performance, price and service. The Company believes its competitive strengths in this market include its high quality, innovative and high-performance product line and its cost competitive manufacturing capabilities.

Defense segment. Oshkosh Defense produces heavy- and medium-payload, Mine Resistant Ambush Protected (MRAP) and light-payload tactical wheeled vehicles for the military and security forces around the world and postal delivery vehicles to USPS. Competition for sales of these vehicles includes, among others, Navistar Defense LLC (a subsidiary of Cerberus Capital Management, LP), General Dynamics Corporation, AM General LLC (a subsidiary of KPS Capital Partners, LP), BAE Systems plc, General Motors Defense, Utilimaster (a subsidiary of The Shyft Group), Morgan Olson (a subsidiary of JB Poindexter & Co., Inc.), Workhorse Group and Rivian. The principal method of competition in the Defense segment involves a competitive bid process that takes into account factors as determined by the customer, such as price, product performance, product life cycle costs, small and disadvantaged business participation, product quality, adherence to bid specifications, production capability, project management capability, past performance and product support. Usually, the Company's vehicle systems must also pass extensive testing. The Company believes that its competitive strengths include: strategic global purchasing capabilities leveraged across multiple business segments; extensive pricing/costing and defense contracting expertise; a significant installed base of vehicles currently in use throughout the world; flexible and high-efficiency vertically-integrated manufacturing capabilities; patented and/or proprietary vehicle components such as the TAK-4 family of independent suspension systems, Oshkosh power transfer cases and Command Zone integrated vehicle diagnostics; weapons and communications integration; ability to develop new and improved product capabilities responsive to the needs of its customers; product quality; and aftermarket parts sales and service capabilities.

The Weapon Systems Acquisition Reform Act requires competition for defense programs in certain circumstances. Accordingly, it is possible that the U.S. Army and U.S. Marine Corps will conduct competitions for programs for which the Company currently has contracts upon the expiration of the existing contracts. Competition for these and other domestic programs could result in future contracts being awarded based upon different competitive factors than those described above and would primarily include price, production capability and past performance. The U.S. government has become more aggressive in seeking to acquire the design rights to the Company's current and potential future programs to facilitate competition for manufacturing our vehicles. The willingness of the bidders to license their design rights to the DoD was an evaluation factor in the JLTV and FMTV A2 contract competitions. Certain of the Company's contracts with the DoD, including the JLTV and FMTV A2 contracts, require that the Company effectively transfer the "technical know-how" necessary to produce and support the vehicles and/or other deliverables within the contract to the customer.

The Competition in Contracting Act requires competition for U.S. defense programs in most circumstances. Competition for DoD programs currently supplied by the Company could result in the U.S. government awarding future contracts to another manufacturer or the U.S. government awarding the contracts to the Company at lower prices and operating margins than the Company experiences under current contracts.

The Company's principal competitors for snow removal vehicle sales are M-B Companies, Inc. (owned by Aebi Schmidt Holding AG), Wausau-Everest LP (owned by Alamo Group, Inc.) and Overaasen AS. Principal methods of competition are product performance, price, service, product quality and innovation. The Company believes its competitive strengths in these airport markets include its high-quality, innovative products and a strong service support network.

The Company's principal competitors for Pratt Miller's engineering and product development services include Ricardo PLC, Corvid Technologies and GS Engineering Inc.

Fire & Emergency segment. The Company produces and sells custom and commercial firefighting vehicles in the U.S. and abroad under the Pierce brand and broadcast and command vehicles in the U.S. and abroad under the Frontline brand. Competitors for firefighting vehicles include Rosenbauer International AG; E-One, Inc., Ferrara Fire Apparatus, Inc., Spartan ER, and Kovatch Mobile Equipment Corp. (all four owned by REV Group, Inc.); and numerous smaller, regional manufacturers. Principal methods of competition include brand awareness, ability to meet or exceed customer specifications, price, the extent to which a company offers single-source customer solutions, product innovation, product quality, dealer distribution, and service and support. The Company believes that its competitive strengths include: recognized, premium brand name; nationwide network of independent Pierce dealers; extensive, high-quality and innovative product offerings, which include single-source customer solutions for aerials, pumpers and rescue units; large-scale and high-efficiency custom manufacturing capabilities; and proprietary technologies such as the PUC vehicle configuration, TAK-4 independent suspension system, Hercules and Husky foam systems, Command Zone electronics and the Ascendant family of aerial fire trucks. The main competitor for broadcast vehicles is Accelerated Media Technologies. The principal competition for command vehicles is LDV, Inc., MBF Industries, Inc., Nomad Global Communication Solutions, Incorporated, Farber Specialty Vehicles, Inc. and Matthews Specialty Vehicles, Inc.

Airport Products manufactures ARFF vehicles for sale in the U.S. and abroad. Oshkosh's competitors for ARFF vehicle sales are Rosenbauer International AG and E-One, Inc.

Commercial segment. McNeilus produces refuse collection vehicles for North America and international markets. Competitors include The Heil Company (a subsidiary of Dover Corporation), New Way Trucks, Labrie Enviroquip Group (owned by Wynnchurch Capital) and other regional competitors. The principal methods of competition are product quality, product performance, service and price. The Company competes for municipal business and large commercial business in the Americas, which is generally based on lowest qualified bid. The Company believes its competitive strengths in the Americas refuse collection vehicle markets include: strong brand recognition; innovative and comprehensive product offerings; a reputation for high-quality products; ability to offer factory-installed compressed natural gas fuel systems; ability to integrate refuse collection bodies with electric chassis; large-scale and high-efficiency manufacturing; and an extensive network of sales and service centers located throughout the U.S.

The Company produces front- and rear-discharge concrete mixers for the Americas under the Oshkosh, McNeilus and London brands. Competition for concrete mixer sales includes Beck Industrial, Con-Tech Manufacturing, Inc., Terex Corporation and other regional competitors. Principal methods of competition are price, service, product features, product quality and product availability. The Company believes its competitive strengths include: strong brand recognition; large-scale and high-efficiency manufacturing; extensive product offerings; high product quality; innovative control systems; ability to offer factory-installed compressed natural gas fuel systems; a significant installed base of concrete mixers in use in the marketplace; and its nationwide network of sales and service centers.

IMT is a manufacturer of field service vehicles and truck-mounted cranes for the construction, equipment dealer, building supply, utility, tire service, railroad and mining industries. IMT's principal field service vehicle competition is from Auto Crane Company (owned by Ramsey Industries, Inc.), Stellar Industries, Inc., Maintainer Corporation of Iowa, Inc., the Knapheide Manufacturing Company and other regional companies. Competition in truck-mounted cranes comes primarily from European companies including Palfinger AG, Cargotec Corporation and Fassi Group SpA. Principal methods of competition are product quality, price and service. The Company believes its competitive strengths include its high-quality products, global distribution network and low-cost manufacturing capabilities.

Government Contracts

Approximately 33% of the Company's net sales for fiscal 2021 were made to the U.S. government, a substantial majority of which were under multi-year contracts and programs in the defense vehicle market. Accordingly, a significant portion of the Company's sales are subject to risks specific to doing business with the U.S. government, including uncertainty of economic conditions, changes in government policies and requirements that may reflect rapidly changing military and political developments, the availability of funds and the ability to meet specified performance thresholds. Multi-year contracts may be conditioned upon continued availability of congressional appropriations and are impacted by uncertainty regarding federal budget pressures. Variances between anticipated budget and congressional appropriations may result in a delay, reduction or termination of these contracts.

Oshkosh Defense's sales are substantially dependent upon periodic awards of new contracts, the purchase base vehicle quantities and the exercise of options under existing contracts. The funding of U.S. government programs is subject to an annual congressional budget authorization and appropriation process. In years when the U.S. government has not completed its budget process before the end of its fiscal year, government operations are typically funded pursuant to a "continuing resolution," which allows federal government agencies to operate at spending levels approved in the previous budget cycle but does not authorize new spending initiatives. When the U.S. government operates under a continuing resolution, delays can occur in the procurement of the products, services and solutions that Oshkosh Defense provides and may result in new initiatives being delayed or canceled, or funds could be reprogrammed away from Oshkosh Defense's programs to pay for higher priority operational needs. In years when the U.S. government fails to complete its budget process or to provide for a continuing resolution, a federal government shutdown may result. This could in turn result in the delay or cancellation of key programs, which could have a negative effect on the Company's cash flows and adversely affect the Company's future results. In addition, payments to contractors for services performed during a federal government shutdown may be delayed, which would have a negative effect on the Company's cash flows.

Contract awards that Oshkosh Defense receives may be subject to protests by competing bidders. These protests, if successful, could result in the customer revoking part or all of any defense contract it awards to Oshkosh Defense and an inability of Oshkosh Defense to recover amounts it has expended during the protest period in anticipation of initiating work under any such contract.

Under firm, fixed-price contracts with the U.S. government, the price paid to the Company is generally not subject to adjustment to reflect the Company's actual costs, except costs incurred as a result of contract changes ordered by the U.S. government. The Company generally attempts to negotiate with the U.S. government the amount of increased compensation to which the Company is entitled for government-ordered changes that result in higher costs. If the Company is unable to negotiate a satisfactory agreement to provide such increased compensation, then the Company may file an appeal with the Armed Services Board of Contract Appeals or the U.S. Claims Court. The Company has no such appeals pending. The Company seeks to mitigate risks with respect to fixed-price contracts by executing firm, fixed-price contracts with its suppliers of significant components for the duration of the Company's contracts.

U.S. government contracts generally permit the government to terminate a contract, in whole or part, at the government's convenience. If the U.S. government exercises its rights under this clause the contractor is entitled to payment for the allowable costs incurred and a reasonable profit on the work performed to date. The U.S. government can also terminate a contract for default. If a contract is terminated for default, the contractor is generally entitled to payment for work that has been accepted by the U.S. government. Termination for default may expose the Company to loss on work not yet accepted by the government and have a negative impact on the Company's ability to obtain future orders and contracts. The U.S. government's right to terminate its contracts has not had a material effect on the operations or financial condition of the Company.

The Company, as a U.S. government contractor, is subject to financial audits and other reviews by the U.S. government relating to the performance of, and the accounting and general practices relating to, U.S. government contracts. Like most large government contractors, the Company is audited and reviewed by the government on a continual basis. Costs and prices under such contracts may be subject to adjustment based upon the results of such audits and reviews. Additionally, such audits and reviews can lead to civil, criminal or administrative proceedings. Such proceedings could involve claims by the government for fines, penalties, compensatory and treble damages, restitution and/or forfeitures. Under government regulations, a company or one or more of its subsidiaries can also be suspended or debarred from government contracts, or lose its export privileges based on the results of such proceedings. The Company believes that the outcome of all such audits and reviews that are now pending will not have a material effect on its financial condition, results of operations or cash flows.

Suppliers

The Company is dependent on its suppliers and subcontractors to meet commitments to its customers, and many components are procured or subcontracted on a sole-source basis with a number of domestic and foreign companies. Components for the Company's products are generally available from a number of suppliers, although the transition to a new supplier may require several months to conclude. The Company purchases chassis components, such as vehicle frames, engines, transmissions, radiators, axles, tires, drive motors, bearings and hydraulic components and vehicle body options, such as cranes, cargo bodies and trailers, from third-party suppliers. These body options may be manufactured specific to the Company's requirements; however, most of the body options could be manufactured by other suppliers or the Company itself. Through reliance on this supply network for the purchase of certain components, the Company is able to reduce many of the pre-production and fixed costs associated with the manufacture of these components and vehicle body options. The Company purchases a large amount of fabrications and outsources certain manufacturing services, each generally from small companies located near its facilities. While providing low-cost services and product surge capability, such companies often require additional management attention during difficult economic conditions or contract start-up. The Company also purchases complete vehicle chassis from truck chassis suppliers in its Commercial segment and, to a lesser extent, in its Fire & Emergency and Access Equipment segments. Increasingly, the Company is sourcing components globally, which may involve additional inventory requirements and introduces additional foreign currency exposures. The Company maintains an extensive qualification, on-site inspection, assistance and performance measurement system to attempt to control risks associated with reliance on suppliers. The Company occasionally experiences problems with supplier and subcontractor performance and component, chassis and body availability and must identify alternate sources of supply and/or address related warranty claims from customers.

While the Company purchases many costly components such as chassis, engines and transmissions, it manufactures certain proprietary components and systems. These components include front drive steer axles, transfer cases, transaxles, cabs, the TAK-4 independent suspension system, Hercules and Husky compressed air foam systems, the Command Zone vehicle control system, body structures and many smaller parts that add uniqueness and value to the Company's products. The Company believes controlling the production of these components provides a significant competitive advantage and also serves to reduce the production costs of the Company's products.

Intellectual Property

Patents and licenses are important in the operation of the Company's business. One of management's objectives is developing proprietary components to provide the Company's customers with advanced technological solutions at attractive prices. The Company holds in excess of 1,100 active domestic and foreign patents. The Company believes patents for the TAK-4 independent suspension system, which expire between 2021 and 2040, provide the Company with a competitive advantage in the Defense and Fire & Emergency segments. In the Defense segment, the TAK-4 independent suspension system has been incorporated into the U.S. Marine Corps' MTVR and LVSR programs, the U.S. Army's PLS A1 program, the MRAP - Joint Program Office M-ATV program, the JLTV program and the FMTV A2 program. The Company believes the TAK-4 independent suspension system provided a performance and cost advantage that contributed to the Company winning these programs. In the Fire & Emergency segment, TAK-4 independent suspension systems are standard on many Pierce custom fire trucks and Global Striker ARFF vehicles, which the Company believes brings a similar competitive advantage to these markets.

The Company believes that patents for certain components of its ProPulse hybrid electric drive system and Command Zone electronics system offer potential competitive advantages to product lines across all its segments. To a lesser extent, other proprietary components provide the Company a competitive advantage in each of the Company's segments.

As part of the Company's long-term alliance with Caterpillar Inc., the Company acquired a non-exclusive, non-transferable worldwide license to use certain Caterpillar Inc. intellectual property through 2025 in connection with the design and manufacture of Caterpillar Inc.'s current telehandler products. Additionally, Caterpillar Inc. assigned to JLG certain patents and patent applications relating to the Caterpillar-branded telehandler products.

The Company holds trademarks for "Oshkosh," "Oshkosh Defense," "TAK-4," "ProPulse," "JLG," "SkyTrak," "Pierce," "McNeilus," "Jerr-Dan," "London," "IMT," "Pratt Miller," "DaVinci" and "Volterra" among others. These trademarks are considered to be important to the future success of the Company's business.

Environmental Matters

The Company is subject to a wide variety of local, state, and federal environmental laws in the U.S., as well as in other countries where the Company conducts business. Our facilities, operations and products are subject to increasingly stringent environmental laws and regulations globally, including laws and regulations governing air emissions, noise, releases to soil and discharges to water and the generation, handling, storage, transportation, treatment, and disposal of non-hazardous and hazardous waste materials. Some environmental laws impose strict, retroactive, and joint and several liability for the release of hazardous substances, even for conduct that was lawful at the time it occurred, or for the conduct of, or conditions caused by prior operators, predecessors or other third parties. With respect to acquired properties and businesses, the Company conducts due diligence into potential exposure to environmental liabilities but cannot be certain that it has identified or will identify all adverse environmental conditions.

We believe that our policies, practices, and procedures are properly designed to prevent unreasonable risk of environmental damage and the consequent financial liability to the Company. Nevertheless, we could incur substantial costs as a result of non-compliance with or liability for cleanup or other costs or damages under environmental laws. Also, we may be subject to other more stringent environmental laws in the future. If more stringent environmental laws are enacted in the future, these laws could have a material adverse impact on our business, results of operations, and financial condition.

Human Capital Management

As of September 30, 2021, the Company had approximately 15,000 employees, approximately 9,000 of whom are production employees. The Company tracks its human capital management performance by measuring numerous relevant elements relating to its employees, including but not limited to, safety and diversity and inclusion.

The United Auto Workers (UAW) Union represented approximately 1,800 production employees at the Company's Oshkosh, Wisconsin facilities; the Boilermakers, Iron Shipbuilders, Blacksmiths and Forgers Union (Boilermakers) represented approximately 200 employees at the Company's Kewaunee, Wisconsin facility; and the International Brotherhood of Teamsters Union (Teamsters) represented approximately 175 employees at the Company's Garner, Iowa facility. The Company's agreement with the UAW expires in September 2027. The Company's five-year agreement with the Boilermakers expires in May 2022. The Company's three-year agreement with the Teamsters extends through October 2023. In addition, approximately 25% of the Company's approximately 2,300 employees located outside of the U.S. are represented by separate works councils or unions.

People First Culture. The Company maintains a People First culture that includes investing in team members' engagement, safety, wellbeing, and personal and professional development, as well as diversity and inclusion. The Company believes its People First culture is a strength, and the Company intends to continue building upon that culture to drive long-term, sustainable performance across the business. In fiscal 2020, 67% of team members participated in the Company's Employee Engagement Survey. Engagement was at a high point compared to past surveys with a 77% positive engagement score.

The Company expects all team members to adhere to the highest ethical standards every day. The Company's Code of Ethics & Conduct, also known as The Oshkosh Way, lays out the Company's core values and standards for ethical behavior.

The Company's connection to its communities and corresponding volunteer efforts have long been an important part of the Company's culture and team member engagement. The Company's teams creatively identified opportunities to volunteer in fiscal 2021 donating over 15,000 hours to the communities in which they live and work.

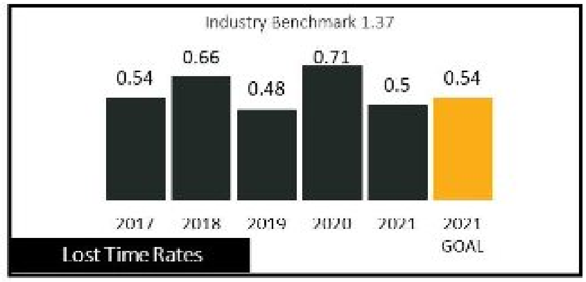
For the last seven years, the Company has held the Oshkosh Excellence Awards (OEAs), an annual competition that invites team members to submit innovative ideas to foster improvements for its culture, operations, products and customers. The COVID-19 pandemic challenged the Company's ability to have a global event, so it pivoted to create a new competition called Cheers to Peers, where team members could nominate those who demonstrated the Company's core values through leadership, courage, and perseverance in the face of unprecedented challenges brought on by the COVID-19 pandemic. Over 450 nominations were submitted, highlighting the Company's team members' commitment to putting people first during a global pandemic.

Talent and Learning. The Company's business strategy is enabled by its ability to attract, develop and retain world-class talent. In fiscal 2021, in spite of COVID-19-related challenges, the Company continued a series of executive leadership development events, shifting from in-person to virtual attendance. More than 350 global leaders completed over 2,000 hours of learning on topics including diversity, equity and inclusion, megatrends, data analytics and innovation.

The Company expanded its enterprise Learning Management System to enable all 15,000 team members to access learning content on its technology platform. Strategic succession planning, future leader pipelines and critical role depth were reviewed and updated during the fiscal year. All leaders are expected to complete regular check-ins to provide feedback, review annual goal progress and hold career development conversations with team members to help ensure alignment, drive engagement and facilitate strong business outcomes.

Health and Safety. The Company focuses on protecting the health and safety of its team members. This has been even more important with COVID-19 creating new disruptions and health threats to the Company's team members. The Company follows government-mandated health and safety guidance including mask and social distancing requirements within its facilities. In addition to complying with external safety mandates, each facility continues to manage its response to COVID-19 based on localized risk factors.

The Company takes a proactive approach to managing safety, is committed to achieving zero workplace injuries and has consistently improved its safety performance over the past few years as illustrated below.



The Company offers a competitive, inclusive and empowering benefit platform to help ensure that no matter where team members are in their wellbeing journey, they are supported in their physical, financial and emotional goals. In calendar 2021, the Company cared for over 25,000 team members and their families on its medical plan. The Company introduced a program supporting the health and wellness of the team members that account for the highest number of preventable illnesses. In addition, the Company launched an expert second opinion medical service to support team members in confirming diagnosis and treatment plans. The Company also focused on improving team members' financial goals by securing a new retirement plan administrator in fiscal 2021.

The Company has set several goals and benchmarks for Diversity, Equity and Inclusion (DEI) performance, using both internal goals and federal standards. The Company's diversity representation is published in its fiscal 2020 Sustainability Report and the Company is driving proactive programs to improve its diverse employee representation. The Company measures diverse hires for full-time U.S. non-production positions and has a goal that 50% of such hires be diverse in any given year. Diverse hires include ethnicity, gender, veteran and disability status. In fiscal 2021, 48% of the Company's hires for full-time U.S. non-production positions were diverse.

Seasonal Nature of Business

In the Company's Access Equipment and Commercial segments, business tends to be seasonal with an increase in sales occurring in the spring and summer months that constitute the traditional construction season in the northern hemisphere. In addition, sales are generally lower in the three months ended December 31 in all segments due to the relatively high number of holidays in the United States, which reduce available production and shipping days.

Available Information

The Company maintains a website with the address www.oshkoshcorp.com. The Company is not including the information contained on the Company's website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. The Company makes available free of charge (other than an investor's own Internet access charges) through its website its Annual Report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after the Company electronically files such materials with, or furnishes such materials to, the Securities and Exchange Commission (SEC).

ITEM 1A. RISK FACTORS

The Company's financial position, results of operations and cash flows are subject to various risks, many of which are not exclusively within the Company's control, which may cause actual performance to differ materially from historical or projected future performance. Investors should carefully consider information in this Annual Report on Form 10-K in light of the risk factors described below.

Business and Operational Risks

The novel coronavirus (COVID-19) pandemic has disrupted our operations and could have a material adverse effect on our business and financial condition.

As a result of the COVID-19 pandemic, governments across the world have implemented numerous measures to attempt to contain or lessen the impact of the virus on their populations, such as travel bans, quarantines, shut-downs and shelter in place orders. The COVID-19 pandemic has disrupted our operations and is expected to continue to negatively impact our operations in numerous ways, including but not limited to those outlined below:

- The rapid increase in demand as the COVID-19 pandemic wanes has caused and is expected to continue to cause significant stress on global supply chains, resulting in parts or components shortages and/or inefficiencies in production. For example, supply chain disruptions, primarily within the Access Equipment segment, adversely impacted sales by approximately $100 million during the fourth quarter of fiscal 2021 and it is likely that parts or components shortages could limit our production in the future.

- President Biden recently issued an Executive Order that requires federal employees and contractors, including federal contractors and subcontractors, to be vaccinated against the coronavirus. It is also expected that the Occupational Safety and Health Administration (OSHA) will also issue an Emergency Temporary Standard requiring employers with at least 100 employees to require their employees to get vaccinated or submit to regular COVID-19 testing. The implementation of such government mandated vaccination or testing mandates may impact our ability to retain current employees and attract new employees. Further, implementation could also have similar consequences for our subcontractors, which may impact their ability to deliver the goods and services we need from them.

- Because working remotely has become more prevalent and accepted as a result of the COVID-19 pandemic, companies could determine that it will be acceptable for employees to work from their homes on a long-term basis, which could reduce demand for future nonresidential construction, which in turn could reduce demand for access equipment, refuse collection vehicles and concrete mixers.

- Our customers may experience financial hardships during the COVID-19 pandemic that could result in lower demand for our products and/or default on financial and other commitments to us.

The impacts that we list above and other impacts of the COVID-19 pandemic are likely to also have the effect of heightening many of the other risks that we describe in the Current Report on Form 8-K. The impact of the COVID-19 pandemic continues to evolve and its ultimate duration, severity and disruption to our business, customers and supply chain, and the related financial impact to us, cannot be accurately forecasted at this time. Should such disruption continue for an extended period, the adverse effect on our business, results of operations, financial condition and/or cash flows could be more severe than previously anticipated.

We are dependent upon third-party suppliers, making us vulnerable to supply shortages and price increases.

We have experienced, and in the future are likely to experience, significant disruption or termination of the supply of some of our parts, materials, components and final assemblies that we obtain from suppliers or subcontractors. For example, the rapid increase in demand as the COVID-19 pandemic wanes has caused, and is expected to continue to cause, significant stress on global supply chains. Delays in obtaining parts, materials, components and final assemblies may result from a number of factors affecting our suppliers including capacity constraints, labor shortages or disputes, supplier product quality issues, suppliers' impaired financial condition and suppliers' allocations to other purchasers. These risks are increased in a weak economic environment or when demand increases coming out of an economic downturn. Such disruptions have resulted and could further result in manufacturing inefficiencies caused by us having to wait for parts to arrive on production lines, could delay sales and could result in a material adverse effect on our results of operations, financial condition, and/or cash flows.

We are dependent on our suppliers of engines and other power sources to continue to timely deliver such components that meet applicable emissions regulations and customer preferences. If we fail to have adequate relationships with suppliers that will supply appropriate engines and powertrain components to us or fail to timely receive appropriate components from our suppliers, that could result in our being placed in an uncompetitive position or without finished product when needed.

Raw material price fluctuations may adversely impact our results.

We purchase, directly and indirectly through component purchases, significant amounts of steel, aluminum and other commodities. Steel, aluminum, and other commodity prices have historically been highly volatile. For example, U.S. hot rolled steel prices have more than tripled between September 2020 and September 2021. Costs for these items may continue to increase and/or remain elevated in the future due to one or more of the following: a sustained economic recovery, the level of tariffs that the U.S. imposes on imported steel and aluminum or a weakening U.S. dollar.

In addition, the cost of parts, materials, components or final assemblies may significantly increase for reasons other than changes in commodity prices. Factors such as supply and demand, freight costs, availability of transportation, availability of labor, inventory levels, the level of imports, the imposition of duties and tariffs and other trade barriers and general economic conditions may affect the price of our parts, materials, components or final assembly purchases.

Increases in parts, materials, components or final assemblies costs negatively impact the profitability of orders in backlog as prices on those orders are usually fixed. If we are not able to recover cost increases through surcharges or permanent price increases to our customers, then such increases will have an adverse effect on our financial condition, profitability and/or cash flows. Furthermore, surcharges and permanent price increases may not be accepted by our customers, resulting in them choosing to order from our competitors instead of us or delaying orders to us. Any significant decrease in orders could have an adverse effect on our financial condition, profitability and/or cash flows. Additionally, if costs decrease and we are unable to negotiate timely component cost decreases commensurate with any decrease in costs, then our higher component costs could put us at a material disadvantage as compared to our competition which could have a material adverse effect on our net sales, financial condition, profitability and/or cash flows.

Our dependency on contracts with U.S. and foreign government agencies subjects us to a variety of risks that could materially reduce our revenues or profits.

We are dependent on U.S. and foreign government contracts for a substantial portion of our business. Approximately 33% of our sales in fiscal 2021 were to the U.S. government. That business is subject to the following risks, among others, that could have a material adverse effect on our operating performance:

- The Weapon Systems Acquisition Reform Act and the Competition in Contracting Act require competition for U.S. defense programs in most circumstances. Competition for DoD programs that we currently have could result in the U.S. government awarding future contracts to another manufacturer or the U.S. government awarding the contracts to us at lower prices and operating margins than we experience under the current contracts. The U.S. Army has stated that it is its intent to recompete the JLTV production contract. There are a number of competitors vying for the new contract and there is no assurance that we will be successful in competing for the new contract. We expect the new contract to be awarded in the second half of calendar 2022.

- Competitions for U.S. government contracts are intense, and we cannot provide any assurance that we will be successful in current or future procurement competitions in which we participate. In addition, the U.S. government has become more aggressive in seeking to acquire the design rights to the Company’s current and potential future programs to facilitate competition for manufacturing our vehicles. The willingness of bidders to license their design rights to the DoD was an evaluation factor in the JLTV and FMTV A2 competitions.

- Most of our contracts with the DoD are multi-year firm, fixed-price contracts. These contracts typically contain annual sales price increases. Under the JLTV contract, we bear the risk of material, labor and overhead cost escalation for the full eight years of the contract, which is three to five years longer than has been the case under our other defense contracts. We attempt to limit the risk related to raw material price fluctuations on prices for major defense components by obtaining firm pricing from suppliers at the time a contract is awarded. However, if these suppliers do not honor their contracts, then we could face margin pressure. Furthermore, if our actual costs on any of these contracts exceed our projected costs, it could result in profits lower than historically realized or than we anticipate or net losses under these contracts.

- Our business is susceptible to changes in the annual U.S. defense budget. Such changes may reduce revenues that we expect in our Defense segment, especially in light of federal budget pressures, lower levels of U.S. ground troops deployed in foreign conflicts and the level of defense funding that will be allocated to the DoD's tactical wheeled vehicle strategy generally.

- The U.S. government may not budget for or appropriate funding that we expect for our U.S. government contracts, which may prevent us from realizing revenues under current contracts or receiving additional orders that we anticipate we will receive. The DoD could also seek to reprogram certain funds originally planned for the purchase of vehicles we manufacture under the current defense budget allocations. The U.S. Army has identified its top modernization and readiness priorities and has re-programmed funds away from the Company's JLTV program to support its modernization and readiness priorities and may re-program additional funds in the future.

- The funding of DoD programs is subject to an annual congressional budget authorization and appropriations process. In years when the U.S. government has not completed its budget process before the end of its fiscal year, government operations are typically funded pursuant to a "continuing resolution," which allows federal government agencies to operate at spending levels approved in the previous budget cycle but does not authorize new spending initiatives. When the U.S. government operates under a continuing resolution, delays can occur in the procurement of the products, services and solutions that we provide and may result in new initiatives being delayed or canceled, or funds could be reprogrammed away from our programs to pay for higher priority operational needs. The U.S. government is currently operating under a continuing resolution that funds the federal government through December 3, 2021. Furthermore, in years when the U.S. government fails to complete its budget process or to provide for a continuing resolution, a federal government shutdown may result. This could in turn result in the delay or cancellation of key programs, which could have a negative effect on our cash flows and adversely affect our future results. In addition, payments to contractors for services performed during a federal government shutdown may be delayed, which would have a negative effect on our cash flows.

- Certain of our U.S. government contracts could be delayed or terminated, and all such contracts expire in the future and may not be replaced, which could reduce revenues that we expect under the contracts and negatively affect margins in our Defense segment.

- Defense tactical wheeled vehicles contract awards that we receive may be subject to protests or lawsuits by competing bidders, which protests or lawsuits, if successful, could result in the U.S. government customer revoking part or all of any defense tactical wheeled vehicle contracts it awards to us and our inability to recover amounts we have expended in anticipation of initiating production under any such contract.

- We must spend significant sums on product development and testing, bid and proposal activities, and pre-contract engineering, tooling and design activities in competitions to have the opportunity to be awarded these contracts.

- As a U.S. government contractor, our DoD contracts and systems are subject to audit and review by the Defense Contract Audit Agency and the Defense Contract Management Agency. These agencies review our performance under our U.S. government contracts, our cost structure and our compliance with laws and regulations applicable to U.S. government contractors. Systems that are subject to review include, but are not limited to, our accounting systems, estimating systems, material management systems, earned value management systems, purchasing systems and government property systems. If improper or illegal activities, errors or system inadequacies come to the attention of the U.S. government, as a result of an audit or otherwise, then we may be subject to civil and criminal penalties, contract adjustments and/or agreements to upgrade existing systems as well as administrative sanctions that may include the termination of our U.S. government contracts, forfeiture of profits, suspension of payments, fines and, under certain circumstances, suspension or debarment from future U.S. government contracts for a period of time. Whether or not illegal activities are alleged and regardless of materiality, the U.S.

government also has the ability to decrease or withhold certain payments when it deems systems subject to its review to be inadequate. These laws and regulations affect how we do business with our customers and, in many instances, impose added costs on our business.

- Our Defense segment results may fluctuate significantly from time to time as a result of the start and completion of existing and new domestic and international contract awards that we may receive. A majority of our contracts in the Defense segment are large in size and require significant personnel and production resources, and when our government customers allow such contracts to expire or significantly reduce their vehicle requirements under such contracts, we must make adjustments to personnel and production resources. The start and completion of existing and new contract awards that we may receive can cause our Defense segment results to fluctuate significantly.

- We periodically experience difficulties with sourcing sufficient vehicle carcasses from the U.S. military to maintain our defense tactical wheeled vehicles remanufacturing schedule, which can create uncertainty and inefficiencies for this area of our business.

Our markets are highly cyclical. Declines in these markets could have a material adverse effect on our operating performance.

The access equipment market is highly cyclical and impacted (i) by the strength of economies in general and customers' perceptions concerning the timing of economic cycles, (ii) by residential and non-residential construction spending, (iii) by the ability of rental companies to obtain third-party financing to purchase revenue generating assets, (iv) by capital expenditures of rental companies in general, including the rate at which they replace aged rental equipment, which is impacted in part by historical purchase levels, (v) by the timing of regulatory standard changes, and (vi) by other factors, including oil and gas related activity. Refuse collection vehicle markets are also cyclical and impacted by the strength of economies in general, by municipal tax receipts and by the size and timing of capital expenditures, including replacement demand, by large waste haulers. The ready-mix concrete market that we serve is highly cyclical and impacted by the strength of the economy generally, by the number of housing starts and by other factors that may have an effect on the level of concrete placement activity, either regionally or nationally. Fire & emergency markets are cyclical later in an economic cycle and are impacted by the economy generally and by municipal tax receipts and capital expenditures. If demand for our products is lower than what we or the market expect, then there could be an adverse effect on our net sales, financial condition, profitability and/or cash flows.

The USPS may not purchase quantities from us that we expect.

In February 2021, the USPS notified us that it selected us to build its NGDV. The IDIQ contract allows for the purchase of between 50,000 and 165,000 units over 10 years. To date, we have received an order for $482 million for engineering to finalize the production vehicle design and for tooling and factory build-out activities that are necessary prior to vehicle production. The USPS awards that we currently anticipate receiving from the USPS and our performance under the contract are subject to the following risks, among others, that could have a material adverse effect on our operating performance:

- Budget constraints facing the USPS and continuously changing demands for postal services may result in the USPS ordering fewer units than we expect the USPS to award to us under the contract.

- Engineering time to finalize the production vehicle design may be greater than we anticipate.

- Tooling and factory build-out activities that we must complete prior to production may be greater than we anticipate.

- We plan to use a new manufacturing facility to perform under the contract, and the costs and other challenges associated with recruiting and training a new workforce may be greater than we anticipate.

- The USPS' obligation to order the minimum order quantity under the contract (50,000 units) is contingent upon USPS satisfactory completion of the National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) process. Failure to complete this process in a satisfactory manner could result in a loss of the minimum quantity and prevent additional awards under the NGDV contract.

Our results could be adversely affected by severe weather, natural disasters, and other events in the locations in which we or our customers or suppliers operate.

We have manufacturing and other operations in locations prone to severe weather and natural disasters, including earthquakes, floods, hurricanes or tsunamis that could disrupt our operations. Our suppliers and customers also have operations in such locations. Severe weather or a natural disaster that results in a prolonged disruption to our operations, or the operations of our customers or suppliers could delay delivery of parts, materials or components to us or sales to our customers and could have a material adverse effect on our net sales, financial condition, results of operations and/or cash flows.

Disruptions within our dealer network could adversely affect our business.

Although we sell the majority of our products directly to the end user, we market, sell and service products through a network of independent dealers in the Fire & Emergency segment and in a limited number of markets for the Access Equipment and Commercial segments. As a result, our business with respect to these products is influenced by our ability to establish and manage new and existing relationships with dealers. While we have relatively low turnover of dealers, from time to time, we or a dealer may choose to terminate the relationship as a result of difficulties that our independent dealers experience in operating their businesses due to economic conditions or other factors, or as a result of an alleged failure by us or an independent dealer to comply with the terms of our dealer agreement. We do not believe our business is dependent on any single dealer, the loss of which would have a sustained material adverse effect upon our business. However, disruption of dealer coverage within a specific state or other geographic market could cause difficulties in marketing, selling or servicing our products and have an adverse effect on our net sales, financial condition, results of operations and/or cash flows.

In addition, our ability to terminate our relationship with a dealer is limited due to state dealer laws, which generally provide that a manufacturer may not terminate or refuse to renew a dealer agreement unless it has first provided the dealer with required notices. Under many state laws, dealers may protest termination notices or petition for relief from termination actions. Responding to these protests and petitions may cause us to incur costs and, in some instances, could lead to litigation resulting in lost opportunities with other dealers or lost sales opportunities, which may have an adverse effect on our net sales, financial condition, results of operations and/or cash flows.

Consolidation within our customer and dealer bases may impact our strategy, pricing and product margins.

Significant consolidation in our customer and dealer bases could enhance the influence of customers and dealers over our business strategy. Intensified consolidation in the industries we serve may provide our customers and dealers with additional leverage in negotiations around our product and service offerings. For example, the Access Equipment segment's largest customers are rental companies that serve the end user equipment rental markets. Should larger access equipment customers continue to grow through the acquisition of smaller rental companies, their buying influence may grow and may impact the competitive environment within the industry. Similarly, the Fire & Emergency segment's distribution channel is comprised of a relatively small number of dealers that if they were to consolidate may create additional pricing pressure, as well as concentrated credit exposures, as our reliance on a smaller group of larger individual dealerships increases. If that trend in customer and dealer consolidation continues, it could have an unfavorable impact on our pricing and product margins.

Competition and Strategy Risks

We face significant competition in the markets we serve.

The markets in which we operate are highly competitive. We compete worldwide with a number of other manufacturers that produce and sell similar products. Our products primarily compete on the basis of brand awareness, product innovation, performance, quality, reliability, availability, price, service and support, ability to meet customer specifications and the extent to which a company offers single-source customer solutions. Certain of our competitors have greater financial, marketing, manufacturing, distribution and governmental affairs resources than we do, which may put us at a competitive disadvantage. We also face pricing pressure from international competitors that attempt to gain domestic market share through importing and selling products at below market prices, particularly in the Access Equipment segment. If competition in our industry intensifies or if our current competitors lower their prices for competing products, we may lose sales or be required to lower the prices we charge for our products. We cannot provide any assurance that our products will continue to compete effectively with the products of competitors or that we will be able to retain our customer base or improve or maintain our profit margins on sales to our customers.

If we are unable to continue to enhance existing products and develop new products that respond to customer needs and preferences, we may experience a decrease in demand for our products and our business could suffer.

One of our growth strategies is emphasizing our new product development as we seek to expand sales and margins by leading our core markets in the introduction of new or improved products and technologies. Our ability to match product improvements and new product offerings to diverse global customer's anticipated needs for different types of products and various product features and functions, at acceptable prices, is critical to our success. We may not be able to compete as effectively, and ultimately satisfy the needs and preferences of our customers, unless we can continue to improve existing products and develop new innovative products in the global markets in which we compete. While we spent $103.1 million, $103.9 million and $99.0 million for research and development in fiscal 2021, 2020 and 2019, respectively, we cannot provide any assurance that this level of investment in research and development will be sufficient to maintain our competitive strength in product innovation, which could cause our business to suffer. Product improvements and new product introductions also require significant planning, design, development and testing at the technological, product and manufacturing process levels, and we may not be able to timely develop product improvements or new products. Our competitors' new products may arrive in the market before our products arrive and be more attractive with more features and functions and/or lower prices than our products. If we are unable to provide continued technological improvements in our products that meet our customers' or the industry's expectations, then the demand for our products could be adversely affected.

In response to changes in customer preferences concerning global climate changes and related changes in regulations, we may face greater pressure to develop products that generate less greenhouse gas emissions. Many manufacturers foresee sales of electric-powered vehicles and mobile equipment becoming increasingly important to their businesses, and we may not have the expertise or resources to successfully address these pressures on a cost-effective basis. While we are developing and offering more propulsion choices in our products, such as electric-powered vehicles or mobile equipment, with lower emissions, this may require us to spend additional funds on product research and development and implementation costs and subject us to the risk that our competitors may respond to these pressures in a manner that gives them a competitive advantage. If we do not accurately predict, prepare for and respond to new kinds of technological innovations with respect to electric-powered vehicles or mobile equipment and other technologies that minimize emissions, competition from others could make our specialty vehicles or mobile equipment less desirable in the marketplace.

We are subject to fluctuations in exchange rates associated with our non-U.S. operations that could adversely affect our results of operations and may significantly affect the comparability of our results between financial periods.

Approximately 15% of our net sales in fiscal 2021 were attributable to products sold outside of the United States, of which approximately 52% involved export sales from the United States. The majority of export sales are denominated in U.S. dollars. Sales that originate outside the United States are typically transacted in the local currencies of those countries. Fluctuations in foreign currency can have an adverse impact on our sales and profits as amounts that are measured in foreign currency are translated back to U.S. dollars. We have sales of inventory denominated in U.S. dollars to certain of our subsidiaries that have functional currencies other than the U.S. dollar. The exchange rates between many of these currencies and the U.S. dollar have fluctuated significantly in recent years and may fluctuate significantly in the future. Such fluctuations, in particular those with respect to the Euro, the Chinese renminbi, the Canadian dollar, the Mexican peso, the Australian dollar and the British pound sterling, may have a material effect on our net sales, financial condition, profitability and/or cash flows and may significantly affect the comparability of our results between financial periods. In addition, any appreciation in the value of the U.S. dollar in relation to the value of the local currency of those countries where our products are sold will increase our costs of goods in our foreign operations, to the extent such costs are payable in U.S. dollars, and impact the competitiveness of our product offerings in international markets.

Our objective is to expand international operations and sales.

Expanding international operations and sales is a part of our growth strategy. International operations and sales are subject to various risks, including political, religious and economic instability, local labor market conditions, the imposition of foreign tariffs upon our products (which include tariffs in response to tariffs that the U.S. imposes) and other trade barriers, the impact of foreign government regulations and the effects of income and withholding taxes, sporadic order patterns, governmental expropriation, uncertainties or delays in collection of accounts receivable and differences in business practices. We may incur increased costs, including increased supply chain costs, and experience delays or disruptions in production schedules, product deliveries or payments in connection with international manufacturing and sales that could cause loss of revenues and earnings. Among other things, there are additional logistical requirements associated with international sales, which increase the amount of time between the completion of vehicle production and our ability to recognize related revenue. In addition, expansion into foreign markets requires the establishment of distribution networks and may require modification of products to meet local requirements or preferences. Establishment of distribution networks or modification to the design of our products to meet local requirements and preferences may take longer or be more costly than we anticipate and could have a material adverse effect on our ability to achieve international sales growth. In addition, our entry into certain markets that we wish to enter may require us to establish a joint venture. Identifying an appropriate joint venture partner and creating a joint venture could be more time consuming, more costly and more difficult than we anticipate.

We may not be able to execute on our business strategy.

The Company’s strategy is grounded in its purpose of making a difference in the lives of those who build, serve, and protect communities around the world. The strategy is reflected in three simple words: Innovate. Serve. Advance. We cannot provide any assurance we will be able to successfully execute our business strategy due to a variety of risks, including our inability to design new products that meet our customers’ requirements and bring them to market; higher costs than anticipated to launch new products or delays in new product launches; our inability to expand our aftermarket parts and services availability; and slow adoption of our products in emerging markets and/or our inability to successfully expand into new markets.

We may not realize all of the anticipated benefits of our acquisitions.

We are continuously evaluating potential acquisitions to support our business strategy. As part of this evaluation process, we perform due diligence to identify potential risks associated with the potential transaction. We also make assumptions regarding future performance of the acquired business. We cannot provide any assurance we will be able to successfully achieve the benefits of any business acquisition due to a variety of risks, including the following:

- Our failure to achieve the acquisition’s assumed future financial performance or realize assumed efficiencies or assumed cost reductions;
- There may be a cultural mismatch that exists between us and the acquired business;
- We may incur unforeseen expenses or liabilities or may be subject to other unanticipated regulatory or government actions related to the acquired business; and
- We may incur higher transaction costs than expected.

Financial Risks

We are subject to changes in contract estimates.

We account for substantially all long-term contracts in the Defense segment utilizing the cost to cost method of percentage-of-completion accounting. This accounting requires judgment relative to assessing risks, estimating revenues and costs and making assumptions regarding the timing of receipt of delivery orders from our government customer and technical issues. Due to the size and nature of these contracts, the estimation of total revenues and costs is complicated and subject to many variables. We must make assumptions regarding expected increases in wages and employee benefits, engineering hours, productivity and availability of labor, material costs and allocated fixed costs. Changes to production costs, overhead rates, learning curves and/or supplier performance can also impact these estimates. Furthermore, under the revenue recognition accounting rules, we can only include units in our estimates of overall contract profitability after we have received a firm delivery order for those units. Because new orders have the potential to significantly change the overall profitability of cumulative orders received to date, particularly early in the contract when fewer overall units are on order, the period in which we receive those orders from the government will impact the estimated life-to-date contract profitability. Changes in underlying assumptions, circumstances or estimates could have a material adverse effect on our net sales, financial condition and/or profitability.

We may experience losses in excess of our recorded reserves for doubtful accounts, finance receivables, notes receivable and guarantees of indebtedness of others.

As of September 30, 2021, we had consolidated gross receivables of $1.03 billion. In addition, we were subject to obligations to guarantee customer indebtedness to third parties of $846.6 million, under which we estimate our maximum exposure to be $167.0 million. We evaluate the collectability of receivables and our guarantees of indebtedness of others based on a combination of factors and establish reserves based on our estimates of potential current and future losses. In circumstances where we believe it is probable that a specific customer will have difficulty meeting its financial obligations, a specific reserve is recorded to reduce the net recognized receivable to the amount we expect to collect, and/or we recognize a liability for a guarantee we expect to pay, taking into account any amounts that we would anticipate realizing if we are forced to repossess the equipment that supports the customer's financial obligations to us. We also establish additional reserves based upon our perception of the quality of the current receivables, the current financial position of our customers, past collections experience, existing and future market conditions. Prolonged or more severe economic weakness may result in additional requirements for specific reserves. During periods of economic weakness, the collateral underlying our guarantees of indebtedness of customers or receivables can decline sharply, thereby increasing our exposure to losses. We also face a concentration of credit risk as the Access Equipment segment's ten largest debtors at September 30, 2021 represented approximately 33% of our consolidated gross receivables. Some of these customers are highly leveraged. We may incur losses in excess of our recorded reserves if the financial condition of our customers were to deteriorate or the full amount of any anticipated proceeds from the sale of the collateral supporting our customers' financial obligations is not realized. Our cash flows and overall liquidity may be materially adversely affected if any of the financial institutions that finance our customer receivables become unable or unwilling, due to unfavorable economic conditions, a weakening of our or their financial position or otherwise, to continue providing such credit.

An impairment in the carrying value of goodwill and other indefinite-lived intangible assets could negatively affect our operating results.

We have a substantial amount of goodwill and other indefinite-lived intangible assets on our balance sheet as a result of acquisitions we have completed. At September 30, 2021, approximately 85% of these intangibles were concentrated in the Access Equipment segment. We evaluate goodwill and indefinite-lived intangible assets for impairment at least annually, or more frequently if potential interim indicators exist that could result in impairment. Events and conditions that could result in impairment include a prolonged period of global economic weakness, a decline in economic conditions or a slow, weak economic recovery, a sustained decline in the price of our common stock, adverse changes in the regulatory environment, adverse changes in the market share of our products, adverse changes in interest rates, or other factors leading to reductions in the long-term sales or profitability that we expect. Determination of the fair value of a reporting unit includes developing estimates which are highly subjective and incorporate calculations that are sensitive to minor changes in underlying assumptions. Management's assumptions change as more information becomes available. Changes in these events and conditions or other assumptions could result in an impairment charge in the future, which could have a significant adverse impact on our reported earnings.

Financing costs and restrictive covenants in our current debt facilities could limit our flexibility in managing our business and increase our vulnerability to general adverse economic and industry conditions.

Our credit agreement contains financial and restrictive covenants which, among other things, require us to satisfy quarter-end financial ratios. Our ability to meet the financial ratios in such covenants may be affected by a number of risks or events, including the risks described in this Current Report on Form 8-K and events beyond our control. The indenture governing our senior notes also contain restrictive covenants. Any failure by us to comply with these restrictive covenants or the financial and restrictive covenants in our credit agreement could have a material adverse effect on our financial condition, results of operations and debt service capability.

Our access to debt financing at competitive risk-based interest rates is partly a function of our credit ratings. A downgrade to our credit ratings could increase our interest rates, could limit our access to public debt markets, could limit the institutions willing to provide us credit facilities, and could make any future credit facilities or credit facility amendments more costly and/or difficult to obtain. In addition, a portion of our debt is subject to variable interest rates. An increase in general interest rates would also increase our cost of borrowing under our credit agreement.

Additional liabilities relating to changes in tax rates or exposure to additional income tax liabilities could adversely impact our financial condition and cash flow.

We are subject to income taxes in the U.S. and various non-U.S. jurisdictions. Our domestic and international tax liabilities are dependent upon the location of earnings among these different jurisdictions. Changes in our effective tax rate as a result of changes in tax laws or regulations and judicial or regulatory interpretations of those laws or regulations, the mix of earnings in countries with differing statutory tax rates, changes in overall profitability, changes in U.S. generally accepted accounting principles, or changes in the valuation of deferred tax assets could adversely affect our future results of operations. In addition, the amount of income taxes that the Company pays is subject to ongoing audits by U.S. federal, state and local tax authorities and by non-U.S. tax authorities. If these audits result in assessments different from amounts that the Company has reserved for potential tax liabilities, future financial results may include unfavorable adjustments to the Company’s tax liabilities, which could have a material adverse effect on the Company’s results of operations.

Cybersecurity Risks

Increased cybersecurity threats and more sophisticated computer crime pose a risk to our systems, networks, products and services.

As a defense contractor, we face many cyber and security threats that can range from attacks common to most industries, which could have financial or reputational consequences, to advanced persistent threats on our Defense programs, which could involve information that is considered a matter of national security. We rely extensively on information technology systems and networks, some of which third parties manage, supporting a variety of business activities. Operating these information technology systems and networks and processing and maintaining related data in a secure manner, is critical to our business operations and strategy. Information technology security threats -- from user error to cybersecurity attacks designed to gain unauthorized access to our systems, networks and data -- are increasing in frequency and sophistication. Cybersecurity attacks may range from random attempts to coordinated and targeted attacks, including sophisticated computer crime and advanced persistent threats. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Cybersecurity attacks could also include attacks targeting the security, integrity and/or reliability of the hardware and software that we have installed in our products. It is possible that our information technology systems and networks, or those that third parties manage or provide, could have vulnerabilities, which could go unnoticed for a period of time. While we have utilized and continue to utilize various procedures and controls to mitigate such risks, we cannot assure that the actions and controls we have implemented and are implementing, or that we cause or have caused third-party service providers to implement, will be sufficient to protect our systems, information or other property. We have experienced cyber security threats and vulnerabilities in our systems and those of our third-party providers, and we have experienced viruses and attacks targeting our information technology systems and networks. Such prior events, to date, have not had a material impact on our financial condition, results of operations or liquidity. However, the potential consequences of a future material cybersecurity attack include reputational damage, litigation with third-parties, government enforcement actions, penalties, disruption to systems, unauthorized release of confidential or otherwise protected information, corruption of data, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition.

Legal and Regulatory Risks

Our international sales and operations subject us to risks that may have a material adverse effect on our business.

As a result of our international operations and sales, we are subject to the Foreign Corrupt Practices Act (FCPA) and other laws that prohibit improper payments or offers of payments to foreign governments and their officials for the purpose of obtaining or retaining business. Our international activities create the risk of unauthorized payments or offers of payments in violation of the FCPA by one of our employees, consultants, sales agents or distributors, because these parties are not always subject to our control. Any violations of the FCPA could result in significant fines, criminal sanctions against us or our employees, and prohibitions on the conduct of our business, including our business with the U.S. government. We are also increasingly subject to export control regulations, including, without limitation, the United States Export Administration Regulations and the International Traffic in Arms Regulations. Unfavorable changes in the political, regulatory or business climate could have a material adverse effect on our net sales, financial condition, profitability and/or cash flows.

We may be required to make material expenditures to comply with environmental laws and climate change regulations, or incur additional liabilities under these laws and regulations.

Both our products and the operation of our manufacturing facilities are subject to statutory and regulatory requirements. These include environmental requirements applicable to manufacturing and vehicle emissions, government contracting regulations, regulations impacting our supply chain and domestic and international trade regulations. A significant change to these regulatory requirements could substantially increase manufacturing costs, which could make our business results more variable.

Climate change attributed to increased levels of greenhouse gases, including carbon dioxide, has led to significant legislative and regulatory efforts to limit greenhouse gas emissions. These considerations may lead to new international, national, regional, or local legislation or regulatory response. The legislation of greenhouse gases could result in unfavorable financial impact through various forms including taxation, emission allowances, fines, facilities improvement investment and higher energy costs. The impact of any future greenhouse gas legislation, regulatory, or product standard requirements is unknown and therefore, we are uncertain of the potential impact that future changes may have.

Our global facilities, operations and products are subject to increasingly stringent environmental laws and regulations, including laws and regulations governing air emissions, noise, releases to soil and discharges to water and the generation, handling, storage, transportation, treatment, and disposal of non-hazardous and hazardous waste materials. Certain environmental laws impose strict, retroactive, and joint and several liability for the release of hazardous substances, even for conduct that was lawful at the time it occurred, or for the conduct of, or conditions caused, by prior operators, predecessors or other third parties. With respect to acquired properties and businesses, we conduct due diligence into potential environmental exposure. However, we cannot be certain that we have identified or will identify all adverse environmental conditions. We could be subject to fines, cleanup costs or other costs or damages under environmental laws if we are not in compliance with environmental regulations. We may be subject to other more stringent environmental laws in the future that could have a material adverse impact on our business, results of operation, and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

The Company has no unresolved staff comments regarding its periodic or current reports from the staff of the SEC that were issued 180 days or more preceding September 30, 2021.

ITEM 2. PROPERTIES

The Company believes its equipment and buildings are well maintained and adequate for its present and anticipated needs. As of September 30, 2021, the Company operated in 28 manufacturing facilities. The locations of the Company's manufacturing facilities are provided in the table below:

Segment	Location (# of facilities)	Segment	Location (# of facilities)
Access Equipment	McConnellsburg, Pennsylvania (3) [(a)]	**Fire & Emergency**	Appleton, Wisconsin (2)
	Shippensburg, Pennsylvania (1)		Bradenton, Florida (1)
	Greencastle, Pennsylvania (1)		Kewaunee, Wisconsin (1)
	Tianjin, China (2) [(c)]		Clearwater, Florida (1) [(b)]
	Tonneins, France (1) [(b)]		Neenah, Wisconsin (1) [(b)]
	Port Macquarie, Australia (1)		
	Leicester, United Kingdom (1)	**Commercial**	Dodge Center, Minnesota (1)
	Bedford, Pennsylvania (1)		Garner, Iowa (1)
	Leon, Mexico (1)		Riceville, Iowa (1)
			London, Canada (1) [(b)]
Defense	Oshkosh, Wisconsin (4)		
	Jefferson City, Tennessee (1) [(b)]		
	Spartanburg, South Carolina (1) [(b)]		

(a) Two facilities are owned and the other is leased.

(b) These facilities are leased.

(c) One facility is owned and the other is leased.

The Company's manufacturing facilities generally operate five days per week on one or two shifts, except for seasonal shutdowns for one- to three-week periods. The Company believes its manufacturing capacity could be significantly increased with limited capital spending by operating an additional shift at each facility.

The Company also performs contract maintenance services out of multiple warehousing and service facilities owned and/or operated by the U.S. government and third parties, including locations in the U.S., Japan and multiple other countries in Europe and the Middle East.

In addition to sales and service activities at the Company's manufacturing facilities, the Company maintains a network of sales and service centers in the U.S. The Company uses these facilities primarily for sales and service of refuse collection vehicles and concrete mixers. The Access Equipment segment also leases a number of small distribution, engineering, administration or service facilities throughout the world.

ITEM 3. LEGAL PROCEEDINGS

The Company is subject to environmental matters and legal proceedings and claims, including patent, antitrust, product liability, warranty and state dealership regulation compliance proceedings that arise in the ordinary course of business. Although the final results of all such matters and claims cannot be predicted with certainty, the Company believes that the ultimate resolution of all such matters and claims will not have a material effect on the Company's financial condition, results of operations or cash flows.

Personal injury actions and other. At September 30, 2021, the estimated net liabilities for product and general liability claims totaled $49.5 million. Although the final results of all such matters and claims cannot be predicted with certainty, the Company believes that the ultimate resolution of all such matters and claims, after considering the liabilities accrued with respect to all such matters and claims, will not have a material effect on the Company's financial condition, results of operations or cash flows. Actual results could vary, among other things, due to the uncertainties involved in litigation.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following table sets forth certain information as of November 16, 2021 concerning the Company's executive officers. All of the Company's executive officers serve terms of one year and until their successors are elected and qualified.

Name	Age	Title
John C. Pfeifer	56	President and Chief Executive Officer
John J. Bryant	63	Executive Vice President and President, Defense Segment
Ignacio A. Cortina	50	Executive Vice President, General Counsel and Secretary
James W. Johnson	57	Executive Vice President and President, Fire & Emergency Segment
Bradley M. Nelson	52	Executive Vice President and President, Commercial Segment
Frank R. Nerenhausen	57	Executive Vice President and President, Access Equipment Segment
Michael E. Pack	47	Executive Vice President and Chief Financial Officer
Jason P. Baab	47	Senior Vice President, Corporate Development and Strategy
Bryan K. Brandt	53	Senior Vice President and Chief Marketing Officer
Thomas P. Hawkins	56	Senior Vice President, Government Relations
Anupam Khare	57	Senior Vice President and Chief Information Officer
Emma M. McTague	48	Senior Vice President and Chief Human Resources Officer

John C. Pfeifer. Mr. Pfeifer joined the Company in 2019 as Executive Vice President and Chief Operating Officer. In May 2020, Mr. Pfeifer assumed the position of President and Chief Operating Officer of the Company. On November 18, 2020, it was announced that Mr. Pfeifer was appointed President and Chief Executive Officer effective on April 2, 2021. Prior to joining the Company, he served as Senior Vice President and President - Mercury Marine, of Brunswick Corporation, a designer, manufacturer and marketer of marine engines and marine parts and accessories, from 2014 to 2019. Prior to that, Mr. Pfeifer served as Vice President and President - Mercury Marine of Brunswick Corporation from 2014 to 2018. Mr. Pfeifer is a director of The Manitowoc Company, Inc.

John J. Bryant. Mr. Bryant joined the Company in 2010 as Vice President and General Manager of Marine Corps Programs - Defense segment. He served as Vice President of Programs - Defense segment from 2013 to 2016 and as Senior Vice President and President, Defense Segment from 2016 until his appointment to his current position of Executive Vice President and President, Defense Segment in February 2018. Prior to joining Oshkosh Defense, he served as a Professor of Program Management at the Defense Acquisition University. Mr. Bryant retired from the U.S. Marine Corps with the rank of Colonel in 2008.

Ignacio A. Cortina. Mr. Cortina joined the Company in 2006 with the acquisition of JLG. He has held various roles of increasing responsibility, serving as the Company's Vice President and Deputy General Counsel from 2011 to 2015 and Senior Vice President, General Counsel and Secretary from 2015 to 2016. Prior to joining the Company, he spent seven years in private practice in the Washington, D.C. area. He was appointed to his current position of Executive Vice President, General Counsel and Secretary in 2016.

James W. Johnson. Mr. Johnson joined the Company in 2007 as Director of Dealer Development for Pierce. He was appointed to Senior Vice President of Sales and Marketing for Pierce in 2009 and was appointed to his current position of Executive Vice President and President, Fire & Emergency Segment in 2010.

Bradley M. Nelson. Mr. Nelson joined the Company in 2011 and served as Global Vice President of Marketing for JLG from 2011 to 2013. He then served as Senior Vice President and President, Commercial Segment from 2013 to September 2021 and was appointed to his current position of Executive Vice President and President, Commercial Segment in September 2021.

Frank R. Nerenhausen. Mr. Nerenhausen joined the Company in 1986 and has served in various assignments, including Vice President of Concrete & Refuse Sales & Marketing for McNeilus from 2008 to 2010 and Executive Vice President and President, Commercial Segment from 2010 to 2012. He was appointed to his current position of Executive Vice President and President, Access Equipment Segment in 2012.

Michael E. Pack. Mr. Pack joined the Company in 2006 as Senior Director of Financial Analysis and Controls and has served in various assignments in the Commercial, Access Equipment and Fire & Emergency segments, including Vice President Finance - Fire & Emergency from 2012 to 2020. He was appointed to his current position of Executive Vice President and Chief Financial Officer of the Company in April 2020.

Jason P. Baab. Mr. Baab joined the Company in 2017 as Vice President of Corporate Development and was appointed to his current position of Senior Vice President, Corporate Development and Strategy in October 2021. Prior to joining the Company, he served as Vice President of Corporate Development for Fortune Brands Home & Security, Inc., a home and security products company, from 2013 to 2016.

Bryan K. Brandt. Mr. Brandt joined the Company in 2016 as Vice President, Global Branding and Communications. He was appointed to his current position of Senior Vice President and Chief Marketing Officer in September 2018. Prior to joining the Company, he spent more than twenty years with Bemis Company, Inc., a global supplier of flexible packaging, in numerous positions of increasing responsibility, most recently as Vice President of Marketing and Transformation for Bemis North America from 2014 to 2016.

Thomas P. Hawkins. Mr. Hawkins joined the Company in September 2018 as Senior Vice President of Government Relations. Mr. Hawkins has 29 years of government service, most recently as the National Security Advisor with the Office of the Senate Republican Leader from 2007 to 2018.

Anupam Khare. Mr. Khare joined the Company in April 2018 as Senior Vice President and Chief Information Officer. He previously served as the Executive Director - Digital Technology at United Technologies Corporation, a global technology products and services company that serves the building systems and aerospace industries, from 2015 to April 2018. Prior to that, Mr. Khare served in positions of increasing responsibility at Koch Industries, Inc., a manufacturer of a wide variety of products.

Emma M. McTague. Ms. McTague joined the Company in 2015 as Vice President and Chief Human Resources Officer for the Access Equipment segment. She was appointed to her current position of Senior Vice President and Chief Human Resources Officer in February 2021.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Common Stock Repurchases

The following table sets forth information with respect to purchases of Common Stock made by the Company or on the Company's behalf during the fourth quarter of fiscal 2021:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (1)
July 1 - July 31	261,689	$ 120.39	261,689	7,090,501
August 1 - August 31	286,164	$ 116.25	286,164	6,804,337
September 1 - September 30	272,943	$ 109.93	272,943	6,531,394
Total	820,796		820,796	6,531,394

(1) In May 2019, the Board of Directors approved a stock repurchase authorization of 10,000,000 shares. At September 30, 2021, the Company had repurchased 3,468,606 shares under this authorization. As a result, 6,531,394 shares of Common Stock remained available for repurchase under the repurchase authorization at September 30, 2021. The Company can use this authorization at any time as there is no expiration date associated with the authorization. From time to time, the Company may enter into a Rule 10b5-1 trading plan for the purpose of repurchasing shares under this authorization.

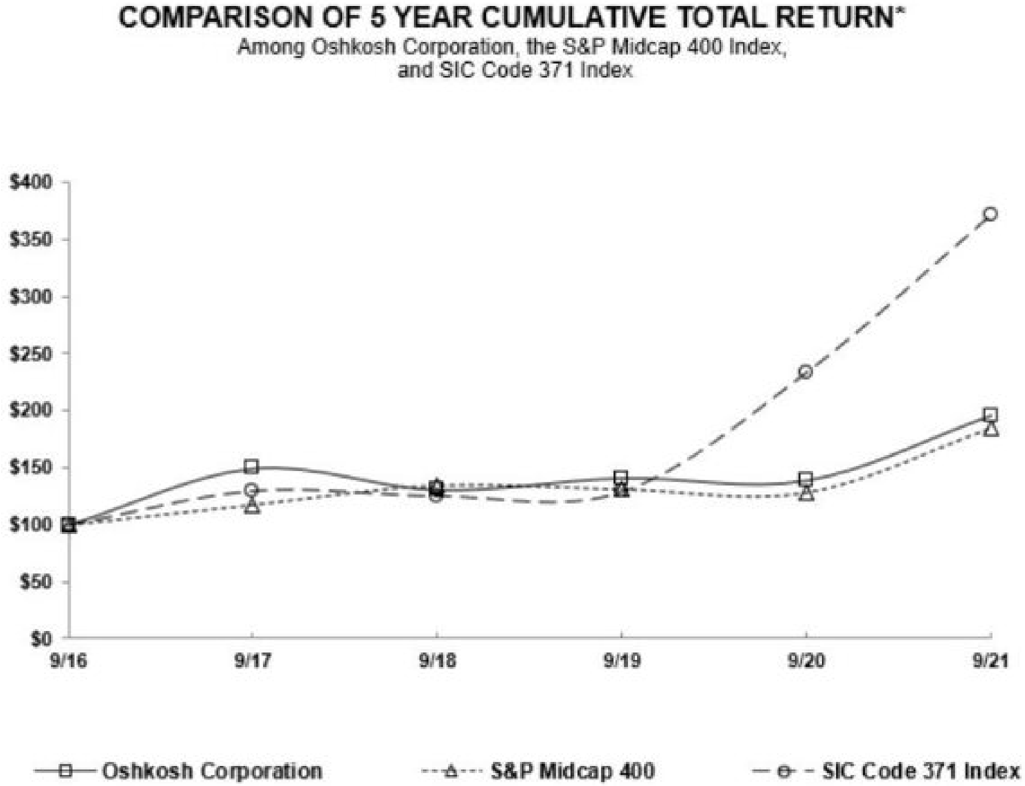
Common Stock Information

The Company's Common Stock is listed on the New York Stock Exchange (NYSE) under the symbol OSK. As of November 9, 2021, there were 1,936 holders of record of the Common Stock.

Item 12 of this Annual Report on Form 10-K contains certain information relating to the Company's equity compensation plans.

The following information in this Item 5 is not deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 (Exchange Act) or to the liabilities of Section 18 of the Exchange Act, and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent the Company specifically incorporates it by reference into such a filing. The SEC requires the Company to include a line graph presentation comparing cumulative five year Common Stock returns with a broad-based stock index and either a nationally recognized industry index or an index of peer companies selected by the Company. The Company has chosen to use the Standard & Poor's MidCap 400 market index as the broad-based index and the companies currently in the Standard Industry Classification Code 371 Index (motor vehicles and equipment) (the SIC Code 371 Index) as a more specific comparison.

The comparisons assume that $100 was invested on September 30, 2016 in each of: the Company's Common Stock, the Standard & Poor's MidCap 400 market index and the SIC Code 371 Index. The total return assumes reinvestment of dividends and is adjusted for stock splits. The fiscal 2021 return listed in the charts below is based on closing prices per share on September 30, 2021. On that date, the closing price for the Company's Common Stock was $102.37.



* $100 invested on September 30, 2016 in stock or index, including reinvestment of dividends.

	September 30,				
	2017	2018	2019	2020	2021
Oshkosh Corporation	$ 149.20	$ 130.38	$ 140.81	$ 138.67	$ 195.66
S&P MidCap 400 market index	117.52	134.21	130.87	128.04	183.97
SIC Code 371 Index	129.91	125.37	129.17	234.03	372.18

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

GENERAL

The Company is a leading innovator, manufacturer and marketer of a wide range of essential specialty vehicles and vehicle bodies, including access equipment, defense trucks and trailers, fire & emergency vehicles, refuse collection vehicles and concrete mixers. The Company is a leading global designer and manufacturer of aerial work platforms under the "JLG" brand name. The Company is among the worldwide leaders in the design and manufacturing of telehandlers under the "JLG" and "SkyTrak" brand names. Under the "Jerr-Dan" brand name, the Company is a leading domestic designer and manufacturer and marketer of towing and recovery equipment. The Company manufactures defense trucks under the "Oshkosh" brand name and is a leading designer and manufacturer of severe-duty, tactical wheeled vehicles for the U.S. Department of Defense (DoD). The Company also designs and manufactures delivery vehicles for the United States Postal Service (USPS) and airport snow removal vehicles under the "Oshkosh" brand name. Under the "Pierce" brand name, the Company is among the leading global designers and manufacturers of fire trucks assembled on both custom and commercial chassis. Under the "Frontline" brand name, the Company is a leading domestic designer, manufacturer and marketer of broadcast and command vehicles. The Company designs and manufactures Aircraft Rescue and Firefighting (ARFF) vehicles under the "Oshkosh" brand name. Under the "McNeilus" brand name, the Company designs and manufactures a wide range of automated, rear, front, side and top loading refuse collection vehicles. Under the "McNeilus," "Oshkosh," and "London" brand names, the Company designs and manufactures rear- and front-discharge concrete mixers. Under the "IMT" brand name, the Company is a leading domestic designer and manufacturer of field service vehicles and truck-mounted cranes.

Major products manufactured and marketed by each of the Company's business segments are as follows:

Access Equipment — aerial work platforms and telehandlers used in a wide variety of construction, industrial, institutional and general maintenance applications to position workers and materials at elevated heights, as well as carriers and wreckers. Access Equipment customers include equipment rental companies, construction contractors, manufacturing companies, home improvement centers and towing companies.

Defense — tactical vehicles, trailers, weapons system integration and supply parts and services sold to the U.S. military and to other militaries around the world, delivery vehicles for the USPS, and snow removal vehicles for military and civilian airports.

Fire & Emergency — custom and commercial firefighting vehicles and equipment, ARFF vehicles, simulators, mobile command and control vehicles and other emergency vehicles primarily sold to fire departments, airports and other governmental units, as well as broadcast vehicles sold to broadcasters and TV stations.

Commercial — refuse collection vehicles sold to commercial and municipal waste haulers, concrete mixers sold to ready-mix companies and field service vehicles and truck-mounted cranes sold to mining, construction and other companies.

All estimates referred to in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" refer to the Company's estimates as of November 16, 2021.

In October 2021, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31. Accordingly, the Company will report a transition quarter that runs from October 1, 2021 through December 31, 2021 (Stub Period). The Company's next full fiscal year will run from January 1, 2022 through December 31, 2022. As a result, all references in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" to a quarter or year are to the Company's historical fiscal quarter or fiscal year unless stated otherwise.

OVERVIEW

The Company entered fiscal 2021 in the midst of the COVID-19 pandemic, which negatively impacted its sales in the first half of the year, particularly in the Access Equipment segment. As a result of the reduction in demand, the Access Equipment segment implemented production shutdowns of two weeks per month in the first quarter of fiscal 2021 and one week per month in the second quarter of fiscal 2021. Higher COVID-19 infection rates also resulted in production challenges in both the Defense and Fire & Emergency segments in the first half of fiscal 2021. During the second quarter of fiscal 2021, positive vaccination progress, and the confidence that brought to the marketplace, caused the U.S. economy to begin to rebound. As a result of the improving economy, the Company experienced a strong return in demand for many of its products. This rapid rebound has coincided with significant supply chain and logistics disruptions across the globe, which in turn have led to labor inefficiencies within the Company's production facilities and higher freight costs to expedite parts. The rapid increase in business activity across the globe has also caused the Company to experience significant inflation in materials, freight and labor costs. The Company increased prices multiple times during fiscal 2021 in its non-Defense segments in an effort to offset the higher input costs, but the realization of the price increases is delayed due to existing backlog at the time the price increases were implemented.

Consolidated net sales in fiscal 2021 increased $880.5 million, or 12.8%, to $7.74 billion compared to fiscal 2020 primarily as a result of an increase in sales in the Access Equipment segment in the second half of fiscal 2021 as the COVID-19 pandemic significantly impacted demand in this segment in the third and fourth quarters of fiscal 2020. Higher Joint Light Tactical Vehicle (JLTV) production in the Defense segment and increased deliveries in the Fire & Emergency segment, including the recognition of several multi-unit international deliveries, also favorably impacted sales in fiscal 2021.

Consolidated operating income was $544.7 million, or 7.0% of sales, in fiscal 2021, an increase of 11.5% compared to fiscal 2020. The increase in consolidated operating income was primarily due to the impact of higher gross margin associated with higher sales volume, offset in part by higher material & freight costs and higher incentive compensation expense.

The increase in operating income, along with a significant tax benefit associated with the carryback of a U.S. net operating loss to prior years, resulted in diluted earnings per share of $6.83 in fiscal 2021, up significantly from $4.72 in fiscal 2020.

Fiscal 2021 results included a $75.3 million tax benefit associated with the carryback of the U.S. net operating loss to prior years and an $11.7 million tax benefit associated with the release of a valuation allowance on deferred tax assets in Europe, offset in part by after-tax charges of $11.7 million associated with restructuring actions in the Access Equipment segment and $0.8 million associated with business acquisition costs in the Defense segment. In the aggregate, these items accounted for a net $74.5 million, or $1.08 per share, benefit in fiscal 2021. Fiscal 2020 results included after-tax charges related to restructuring actions of $17.9 million, the establishment of a valuation allowance on deferred tax assets in Europe of $11.4 million, an after-tax charge of $6.5 million associated with debt extinguishment costs incurred in connection with the refinancing of the Company's senior notes, offset in part by a $14.2 million after-tax gain on a property and business interruption insurance recovery, an after-tax gain of $3.2 million on an arbitration settlement in the Defense segment and an after-tax gain of $2.8 million on the sale of a business in the Commercial segment. In the aggregate, these items accounted for a net $15.6 million, or $0.22 per share, charge in fiscal 2020.

In January 2021, the Company acquired Pratt & Miller Engineering & Fabrications, LLC (Pratt Miller), an advanced engineering, technology and innovation provider for motorsports and multiple ground vehicle markets, for $111 million.

In February 2021, the Company was notified that the USPS selected the Company to build its Next Generation Delivery Vehicle (NGDV). The indefinite delivery, indefinite quantity (IDIQ) contract allows the USPS to purchase between 50,000 and 165,000 units over 10 years. The NGDV provides the USPS the ability to significantly modernize its delivery fleet with improved safety, reliability, sustainability and cost-efficiency while providing a much better working experience for the nation's postal carriers. The Company's offering provides the USPS with both zero-emission battery electric vehicles (BEV) and fuel efficient, low emission internal combustion engine (ICE) vehicles. The vehicle design also provides the USPS with the flexibility of converting ICE units to BEV in the future. The initial $482 million contract provides for engineering to finalize the production vehicle design, and for tooling and factory build-out activities that are necessary prior to vehicle production. The Company expects to begin delivering production vehicles in the second half of calendar 2023.

In June 2021, the U.S. Army awarded the Company a 6-year contract worth up to $943 million for the Stryker Medium Caliber Weapons System, representing an important new adjacency for the Defense segment. In June 2021, the Company also announced that Madison, Wisconsin is operating the Company's revolutionary new electric fire truck, the Pierce Volterra. The Volterra is a significant step forward for electric vehicles and is another milestone in Oshkosh's two decade-plus history of electrifying products.

Demand for the Company's products has been robust. Backlog is up significantly in all segments, leading to consolidated backlog of $8.08 billion at September 30, 2021. However, the current supply chain and logistics disruptions are making it difficult to forecast sales volume. While the Company's backlogs support a 10% to 15% increase in sales in the Stub Period compared to the first quarter of fiscal 2021, the Company expects parts availability to constrain its ability to deliver higher sales. As a result of this uncertainty, the Company is unable to provide quantitative expectations for the Stub Period. The Company expects that Stub Period earnings per share will be significantly lower than the first quarter of fiscal 2021 and may approach break-even levels.

The Company expects that unfavorable price/cost dynamics will be a $75 million to $85 million headwind in the Stub Period versus the first quarter of fiscal 2021. Steel and other component costs have continued to increase. The Company has taken multiple pricing actions in its non-Defense businesses over the past several quarters, and in many cases, prices are now greater than 10% above early fiscal 2021 levels. The Company expects these price increases to enable it to achieve price/cost equilibrium based on the cost escalation that it has seen to date. However, the Company still needs to work through large backlogs, so the Company anticipates it will take until the end of the second quarter of calendar 2022 for these pricing actions to largely catch up with costs. If costs escalate further, the Company expects to take additional pricing actions.

The Company also expects higher spending levels in the Stub Period versus the first quarter of fiscal 2021. COVID-19 infection rates spiked early in the first quarter of fiscal 2021 and the Company's spending levels remained low. Since then, spending levels have begun to normalize to pre-COVID-19 levels. The Company also expects that parts availability constraints will continue to drive labor inefficiencies.

The Company continued to execute its disciplined capital allocation strategy in fiscal 2021. The Company returned $198.2 million of cash to shareholders through the repurchase of 927,934 shares of stock and payment of quarterly dividends. In addition, the Company recently announced an increase in its quarterly dividend rate of 12%, to $0.37, per share beginning in November 2021. This was the Company's eighth straight year of a double-digit percentage increase in its dividend rate.

RESULTS OF OPERATIONS – FISCAL 2021 COMPARED WITH FISCAL 2020

CONSOLIDATED RESULTS

The following table presents consolidated results (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ 7,737.3	$ 6,856.8	$ 880.5	12.8%
Cost of sales	6,516.5	5,736.5	780.0	13.6%
Gross income	1,220.8	1,120.3	100.5	9.0%
% of sales	*15.8%*	*16.3%*	*-0.5%*	
SG&A expenses	666.5	620.6	45.9	7.4%
Amortization	9.6	11.0	(1.4)	-12.7%
Operating income	544.7	488.7	56.0	11.5%
% of sales	*7.0%*	*7.1%*	*-0.1%*	

The following table presents net sales by geographic region based on product shipment destination (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
North America	$ 6,748.5	$ 6,023.7	$ 724.8	12.0%
Europe, Africa and Middle East	504.8	413.7	91.1	22.0%
Rest of the world	484.0	419.4	64.6	15.4%
	$ 7,737.3	$ 6,856.8	$ 880.5	12.8%

Net sales increased as a result of higher Access Equipment segment sales, largely as a result of the impact of the COVID-19 pandemic on its markets in fiscal 2020. Additionally, Defense segment sales improved on increased JLTV production, and Fire & Emergency segment sales were up on higher deliveries, including higher multi-unit international deliveries.

The decrease in gross margin was due to higher material costs (130 basis points), offset in part by improved manufacturing absorption as a result of higher production volume (50 basis points) and lower engineering & product development costs (40 basis points).

The increase in selling, general and administrative expenses was generally a result of higher incentive compensation costs.

The increase in operating income was primarily due to the higher gross margin associated with higher consolidated sales volume ($180 million), favorable mix ($20 million), improved manufacturing absorption as a result of higher production volume ($13 million) and lower restructuring-related costs ($12 million), offset in part by unfavorable material costs ($97 million), higher incentive compensation costs ($62 million) and higher product liability activity ($12 million).

The following table presents consolidated non-operating changes (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Interest expense, net of interest income	$ (44.7)	$ (51.8)	$ 7.1	-13.7%
Miscellaneous income (expense)	(2.1)	2.2	(4.3)	-195.5%
Provision for income taxes	25.2	112.8	(87.6)	-77.7%
Effective tax rate	*5.1%*	*25.7%*	*-20.6%*	
Losses of unconsolidated affiliates	$ —	$ (1.8)	$ 1.8	-100.0%

The decrease in interest expense net of interest income was due to the absence of debt extinguishment costs. Fiscal 2020 included $8.5 million of debt extinguishment costs incurred in connection with refinancing the Company's senior notes partially offset by $3.3 million of interest income related to a favorable arbitration settlement in the Defense segment.

Other miscellaneous income (expense) primarily related to gains and losses on investments, net foreign currency transaction gains and losses, and non-service costs of the Company's pension plans. Fiscal 2020 also included $6.2 million of income on an insurance recovery at the Commercial segment.

Income tax expense in fiscal 2021 included discrete tax benefits of $96.0 million, primarily related to the carryback of the net operating loss to previous tax years with higher federal statutory tax rates ($75.3 million) and the reversal of a tax valuation allowance recorded against certain foreign net deferred tax assets in Europe ($11.7 million). Fiscal 2020 results were adversely impacted by discrete tax charges of $8.0 million, including tax valuation reserves recorded against certain foreign net deferred tax assets in Europe ($11.4 million). See Note 6 of the Notes to Consolidated Financial Statements for a reconciliation of the effective tax rate compared to the U.S. statutory tax rate.

Losses of unconsolidated affiliates primarily represented the Company's equity interest in a commercial entity in Mexico.

SEGMENT RESULTS

Access Equipment

The following table presents the Access Equipment segment results (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ 3,072.1	$ 2,515.1	$ 557.0	22.1%
Cost of sales	2,599.1	2,090.6	508.5	24.3%
Gross income	473.0	424.5	48.5	11.4%
% of sales	*15.4%*	*16.9%*	*-1.5%*	
Operating expenses	223.9	225.9	(2.0)	-0.9%
Operating income	249.1	198.6	50.5	25.4%
% of sales	*8.1%*	*7.9%*	*0.2%*	

Segment net sales increased as a result of improved market demand, led by North America. The third and fourth quarters of fiscal 2020 were impacted by lower market demand due in large part to the economic downturn as a result of the COVID-19 pandemic.

The decrease in segment gross margin was due to unfavorable material & logistics costs (190 basis points), unfavorable product and customer mix (60 basis points) and product liability activity (50 basis points), offset in part by favorable fixed manufacturing absorption as a result of higher production volume (160 basis points).

The increase in segment operating income was primarily due to the impact of higher gross margin associated with higher sales volume ($135 million) and favorable fixed manufacturing absorption as a result of higher production volume ($25 million), offset in part by unfavorable material and logistics costs ($56 million), higher incentive compensation costs ($34 million) and higher product liability activity ($17 million).

Defense

The following table presents the Defense segment results (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ 2,525.6	$ 2,311.5	$ 214.1	9.3%
Cost of sales	2,199.1	2,017.5	181.6	9.0%
Gross income	326.5	294.0	32.5	11.1%
% of sales	*12.9%*	*12.7%*	*0.2%*	
Operating expenses	128.7	105.9	22.8	21.5%
Operating income	197.8	188.1	9.7	5.2%
% of sales	*7.8%*	*8.1%*	*-0.3%*	

Segment net sales increased as a result of higher JLTV and Family of Heavy Tactical Vehicles (FHTV) program volumes and sales of Pratt Miller ($64 million) after its acquisition in January 2021, offset in part by lower Family of Medium Tactical Vehicles (FMTV) program volume. The Company expects domestic JLTV sales will decrease after fiscal 2021.

The increase in segment gross margin was due to lower engineering & product development costs (50 basis points) and improved product mix (30 basis points), offset in part by production inefficiencies (60 basis points).

The increase in segment operating income was primarily a result of the impact of higher gross margin associated with higher sales volume ($28 million), lower engineering & product development costs ($9 million) and favorable mix ($9 million), offset by production inefficiencies ($16 million), higher warranty costs ($6 million), higher incentive compensation costs ($5 million), higher material costs ($4 million) and the amortization of intangibles associated with the Pratt Miller acquisition ($4 million). Changes in estimates on contracts accounted for under the cost-to-cost method increased operating income by $19.4 million and $16.2 million in fiscal 2021 and 2020, respectively.

Fire & Emergency

The following table presents the Fire & Emergency segment results (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ 1,226.6	$ 1,107.0	$ 119.6	10.8%
Cost of sales	959.7	874.3	85.4	9.8%
Gross income	266.9	232.7	34.2	14.7%
% of sales	*21.8%*	*21.0%*	*0.8%*	
Operating expenses	92.7	86.2	6.5	7.5%
Operating income	174.2	146.5	27.7	18.9%
% of sales	*14.2%*	*13.2%*	*1.0%*	

Segment net sales increased due to higher ARFF vehicle volume ($54 million) as a number of multi-unit awards were recognized in fiscal 2021, higher fire truck sales volume ($50 million) and improved pricing ($18 million). Fire truck deliveries in fiscal 2020 were negatively impacted by workforce availability constraints resulting from the COVID-19 pandemic and delivery delays resulting from COVID-19 related travel restrictions that prevented customers from inspecting and accepting trucks.

The increase in segment gross margin was primarily attributable to improved pricing (90 basis points) and favorable product mix (40 basis points), offset in part by higher material costs (60 basis points).

The increase in segment operating income was largely a result of the impact of higher gross margin associated with higher sales volume ($27 million), improved pricing ($18 million), offset in part by higher material costs ($9 million) and higher incentive compensation costs ($7 million).

Commercial

The following table presents the Commercial segment results (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ 937.6	$ 957.8	$ (20.2)	-2.1%
Cost of sales	782.8	788.5	(5.7)	-0.7%
Gross income	154.8	169.3	(14.5)	-8.6%
% of sales	*16.5%*	*17.7%*	*-1.2%*	
Operating expenses	83.8	88.1	(4.3)	-4.9%
Operating income	71.0	81.2	(10.2)	-12.6%
% of sales	*7.6%*	*8.5%*	*-0.9%*	

Segment net sales decreased as a result of the sale of the concrete batch plant business in the fourth quarter of fiscal 2020 ($35 million) and lower package sales, which include both a third-party chassis and a body ($26 million), offset in part by improved refuse collection vehicle ($29 million) and concrete mixer ($20 million) sales. Front-discharge concrete mixer volume was low in fiscal 2020 as a result of the ramp-up of production to a new model. Fiscal 2020 was also impacted by lower market demand due in large part to the economic downturn as a result of the COVID-19 pandemic.

The decrease in gross margin was primarily attributable to unfavorable material & logistics costs (290 basis points) and the absence of a business interruption insurance recovery (130 basis points), offset in part by favorable product mix (160 basis points), lower product liability costs (40 basis points), lower engineering spending (40 basis points) and the absence of restructuring costs (40 basis points).

The decrease in segment operating income was primarily due to unfavorable material costs ($27 million) and the absence of the business interruption insurance recovery ($12 million), offset in part by favorable product mix ($8 million), the absence of restructuring costs ($6 million), lower engineering costs ($5 million), improved pricing ($5 million) and lower product liability costs ($4 million).

Corporate and Intersegment eliminations

The following table presents the corporate costs and intersegment eliminations (in millions):

	Fiscal Year Ended September 30,			
	2021	2020	Change	% Change
Net sales	$ (24.6)	$ (34.6)	$ 10.0	-28.9%
Cost of sales	(24.2)	(34.4)	10.2	-29.7%
Gross income	(0.4)	(0.2)	(0.2)	100.0%
Operating expenses	147.0	125.5	21.5	17.1%
Operating income	(147.4)	(125.7)	(21.7)	17.3%

Corporate operating expenses increased as a result of higher incentive compensation costs ($15 million) and the return of spending related to temporary cost reductions in fiscal 2020 in response to the COVID-19 pandemic ($5 million).

FISCAL 2020 COMPARED WITH FISCAL 2019

The comparison of the fiscal 2020 results with the fiscal 2019 results can be found in the “Management’s Discussion and Analysis” section in the Company’s fiscal 2020 Annual Report on Form 10-K.

LIQUIDITY AND CAPITAL RESOURCES

The Company generates significant capital resources from operating activities, which is the expected primary source of funding for the Company. In addition to cash generated from operations, the Company had other sources of liquidity available at September 30, 2021, including $1.38 billion of cash and cash equivalents and $832.8 million of unused available capacity under the Revolving Credit Facility (as defined in “Liquidity”). Borrowings under the Revolving Credit Facility could, as discussed below, be limited by the financial covenants contained in the Credit Agreement (as defined in “Liquidity”). The Company was in compliance and expects to remain in compliance with all financial covenants contained in the Credit Agreement.

The Company continues to actively monitor its liquidity position and working capital needs and prioritizes capital expenditures related to capacity and strategic investments. The Company remains in a stable overall capital resources and liquidity position that is adequate to meet its projected needs. In March 2020, the Company suspended its share repurchase program in response to business uncertainty resulting from the COVID-19 pandemic. During June 2021, the Company reinitiated the share repurchase program and repurchased over $100 million in shares during the remainder of fiscal 2021. As of September 30, 2021, the Company had approximately 6.5 million shares of Common Stock remaining under the repurchase authorization.

Financial Condition at September 30, 2021

The Company's capitalization was as follows (in millions):

	September 30, 2021	September 30, 2020
Cash and cash equivalents	$ 1,375.8	$ 582.9
Total debt	818.8	823.1
Total shareholders' equity	3,247.8	2,850.7
Total capitalization (debt plus equity)	4,066.6	3,673.8
Debt to total capitalization	20.1%	22.4%

The Company's ratio of debt to total capitalization of 20.1% at September 30, 2021 remained within its targeted range. The Company's goal is to maintain an investment-grade credit rating. The rating agencies periodically update the Company's credit ratings as events or changes in economic conditions occur. At September 30, 2021, the long-term credit ratings assigned to the Company's senior debt securities by the credit rating agencies engaged by the Company were as follows:

Rating Agency	Rating
Fitch Ratings	BBB-
Moody's Investor Services, Inc.	Baa3
Standards & Poor's	BBB

Consolidated days sales outstanding (defined as "Trade Receivables" at quarter end divided by "Net Sales" for the most recent quarter multiplied by 90 days) was 42 days at September 30, 2021, up slightly from 41 days at September 30, 2020. Days sales outstanding for segments other than the Defense segment was 51 days at September 30, 2021, up slightly from 50 days at September 30, 2020. Consolidated inventory turns (defined as "Cost of Sales" on an annualized basis, divided by the average "Inventory" at the past five quarter end periods) increased from 3.8 times at September 30, 2020 to 4.7 times at September 30, 2021 primarily as a result of lower inventory levels in the Access Equipment segment. Inventories in the Access Equipment segment were elevated in fiscal 2020 due to the sudden decrease in customer demand as a result of the COVID-19 pandemic.

Operating Cash Flows

Operating activities provided $1.22 billion of cash during fiscal 2021 compared to $327.3 million during fiscal 2020. The increase in cash provided by operating activities in fiscal 2021 compared to fiscal 2020 was due to the timing of year-end within the COVID-19 pandemic. Sales declined significantly during the third and fourth quarters of fiscal 2020, which drove up finished goods inventory and reduced accounts receivable outstanding at September 30, 2020. At the same time, the Company reduced production at its manufacturing plants, which drove down accounts payable at September 30, 2020. Demand increased significantly in the third and fourth quarter of fiscal 2021, which allowed the Company to reduce finished goods inventory levels while at the same time increasing production. The higher sales and production resulted in an increase in accounts receivable and accounts payable levels at September 30, 2021. Altogether, inventory, accounts receivable and accounts payable provided $573 million more cash in fiscal 2021 than in fiscal 2020. Improved results coming out of the COVID-19 pandemic also resulted in an increase in consolidated net income of $148 million.

Investing Cash Flows

Investing activities used cash of $245.6 million during fiscal 2021 compared to $77.6 million in fiscal 2020. Additions to property, plant and equipment of $104.4 million in fiscal 2021 was generally consistent with fiscal 2020. The Company anticipates that it will spend $275 million on capital expenditures over the twelve month period ended September 30, 2021. The expected increase in capital spending over the next twelve months reflects the set-up of the NGDV manufacturing plant in Spartanburg, SC, for which the Company will receive customer advances. The Company used available cash to fund the acquisition of Pratt Miller in the second quarter of fiscal 2021 and increased its investments in affiliates by $38 million in fiscal 2021. In addition, a customer in the Access Equipment segment purchased a large amount of equipment in the first quarter of fiscal 2020 that the customer was previously renting. This transaction increased proceeds received from the sale of equipment held for rental by $26.8 million in fiscal 2020 as compared to fiscal 2021.

Financing Cash Flows

Financing activities used cash of $180.4 million in fiscal 2021 compared to $115.5 million in fiscal 2020. The increase in cash utilized for financing activities was due to an increase in Common Stock repurchases under the authorization approved by the Company's Board of Directors as the Company paused repurchases in fiscal 2020 to preserve liquidity when the COVID-19 pandemic struck. In fiscal 2021, the Company repurchased 927,934 shares of its Common Stock at an aggregate cost of $107.8 million. In fiscal 2020, the Company repurchased 550,853 shares of its Common Stock at an aggregate cost of $40.8 million.

Liquidity

Senior Credit Agreement

In April 2018, the Company entered into a Second Amended and Restated Credit Agreement with various lenders (the "Credit Agreement"). The Credit Agreement provides for (i) an unsecured revolving credit facility (the "Revolving Credit Facility") that matures in April 2023 with an initial maximum aggregate amount of availability of $850 million and (ii) an unsecured $325 million term loan (the "Term Loan") due in quarterly principal installments of $4.1 million commencing as of September 30, 2019 with a balloon payment of $264.1 million due at maturity in April 2023. As of September 30, 2021, the Company has prepaid all required quarterly principal installments and $39.1 million of the balloon payment on the Term Loan. At September 30, 2021, outstanding letters of credit of $17.2 million reduced available capacity under the Revolving Credit Facility to $832.8 million.

Under the Credit Agreement, the Company is obligated to pay (i) an unused commitment fee ranging from 0.125% to 0.275% per annum of the average daily unused portion of the aggregate revolving credit commitments under the Credit Agreement and (ii) a fee ranging from 0.563% to 1.75% per annum of the maximum amount available to be drawn for each letter of credit issued and outstanding under the Credit Agreement.

Borrowings under the Credit Agreement bear interest at a variable rate equal to (i) LIBOR plus a specified margin, which may be adjusted upward or downward depending on whether certain criteria are satisfied, or (ii) for dollar-denominated loans only, the base rate (which is the highest of (a) the administrative agent's prime rate, (b) the federal funds rate plus 0.50% or (c) the sum of 1% plus one-month LIBOR) plus a specified margin, which may be adjusted upward or downward depending on whether certain criteria are satisfied.

Covenant Compliance

The Credit Agreement contains various restrictions and covenants, including requirements that the Company maintain certain financial ratios at prescribed levels and restrictions, subject to certain exceptions, on the ability of the Company and certain of its subsidiaries to consolidate or merge, create liens, incur additional indebtedness, and dispose of substantially all assets. The Company was in compliance with the financial covenants contained in the Credit Agreement as of September 30, 2021 and expects to be able to meet the financial covenants contained in the Credit Agreement over the next twelve months.

Senior Notes

In May 2018, the Company issued $300.0 million of 4.600% unsecured senior notes due May 15, 2028 (the "2028 Senior Notes"). In February 2020, the Company issued $300.0 million of 3.100% unsecured senior notes due March 1, 2030 (the "2030 Senior Notes") at a discount of $1.2 million. The Company recognized an approximately $8.5 million loss associated with the issuance of the 2030 Senior Notes in fiscal 2020. The 2028 Senior Notes and the 2030 Senior Notes were issued pursuant to an indenture (the "Indenture") between the Company and a trustee. The Indenture contains customary affirmative and negative covenants. The Company has the option to redeem the 2028 and 2030 Senior Notes at any time for a premium.

Refer to Note 15 of the Notes to Consolidated Financial Statements for additional information regarding the Company's debt as of September 30, 2021.

Contractual Obligations

The total amount of gross unrecognized tax benefits, including interest, for uncertain tax positions was $52.4 million as of September 30, 2021. Payment of these obligations would result from settlements with tax authorities. Due to the difficulty in determining the timing of the settlement, these obligations are not included in the summary of the Company's fixed contractual obligations. See Note 6 of the Notes to Consolidated Financial Statements for additional information regarding the Company's unrecognized tax benefits as of September 30, 2021. Following is a summary of the Company's contractual obligations and payments due by period following September 30, 2021 (in millions):

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term debt (including interest)(1)	$ 1,000.8	$ 26.3	$ 274.2	$ 46.2	$ 654.1
Lease obligations	249.7	52.1	72.8	41.6	83.2
Purchase obligations(2)	2,020.5	1,946.7	73.8	—	—
Other long-term liabilities(3)	734.9	51.0	91.5	58.3	534.1
	$ 4,005.9	$ 2,076.1	$ 512.3	$ 146.1	$ 1,271.4

(1) Interest was calculated based upon the interest rate in effect on September 30, 2021.

(2) The amounts for purchase obligations included above represent all obligations to purchase goods or services under agreements that are enforceable and legally binding and that specify all significant terms.

(3) Represents other long-term liabilities on the Company's Consolidated Balance Sheet, including the current portion of these liabilities. The projected timing of cash flows associated with these obligations is based on management's estimates, which are based largely on historical experience. This amount also includes all liabilities under the Company's pension and other postretirement benefit plans. See Note 5 of the Notes to Consolidated Financial Statements for information regarding these liabilities and the plan assets available to satisfy them.

CRITICAL ACCOUNTING POLICIES

The Company's significant accounting policies are described in Note 2 of the Notes to Consolidated Financial Statements. The Company considers the following policy to be the most critical in understanding the judgments that are involved in the preparation of the Company's consolidated financial statements and the uncertainties that could impact the Company's financial condition, results of operations and cash flows.

Revenue Recognition. The Company recognizes revenue in accordance with ASC 606, *Revenue from Contracts with Customers*. Accordingly, revenue is recognized when control of the goods or services promised under a contract is transferred to the customer either at a point in time (e.g., upon delivery) or over time (e.g., as the Company performs under the contract) in an amount that reflects the consideration to which the Company expects to be entitled in exchange for the goods or services. The Company accounts for a contract when it has approval and commitment from both parties, the rights and payment terms of the parties are identified, the contract has commercial substance and collectability of consideration is probable. If collectability is not probable, the sale is deferred until collection becomes probable or payment is received. In fiscal 2021, approximately 38% of the Company's revenues were recognized under the percentage-of-completion accounting method.

Contracts are reviewed to determine whether there is one or multiple performance obligations. A performance obligation is a promise to transfer a distinct good or service to a customer and represents the unit of accounting for revenue recognition. For contracts with multiple performance obligations, the expected consideration (e.g., the transaction price) is allocated to each performance obligation identified in the contract based on the relative standalone selling price of each performance obligation, which is determinable based on observable standalone selling prices or is estimated using an expected cost plus a margin approach. Revenue is then recognized for the transaction price allocated to the performance obligation when control of the promised goods or services underlying the performance obligation is transferred. When the amount of consideration allocated to a performance obligation through this process differs from the invoiced amount, it results in a contract asset or liability. The identification of performance obligations within a contract requires significant judgment.

The following is a description of the primary activities from which the Company generates revenue.

Access Equipment, Fire & Emergency and Commercial segments revenue

The Company derives revenue in the Access Equipment, Fire & Emergency and Commercial segments (non-defense segments) through the sale of machinery, vehicles and related aftermarket parts and services. Customers include distributors and end-users. Contracts with customers generally exist upon the approval of a quote and/or purchase order by the Company and customer. Each contract is also assessed at inception to determine whether it is necessary to combine the contract with other contracts.

The Company's non-defense segments offer various customer incentives within contracts, such as sales and marketing rebates, volume discounts and interest subsidies, some of which are variable and therefore must be estimated by the Company. Transaction prices may also be impacted by rights of return, primarily within the aftermarket parts business, which requires the Company to record a liability and asset representing its rights and obligations in the event a return occurs. The estimated return liability is based on historical experience rates.

Revenue for performance obligations consisting of machinery, vehicles and aftermarket parts (together, "product") is recognized when the customer obtains control of the product, which typically occurs at a point in time, based on the shipping terms within the contract. In the Commercial segment, concrete mixer and refuse collection products are sold on both Company owned chassis and customer owned chassis. When performing work on a customer owned chassis, revenue is recognized over time based on the cost-to-cost method, as the Company is enhancing a customer owned asset.

All non-defense segments offer aftermarket services related to their respective products such as repair, refurbishment and maintenance (together, "services"). The Company generally recognizes revenue on service performance obligations over time using the method that results in the most faithful depiction of transfer of control to the customer. Non-defense segments also offer extended warranty coverage as an option on most products. The Company considers extended warranties to be service-type warranties and therefore a performance obligation. Service-type warranties differ from the Company's standard, or assurance-type warranties, as they are generally separately priced and negotiated as part of the contract and/or provide additional coverage beyond what the customer or customer group that purchases the product would receive under the Company's standard assurance-type warranty. The Company has concluded that its extended warranties are stand-ready obligations to perform and therefore recognizes revenue ratably over the coverage period.

Defense segment revenue

The majority of the Company's Defense segment net sales are derived through long-term contracts with the U.S. government to design, develop, manufacture or modify defense products. These contracts, which also include those under the U.S. Government-sponsored Foreign Military Sales (FMS) program, accounted for approximately 95% of Defense segment revenue in fiscal 2021. Contracts with Defense segment customers are generally fixed-price or cost-reimbursement type contracts. Under fixed-price contracts, the price paid to the Company is generally not adjusted to reflect the Company's actual costs except for costs incurred as a result of contract modifications. Certain fixed-price contracts include an incentive component under which the price paid to the Company is subject to adjustment based on the actual costs incurred. Under cost-reimbursement contracts, the price paid to the Company is determined based on the allowable costs incurred to perform plus a fee. The fee component of cost-reimbursement contracts can be fixed based on negotiations at contract inception or can vary based on performance against target costs established at the time of contract inception. The Company also designs, develops, manufactures or modifies defense products for international customers through Direct Commercial Sale contracts. The Defense segment supports its products through the sale of aftermarket parts and services. Aftermarket contracts can range from long-term supply agreements to ad hoc purchase orders for replacement parts.

The Company evaluates the promised goods and services within Defense segment contracts at inception to identify performance obligations. The goods and services in Defense segment contracts are typically not distinct from one another as they are generally customized and have complex inter-relationships and the Company is responsible for overall management of the contract. As a result, Defense segment contracts are typically accounted for as a single performance obligation. The Defense segment provides standard warranties for its products for periods that typically range from one to two years. These assurance-type warranties typically cannot be purchased separately and do not meet the criteria to be considered a performance obligation.

The Company determines the transaction price for each contract at inception based on the consideration that it expects to receive for the goods and services promised under the contract. This determination is made based on the Company’s current rights, excluding the impact of any subsequent contract modifications (including unexercised options) until they become legally enforceable. Contract modifications frequently occur within the Defense segment. The Company evaluates each modification to identify changes that impact price or scope of its contracts, which are then assessed to determine if the modification should be accounted for as an adjustment to an existing contract or as a separate contract. Contract modifications within the Defense segment are generally accounted for as a cumulative effect adjustment to existing contracts as they are not distinct from the goods and services within the existing contract.

For Defense segment contracts that include a variable component of the sale price, the Company estimates variable consideration. Variable consideration is included within the contract’s transaction price to the extent it is probable that a significant reversal of revenue will not occur. The Company evaluates its estimates of variable consideration on an ongoing basis and any adjustments are accounted for as changes in estimates in the period identified. Common forms of variable consideration within Defense segment contracts include cost reimbursement contracts that contain incentives, customer reimbursement rights and regulatory or customer negotiated penalties tied to contract performance.

The Company recognizes revenue on Defense segment contracts as performance obligations are satisfied and control of the underlying goods and services is transferred to the customer. In making this evaluation, the Defense segment considers contract terms, payment terms and whether there is an alternative future use for the good or service. Through this process the Company has concluded that substantially all of the Defense segment’s performance obligations, including a majority of performance obligations for aftermarket goods and services, transfer control to the customer over time. For U.S. government and FMS program contracts, this determination is supported by the inclusion of clauses within contracts that allow the customer to terminate a contract at its convenience. When the clause is present, the Company is entitled to compensation for the work performed through the date of notification at a price that reflects actual costs plus a reasonable margin in exchange for transferring its work in process to the customer. For contracts that do not contain termination for convenience provisions, the Company is generally able to support the over time transfer of control determination as a result of the customized nature of its goods and services, which create assets without an alternative use and contractual rights.

When transfer of control is not determined to be continuous over the term of the contract, the Company initially defers contract costs that relate to the contract or anticipated contract, as they generate or enhance assets that will be utilized to satisfy performance obligations in the future and are expected to be recovered. Deferred contract costs are subsequently amortized on a systematic basis consistent with the pattern of transfer of the goods and services to which they relate. Unlike the JLTV and FMTV A2 contracts, for which the Company has concluded control of the performance obligations transfers continuously over the contract terms, the Company has concluded that control of the performance obligation for the USPS contract transfers during the production phase of the contract. As a result, the Company has recognized $34.8 million of deferred contract costs related to the USPS contract at September 30, 2021 consisting of engineering costs, setup costs and tooling costs. The Company anticipates the production phase of the contract will begin in 2023. The USPS contract contains milestone billings provisions, under which the Company billed and received $39.6 million of advance payments from the customer as of September 30, 2021.

CRITICAL ACCOUNTING ESTIMATES

“Management’s Discussion and Analysis of Financial Condition and Results of Operations” is based on the Company’s Consolidated Financial Statements, which have been prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP). The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and judgments that affect reported amounts and related disclosures. On an ongoing basis, management evaluates and updates its estimates. Management employs judgment in making its estimates but they are based on historical experience and currently available information and various other assumptions that the Company believes to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily available from other sources. Actual results could differ from those estimates.

Management believes that its judgment is applied consistently and produces financial information that fairly depicts the results of operations for all periods presented.

Estimate-at-Completion (EAC). The Company has concluded that control of substantially all of the Defense segment's performance obligations transfers to the customer continuously and therefore revenue is recognized over time. The Defense segment recognizes revenue on its performance obligations that are satisfied over time by measuring progress using the cost-to-cost method of percentage-of-completion because it best depicts the transfer of control to the customer. Under the cost-to-cost method of percentage-of-completion, the Defense segment measures progress based on the ratio of costs incurred to date to total estimated costs for the performance obligations. Due to the size and nature of these contracts, the estimation of total revenues and costs is highly complicated and judgmental. The Company must make assumptions regarding expected increases in wages and employee benefits, productivity and availability of labor, material costs and allocated fixed costs. Each contract is evaluated at contract inception to identify risks and estimate revenue and costs. In performing this evaluation, the Defense segment considers risks of contract performance such as technical requirements, schedule, duration and key contract dependencies. These considerations are then factored into the Company's estimated revenue and costs. If a loss is expected on a performance obligation, the complete estimated loss is recorded in the period in which the loss is identified. Preliminary contract estimates are subject to change throughout the duration of the contract as additional information becomes available that impacts risks and estimated revenue and costs. Changes to production costs, overhead rates, learning curve and/or supplier performance can also impact these estimates. These estimates are highly judgmental, particularly the non-production costs on the JLTV and FMTV A2 contracts. The Company recognizes changes in estimated sales or costs and the resulting profit or loss on a cumulative basis. In addition, as contract modifications (e.g., new orders) are received, they are evaluated to determine if they represent a separate contract or the impact on the existing contract. As of September 30, 2021, the estimated remaining costs on the JLTV and FMTV A2 contracts represent the majority of the total estimated costs to complete in the Defense segment.

Changes in estimates on contracts accounted for under the cost-to-cost method on prior year revenues increased Defense segment operating income by $19.4 million in fiscal 2021 and $16.2 million in fiscal 2020.

NEW ACCOUNTING STANDARDS

See Note 2 of the Notes to Consolidated Financial Statements for a discussion of the impact of new accounting standards on the Company's consolidated financial statements.

CUSTOMERS AND BACKLOG

Sales to the U.S. government comprised approximately 33% of the Company's net sales in fiscal 2021. No other single customer accounted for more than 10% of the Company's net sales for this period. A substantial majority of the Company's net sales are derived from the fulfillment of customer orders that are received prior to commencing production.

The Company's backlog as of September 30, 2021 increased 76.4% to $8.08 billion compared to $4.58 billion at September 30, 2020. Access Equipment segment backlog increased 652.1% to $2.76 billion at September 30, 2021 compared to $366.7 million at September 30, 2020 as demand rebounded following the re-opening of economies and as a result of elevated customer fleet ages. The Access Equipment segment also faced significant supply chain disruptions as the economy rebounded from the COVID-19 pandemic, which limited production in the second half of fiscal 2021 and contributed to the higher backlog. Defense segment backlog increased 18.3% to $3.36 billion at September 30, 2021 compared to $2.84 billion at September 30, 2020 primarily due to the initial order from the USPS for the NGDV program, offset in part by shipments under the JLTV contract. Fire & Emergency segment backlog increased 27.6% to $1.39 billion at September 30, 2021 compared to $1.09 billion at September 30, 2020 due to strong demand for fire trucks coming out of the COVID-19 pandemic as municipal budgets have been more resilient than the Company previously expected. Although Fire & Emergency segment backlog remained strong, orders softened for ARFF vehicles due to the impact of the COVID-19 pandemic on airport budgets. Commercial segment backlog increased 101.1% to $569.4 million at September 30, 2021 compared to $283.1 million at September 30, 2020 due to high demand for the Company's new front-discharge concrete mixer and improved market demand for refuse collection vehicles and concrete mixers as demand returned coming out of the COVID- 19 pandemic.

Reported backlog excludes purchase options and announced orders for which definitive contracts have not been executed. Backlog information and comparisons thereof as of different dates may not be accurate indicators of future sales or the ratio of the Company's future sales to the DoD versus its sales to other customers. Approximately 24% of the Company's September 30, 2021 backlog is not expected to be filled in the twelve months ended September 30, 2022.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to market risk from changes in interest rates, certain commodity prices and foreign currency exchange rates. To reduce the risk from changes in foreign currency exchange and interest rates, the Company selectively uses financial instruments. All hedging transactions are authorized and executed pursuant to clearly defined policies and procedures, which strictly prohibit the use of financial instruments for speculative purposes.

Interest Rate Risk. The Company's earnings exposure related to adverse movements in interest rates is primarily derived from outstanding floating rate debt instruments that are indexed to short-term market interest rates. In this regard, changes in U.S. and off-shore interest rates affect interest payable on the Company's borrowings under its Credit Agreement. Based on debt outstanding at September 30, 2021, a 100 basis point increase or decrease in the average cost of the Company's variable rate debt would increase or decrease annual pre-tax interest expense by approximately $2.3 million.

The table below provides information about the Company's debt obligations, which are sensitive to changes in interest rates (dollars in millions):

	Expected Maturity Date							
	2022	2023	2024	2025	2026	Thereafter	Total	Fair Value
Liabilities								
Long-term debt:								
Variable rate ($US)	$ —	$ 225.0	$ —	$ —	$ —	$ —	$ 225.0	$ 225.0
Average interest rate	1.4168%	1.7428%	—%	—%	—%	—%	1.5563%	
Fixed rate ($US)	$ —	$ —	$ —	$ —	$ —	$ 600.0	$ 600.0	$ 661.2
Average interest rate	3.8500%	3.8500%	3.8500%	3.8500%	3.8500%	3.5831%	3.7606%	

Commodity Price Risk. The Company is a purchaser of certain commodities, including steel, aluminum and composites. In addition, the Company is a purchaser of components and parts containing various commodities, including steel, aluminum, rubber and others which are integrated into the Company's end products. The Company generally buys these commodities and components based upon market prices that are established with the vendor as part of the purchase process. The Company does not use commodity financial instruments to hedge commodity prices.

The Company generally obtains firm quotations from its significant components' suppliers for its orders under firm, fixed-price contracts in its Defense segment. In the Company's Access Equipment, Fire & Emergency and Commercial segments, the Company generally attempts to obtain firm pricing from most of its suppliers, consistent with backlog requirements and/or forecasted annual sales. To the extent that commodity prices increase and the Company does not have firm pricing from its suppliers, or its suppliers are not able to honor such prices, then the Company may experience margin declines to the extent it is not able to increase selling prices of its products.

Foreign Currency Risk. The Company's operations consist of manufacturing in the U.S., Mexico, Canada, France, Australia, the United Kingdom and China and sales and limited vehicle body mounting activities on five continents. International sales comprised approximately 15% of overall net sales in fiscal 2021, of which approximately 52% involved exports from the U.S. The majority of export sales in fiscal 2021 were denominated in U.S. dollars. As a result of the manufacture and sale of the Company’s products in foreign markets, the Company’s earnings are affected by fluctuations in the value of foreign currencies in which certain of the Company’s transactions are denominated as compared to the value of the U.S. dollar. The Company’s operating results are principally exposed to changes in exchange rates between the U.S. dollar and the European currencies, primarily the Euro and the U.K. pound sterling, changes between the U.S. dollar and the Australian dollar, changes between the U.S. dollar and the Brazilian real, changes between the U.S. dollar and the Mexican peso, changes between the U.S. dollar and the Chinese renminbi and changes between the U.S. dollar and the Canadian dollar.

ITEM 8. FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Oshkosh Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Oshkosh Corporation and subsidiaries (the "Company") as of September 30, 2021 and 2020, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended September 30, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2021, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of September 30, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 16, 2021 expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Defense Segment Revenue – Refer to Note 3 to the financial statements

Critical Audit Matter Description

The Company's Defense segment recognized revenue on long-term contracts primarily with the U.S. Government for the production of goods, the provision of services, or a combination of both totaling $2,482.1 million for the year ended September 30, 2021. The Company's firm-fixed long-term contracts are typically accounted for as a single performance obligation because the goods and services are generally customized and have complex inter-relationships and the Company is responsible for overall management of the contract. The Company recognizes revenue on Defense segment contracts as performance obligations are satisfied and control of the underlying goods and services is transferred to the customer. The Company measures progress based on the ratio of costs incurred to date to total estimated costs for the performance obligation under the cost-to-cost method of percentage-of-completion.

The estimated costs to complete for the Joint Light Tactical Vehicles (JLTV) contract represents the majority of the total estimated costs to complete in the Defense segment as of September 30, 2021. Given the complexity of this contract and the length of the contract term, together with the significant judgments necessary to estimate costs used to measure progress on this contract, auditing the estimates of costs for this contract required extensive audit effort and a high degree of auditor judgment, especially given the risks of contract performance, such as labor and material costs, schedule, and duration.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the estimated costs for the JLTV contract included the following, among others:

- We tested the effectiveness of controls over revenue recognized over time, including management's controls over estimated costs.
- We evaluated the appropriateness and consistency of the methods and assumptions used by management to develop the estimates of costs to completion.
- We tested the mathematical accuracy of management's estimates of costs to completion.
- We evaluated the estimates of costs to completion by performing the following:
    - Observed completed vehicles and trailers on a sample basis to evaluate the progress to completion.
    - Compared costs incurred to date to the costs management estimated to be incurred to date.
    - Evaluated management's ability to achieve the estimates of costs to completion by performing corroborating inquiries with the Company's project managers and engineers, and comparing the estimates to management's work plans, engineering specifications, and supplier contracts.
- We evaluated management's ability to accurately estimate costs to completion by comparing actual results to management's historical estimates and actual results on similar completed contracts.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin
November 16, 2021

We have served as the Company's auditor since 2002.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Oshkosh Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Oshkosh Corporation and subsidiaries (the "Company") as of September 30, 2021, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended September 30, 2021, of the Company and our report dated November 16, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin
November 16, 2021

OSHKOSH CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(Dollars in millions, except per share amounts)

	Fiscal Year Ended September 30,		
	2021	2020	2019
Net sales	$ 7,737.3	$ 6,856.8	$ 8,382.0
Cost of sales	6,516.5	5,736.5	6,864.6
Gross income	1,220.8	1,120.3	1,517.4
Operating expenses:			
Selling, general and administrative	666.5	620.6	683.5
Amortization of purchased intangibles	9.6	11.0	36.9
Total operating expenses	676.1	631.6	720.4
Operating income	544.7	488.7	797.0
Other income (expense):			
Interest expense	(48.2)	(59.3)	(54.4)
Interest income	3.5	7.5	6.8
Miscellaneous, net	(2.1)	2.2	1.3
Income before income taxes and losses of unconsolidated affiliates	497.9	439.1	750.7
Provision for income taxes	25.2	112.8	171.3
Income before losses of unconsolidated affiliates	472.7	326.3	579.4
Equity in losses of unconsolidated affiliates	—	(1.8)	—
Net income	$ 472.7	$ 324.5	$ 579.4
Earnings per share:			
Basic	$ 6.90	$ 4.76	$ 8.30
Diluted	6.83	4.72	8.21

The accompanying notes are an integral part of these financial statements

OSHKOSH CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Dollars in millions)

	Fiscal Year Ended September 30,		
	2021	2020	2019
Net income	$ 472.7	$ 324.5	$ 579.4
Other comprehensive income (loss), net of tax:			
Employee pension and postretirement benefits	61.7	(26.5)	(49.4)
Currency translation adjustments	3.8	30.4	(36.3)
Change in fair value of derivative instruments	1.9	(0.7)	—
Total other comprehensive income (loss), net of tax	67.4	3.2	(85.7)
Comprehensive income	$ 540.1	$ 327.7	$ 493.7

The accompanying notes are an integral part of these financial statements

OSHKOSH CORPORATION
CONSOLIDATED BALANCE SHEETS
(Dollars in millions, except share and per share amounts)

	September 30, 2021	September 30, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 1,375.8	$ 582.9
Receivables, net	1,017.3	857.6
Unbilled receivables, net	421.1	483.6
Inventories, net	1,267.4	1,505.4
Income taxes receivable	278.1	45.4
Other current assets	58.2	60.9
Total current assets	4,417.9	3,535.8
Property, plant and equipment, net	595.9	565.9
Goodwill	1,052.0	1,009.5
Purchased intangible assets, net	466.8	418.2
Other long-term assets	359.0	286.5
Total assets	$ 6,891.6	$ 5,815.9
Liabilities and Shareholders' Equity		
Current liabilities:		
Revolving credit facility and current maturities of long-term debt	$ —	$ 5.2
Accounts payable	860.4	577.8
Customer advances	654.3	491.4
Payroll-related obligations	215.1	150.8
Income taxes payable	64.9	14.7
Other current liabilities	357.0	345.2
Total current liabilities	2,151.7	1,585.1
Long-term debt, less current maturities	818.8	817.9
Other long-term liabilities	673.3	562.2
Commitments and contingencies		
Shareholders' equity:		
Preferred Stock ($.01 par value; 2,000,000 shares authorized; none issued and outstanding)	—	—
Common Stock ($.01 par value; 300,000,000 shares authorized; 75,101,465 shares issued)	0.7	0.7
Additional paid-in capital	804.6	800.9
Retained earnings	3,129.3	2,747.7
Accumulated other comprehensive loss	(131.0)	(198.4)
Common Stock in treasury, at cost (7,089,782 and 6,950,298 shares, respectively)	(555.8)	(500.2)
Total shareholders' equity	3,247.8	2,850.7
Total liabilities and shareholders' equity	$ 6,891.6	$ 5,815.9

The accompanying notes are an integral part of these financial statements

OSHKOSH CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(Dollars in millions, except per share amounts)

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Common Stock in Treasury at Cost	Total
Balance at September 30, 2018	$ 0.7	$ 814.8	$ 2,007.9	$ (106.8)	$ (203.1)	$ 2,513.5
Effect of adopting new Accounting Standards Updates (ASU):						
Revenue recognition (ASU 2014-09)	—	—	(60.4)	—	—	(60.4)
Tax accounting for intra-entity asset transfers (ASU 2016-16)	—	—	44.5	—	—	44.5
Tax impact of U.S. tax reform on Accumulated Other Comprehensive Income (ASU 2018-02)	—	—	9.1	(9.1)	—	—
Balance at October 1, 2018	0.7	814.8	2,001.1	(115.9)	(203.1)	2,497.6
Net income	—	—	579.4	—	—	579.4
Employee pension and postretirement benefits, net of tax of $14.9	—	—	—	(49.4)	—	(49.4)
Currency translation adjustments	—	—	—	(36.3)	—	(36.3)
Cash dividends ($1.08 per share)	—	—	(75.5)	—	—	(75.5)
Repurchases of Common Stock	—	—	—	—	(350.1)	(350.1)
Exercise of stock options	—	(10.4)	—	—	21.7	11.3
Stock-based compensation expense	—	29.0	—	—	—	29.0
Payment of stock-based restricted and performance shares	—	(24.6)	—	—	24.6	—
Shares tendered for taxes on stock-based compensation	—	—	—	—	(7.3)	(7.3)
Other	—	(0.3)	—	—	1.4	1.1
Balance at September 30, 2019	0.7	808.5	2,505.0	(201.6)	(512.8)	2,599.8
Net income	—	—	324.5	—	—	324.5
Employee pension and postretirement benefits, net of tax of $8.6	—	—	—	(26.5)	—	(26.5)
Currency translation adjustments	—	—	—	30.4	—	30.4
Cash dividends ($1.20 per share)	—	—	(81.8)	—	—	(81.8)
Repurchases of Common Stock	—	—	—	—	(40.8)	(40.8)
Exercise of stock options	—	(11.6)	—	—	37.7	26.1
Stock-based compensation expense	—	29.3	—	—	—	29.3
Payment of stock-based restricted and performance shares	—	(23.0)	—	—	23.0	—
Shares tendered for taxes on stock-based compensation	—	—	—	—	(10.7)	(10.7)
Other	—	(2.3)	—	(0.7)	3.4	0.4
Balance at September 30, 2020	0.7	800.9	2,747.7	(198.4)	(500.2)	2,850.7
Net income	—	—	472.7	—	—	472.7
Employee pension and postretirement benefits, net of tax of $19.4	—	—	—	61.7	—	61.7
Currency translation adjustments	—	—	—	3.8	—	3.8
Cash dividends ($1.32 per share)	—	—	(90.4)	—	—	(90.4)
Repurchases of Common Stock	—	—	—	—	(107.8)	(107.8)
Exercise of stock options	—	0.2	—	—	42.6	42.8
Stock-based compensation expense	—	27.2	—	—	—	27.2
Payment of stock-based restricted and performance shares	—	(23.3)	—	—	23.3	—
Shares tendered for taxes on stock-based compensation	—	—	—	—	(14.3)	(14.3)
Other	—	(0.4)	(0.7)	1.9	0.6	1.4
Balance at September 30, 2021	$ 0.7	$ 804.6	$ 3,129.3	$ (131.0)	$ (555.8)	$ 3,247.8

The accompanying notes are an integral part of these financial statements

OSHKOSH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in millions)

	Fiscal Year Ended September 30,		
	2021	2020	2019
Operating activities:			
Net income	$ 472.7	$ 324.5	$ 579.4
Depreciation and amortization	104.0	104.2	115.2
Stock-based compensation expense	27.2	29.3	29.0
Deferred income taxes	88.6	22.4	10.4
Gain on sale of assets	(3.6)	(11.8)	(3.3)
Debt extinguishment	—	8.5	—
Other non-cash adjustments	(0.1)	(1.2)	1.1
Changes in operating assets and liabilities:			
Receivables, net	(128.3)	266.7	173.2
Unbilled receivables, net	62.8	65.8	(239.8)
Inventories, net	246.7	(246.7)	(111.0)
Other current assets	8.1	(17.4)	(5.8)
Accounts payable	252.1	(222.5)	12.8
Customer advances	162.6	112.3	(90.2)
Payroll-related obligations	61.2	(32.3)	(7.6)
Income taxes payable	(156.7)	(52.1)	36.2
Other current liabilities	6.4	(37.1)	45.6
Other long-term assets and liabilities	17.9	14.7	23.1
Total changes in operating assets and liabilities	532.8	(148.6)	(163.5)
Net cash provided by operating activities	1,221.6	327.3	568.3
Investing activities:			
Additions to property, plant and equipment	(104.4)	(112.3)	(147.6)
Additions to equipment held for rental	(10.4)	(17.9)	(26.6)
Acquisition of business, net of cash acquired	(110.6)	—	—
Proceeds from sale of property, plant and equipment	1.2	2.4	3.1
Proceeds from sale of equipment held for rental	16.3	38.8	12.0
Investments in unconsolidated affiliates	(41.0)	(2.9)	0.5
Other investing activities	3.3	14.3	5.6
Net cash used by investing activities	(245.6)	(77.6)	(153.0)
Financing activities:			
Proceeds from issuance of debt (original maturities greater than three months)	—	303.9	—
Repayments of debt (original maturities greater than three months)	(5.2)	(300.0)	—
Debt issuance costs	—	(9.6)	—
Repurchases of Common Stock	(122.1)	(51.5)	(357.4)
Dividends paid	(90.4)	(81.8)	(75.5)
Proceeds from exercise of stock options	42.8	26.1	11.3
Other financing activities	(5.5)	(2.6)	—
Net cash used by financing activities	(180.4)	(115.5)	(421.6)
Effect of exchange rate changes on cash	(2.7)	0.3	0.1
Increase (decrease) in cash and cash equivalents	792.9	134.5	(6.2)
Cash and cash equivalents at beginning of year	582.9	448.4	454.6
Cash and cash equivalents at end of year	$ 1,375.8	$ 582.9	$ 448.4
Supplemental disclosures:			
Cash paid for interest	$ 45.2	$ 55.9	$ 53.6
Cash paid for income taxes	153.9	157.2	117.6
Proceeds from income tax refunds	26.6		
Cash paid for operating lease liabilities	51.4	55.8	
Operating right-of-use assets obtained	92.5	23.3	

The accompanying notes are an integral part of these financial statements

1. Nature of Operations

Oshkosh Corporation and its subsidiaries (the “Company”) are leading designers and manufacturers of a wide variety of essential specialty vehicles and vehicle bodies for the Americas and global markets. “Oshkosh” refers to Oshkosh Corporation, not including its subsidiaries. The Company sells its products into four principal markets — access equipment, defense, fire & emergency and commercial. The Company’s access equipment business is conducted through its wholly-owned subsidiary, JLG Industries, Inc. and its wholly-owned subsidiaries (JLG) and JerrDan Corporation (JerrDan). The Company’s defense business is conducted principally through its wholly-owned subsidiary, Oshkosh Defense, LLC (Oshkosh Defense) and its wholly-owned subsidiary, Pratt & Miller Engineering & Fabrication, LLC (Pratt Miller). The Company’s fire & emergency business is principally conducted through its wholly-owned subsidiaries Pierce Manufacturing Inc. (Pierce), Oshkosh Airport Products, LLC (Airport Products) and Kewaunee Fabrications, LLC (Kewaunee). The Company’s commercial business is principally conducted through its wholly-owned subsidiaries, McNeilus Companies, Inc. (McNeilus), London Machinery Inc. and its wholly-owned subsidiary (London), Iowa Mold Tooling Co., Inc. (IMT) and Oshkosh Commercial Products, LLC (Oshkosh Commercial).

In July 2020, the Company sold its interest in Concrete Equipment Company, Inc. and its wholly-owned subsidiary (CON-E-CO) to Astec, Inc. CON-E-CO had sales of $35.0 million and $32.7 million in fiscal 2020 and 2019, respectively.

On October 1, 2020, the Company transferred operational responsibility of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment. As a result, the results of the airport snow removal vehicle business have been included within the Defense segment for financial reporting purposes. Historical information has been reclassified to include the airport snow removal vehicle business in the Defense segment for all periods presented.

On January 19, 2021, the Company acquired all of the outstanding membership interests of Pratt Miller, which specializes in advanced engineering, technology and innovation across the motorsports and multiple ground vehicle markets, for $111.4 million, including $110.6 million in cash and contingent cash consideration of $1.4 million, reduced by a receivable of $0.6 million for certain post-closing working capital adjustments. The contingent cash consideration is required to be paid if the revenue earned by the acquired business exceeds certain targets over a three year future period.

The operating results of Pratt Miller have been included in the Company’s Consolidated Statements of Income from the date of acquisition. Pratt Miller had sales of $64.3 million from the acquisition date to September 30, 2021. Pro forma results of operations have not been presented as the effect of the acquisition is not material to any periods presented.

The following table summarizes the fair values of the assets acquired and liabilities assumed as of the date of acquisition (in millions):

Assets Acquired:		
Current assets, excluding cash of $4.9	$	15.4
Property, plant and equipment		7.8
Goodwill		44.4
Purchased intangible assets		57.9
Other long-term assets		5.8
Total assets		131.3
Liabilities Assumed:		
Current liabilities		15.1
Long-term liabilities		4.8
Total liabilities		19.9
Net assets acquired	$	111.4

As of September 30, 2021, the valuation of intangible assets consisted of $25.6 million of assets subject to amortization with an estimated 5.6 year average life and $32.3 million of assets with an indefinite life. The purchase price, net of cash acquired, was allocated based on the estimated fair value of the assets acquired and liabilities assumed at the date of acquisition with the excess purchase price of $44.4 million recorded as goodwill, representing expected synergies of the combined entity, all of which was allocated to the Defense segment. Approximately $43.9 million of the goodwill is deductible for income tax purposes. The Company expensed $1.1 million of transaction costs related to the acquisition in fiscal 2021.

2. Summary of Significant Accounting Policies

Principles of Consolidation and Presentation — The consolidated financial statements include the accounts of Oshkosh and all of its majority-owned or controlled subsidiaries and are prepared in conformity with generally accepted accounting principles in the United States of America (U.S. GAAP). All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates — The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition — The Company recognizes revenue in accordance with Accounting Standards Codification (ASC) Topic 606, *Revenue from Contracts with Customers*. Accordingly, revenue is recognized when control of the goods or services promised under a contract are transferred to the customer in an amount that reflects the consideration to which the Company expects to be entitled in exchange for the goods or services.

The Company has elected to apply the following practical expedients and accounting policy elections when determining revenue from contracts with customers and capitalization of related costs:

- Shipping and handling costs incurred after control of the related product has transferred to the customer are considered costs to fulfill the related promise and are included in "Cost of sales" in the Consolidated Statements of Income when incurred or when the related product revenue is recognized, whichever is earlier.
- Except for the Fire & Emergency segment, the Company has elected to not adjust revenue for the effects of a significant finance component when the timing difference between receipt of payment and recognition of revenue is less than one year.
- Sales and similar taxes that are collected from customers are excluded from the transaction price.
- The Company has elected to expense incremental costs to obtain a contract when the amortization period of the related asset is expected to be less than one year.
- The Company has elected to not disclose unsatisfied performance obligations with an original contract duration of one year or less.

See Note 3 of the Notes to Consolidated Financial Statements for information regarding the Company's revenue recognition practices.

Assurance Warranty — Provisions for estimated assurance warranties are recorded in cost of sales at the time of sale and are periodically adjusted to reflect actual experience. The amount of warranty liability accrued reflects management's best estimate of the expected future cost of honoring Company obligations under the warranty plans. Historically, the cost of fulfilling the Company's warranty obligations has principally involved replacement parts, labor and sometimes travel for any field retrofit campaigns. The Company's estimates are based on historical experience, the extent of pre-production testing, the number of units involved and the extent of features/components included in product models. Also, each quarter, the Company reviews actual warranty claims experience to determine if there are systemic defects that would require a field campaign.

Research and Development and Similar Costs — Except for customer sponsored research and development costs incurred pursuant to contracts (generally with the U.S. Department of Defense (DoD)), research and development costs are expensed as incurred and included in cost of sales. Research and development costs charged to expense totaled $103.1 million, $103.9 million and $99.0 million during fiscal 2021, 2020 and 2019, respectively. Customer sponsored research and development costs incurred pursuant to contracts are accounted for as contract costs.

Advertising — Advertising costs are included in selling, general and administrative expense and are expensed as incurred. These expenses totaled $17.7 million, $16.0 million and $24.9 million in fiscal 2021, 2020 and 2019, respectively.

Stock-Based Compensation — The Company recognizes stock-based compensation using the fair value provisions prescribed by ASC Topic 718, *Compensation — Stock Compensation*. Accordingly, compensation costs for awards of stock-based compensation settled in shares are determined based on the fair value of the share-based instrument at the time of grant and are recognized as expense over the vesting period of the share-based instrument, net of estimated forfeitures. See Note 4 of the Notes to Consolidated Financial Statements for information regarding the Company's stock-based incentive plans.

Debt Financing Costs — Debt issuance costs on term debt are amortized using the interest method over the term of the debt. Deferred financing costs on lines of credit are amortized on a straight-line basis over the term of the related lines of credit. Amortization expense was $1.6 million, $3.6 million (including $1.8 million of amortization related to early debt retirement) and $1.6 million in fiscal 2021, 2020 and 2019, respectively.

Income Taxes — Deferred income taxes are provided to recognize temporary differences between the financial reporting basis and the income tax basis of the Company's assets and liabilities using currently enacted tax rates and laws. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment.

The Company evaluates uncertain income tax positions in a two-step process. The first step is recognition, where the Company evaluates whether an individual tax position has a likelihood of greater than 50% of being sustained upon examination based on the technical merits of the position, including resolution of any related appeals or litigation processes. For tax positions that are currently estimated to have a less than 50% likelihood of being sustained, zero tax benefit is recorded. For tax positions that have met the recognition threshold in the first step, the Company performs the second step of measuring the benefit to be recorded. The actual benefits ultimately realized may differ from the Company's estimates. In future periods, changes in facts and circumstances and new information may require the Company to change the recognition and measurement estimates with regard to individual tax positions. Changes in recognition and measurement estimates are recorded in results of operations and financial position in the period in which such changes occur.

Fair Value of Financial Instruments — Based on Company estimates, the carrying amounts of cash equivalents, receivables, unbilled receivables, accounts payable and accrued liabilities approximated fair value as of September 30, 2021 and 2020. See Notes 5, 13, 15, 22 and 23 of the Notes to Consolidated Financial Statements for additional fair value information.

Cash and Cash Equivalents — The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash equivalents at September 30, 2021 consisted principally of bank deposits and money market instruments.

Receivables — Receivables consist of amounts billed and currently due from customers. The Company extends credit to customers in the normal course of business and maintains an allowance for estimated losses resulting from the inability or unwillingness of customers to make required payments. The accrual for expected losses is based on an estimate of the losses inherent in amounts billed, pools of receivables with similar risk characteristics, existing and future economic conditions, reasonable and supportable forecast that affects the collectability of the related receivable and any specific customer collection issues the Company has identified. Account balances are charged against the allowance when the Company determines it is probable the receivable will not be recovered.

Finance Receivables: Finance receivables represent sales-type leases resulting from the sale of the Company's products and the purchase of finance receivables from lenders pursuant to customer defaults under program agreements with finance companies. Finance receivables originated by the Company generally include a residual value component. Residual values are determined based on the expectation that the underlying equipment will have a minimum fair market value at the end of the lease term. This residual value accrues to the Company at the end of the lease. The Company uses its experience and knowledge as an original equipment manufacturer and participant in end markets for the related products along with third-party studies to estimate residual values. The Company monitors these values for impairment on a continuous basis and reflects any resulting reductions in value in current earnings.

Delinquency is the primary indicator of credit quality of finance receivables. The Company maintains a general allowance for finance receivables considered doubtful of future collection based upon individual, and pools of receivables with similar risk characteristics, estimates of inherent losses. Additional allowances are established based upon the Company's evaluation of the quality of the finance receivables, including the length of time the receivables are past due, past experience of collectability and underlying current and future economic conditions. In circumstances where the Company believes collectability is no longer reasonably assured, a specific allowance is recorded to reduce the net recognized receivable to the amount reasonably expected to be collected. The terms of the finance agreements generally give the Company the ability to take possession of the underlying collateral. The Company may incur losses in excess of recorded allowances if the financial condition of its customers were to deteriorate or the full amount of any anticipated proceeds from the sale of the collateral supporting its customers' financial obligations is not realized.

The Company does not accrue interest income on finance receivables in circumstances where the Company believes collectability is no longer reasonably assured. Any cash payments received on nonaccrual finance receivables are applied first to the principal balances. The Company does not resume accrual of interest income until the customer has shown that it is capable of meeting its financial obligations by making timely payments over a sustained period of time. The Company determines past due or delinquency status based upon the due date of the receivable.

Unbilled Receivables — Unbilled receivables consist of unbilled costs and accrued profits related to revenues on contracts with customers that have been recognized for accounting purposes but not yet billed to customers. In the Company's Defense segment, amounts are billed as work progresses in accordance with agreed-upon contractual terms, either upon achievement of contractual milestones (e.g. acceptance of the vehicle) or at periodic intervals (e.g., biweekly or monthly). Generally, billing occurs subsequent to revenue recognition, resulting in unbilled receivables (contract assets).

Concentration of Credit Risk — Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash equivalents, trade accounts receivable, unbilled receivables and guarantees of certain customers' obligations under deferred payment contracts and lease purchase agreements.

The Company maintains cash and cash equivalents, and other financial instruments, with various major financial institutions. The Company performs periodic evaluations of the relative credit standing of these financial institutions and limits the amount of credit exposure with any institution.

Concentration of credit risk with respect to trade accounts and lease receivables is limited due to the large number of customers and their dispersion across many geographic areas. However, a significant amount of trade accounts receivable are with the U.S. government, with rental companies globally, with companies in the ready-mix concrete industry, with municipalities and with several large waste haulers in the United States. The Company continues to monitor credit risk associated with its trade receivables.

Inventories — Inventories are stated at the lower of cost or market. Cost has been determined using the last-in, first-out (LIFO) method for 85% and 83% of the Company's inventories at September 30, 2021 and 2020, respectively. For the remaining inventories, cost has been determined using the first-in, first-out (FIFO) method.

Property, Plant and Equipment — Property, plant and equipment are recorded at cost. Depreciation expense is recognized over the estimated useful lives of the respective assets using straight-line and accelerated methods. The estimated useful lives range from ten to forty years for buildings and improvements, from four to twenty-five years for machinery and equipment and from three to ten years for software and related costs. The Company capitalizes interest on borrowings during the active construction period of major capital projects. All capitalized interest has been added to the cost of the underlying assets and is amortized over the useful lives of the assets.

Goodwill — Goodwill reflects the cost of an acquisition in excess of the aggregate fair value assigned to identifiable net assets acquired. Goodwill is not amortized; however, it is assessed for impairment at least annually and as triggering events or "indicators of potential impairment" occur. The Company performs its annual impairment test as of July 1 of each fiscal year. The Company evaluates the recoverability of goodwill by estimating the fair value of the businesses to which the goodwill relates. Estimated cash flows and related goodwill are grouped at the reporting unit level. A reporting unit is an operating segment or, under certain circumstances, a component of an operating segment. When the fair value of the reporting unit is less than the carrying value of the reporting unit, a further analysis is performed to measure and recognize the amount of the impairment loss, if any. Impairment losses, limited to the carrying value of goodwill, represent the excess of the carrying amount of a reporting unit's goodwill over the implied fair value of that goodwill.

In evaluating the recoverability of goodwill, it is necessary to estimate the fair value of the reporting units. The Company evaluates the recoverability of goodwill utilizing the income approach and the market approach. The Company weighted the income approach more heavily (75%) as the Company believes the income approach more accurately considers long-term fluctuations in the U.S. and European construction markets than the market approach. Under the income approach, the Company determines fair value based on estimated future cash flows discounted by an estimated weighted-average cost of capital, which reflects the overall level of inherent risk of a reporting unit and the rate of return an outside investor would expect to earn. Estimated future cash flows are based on the Company's internal projection models, industry projections and other assumptions deemed reasonable by management. Rates used to discount estimated cash flows correspond to the Company's cost of capital, adjusted for risk where appropriate, and are dependent upon interest rates at a point in time. There are inherent uncertainties related to these factors and management's judgment in applying them to the analysis of goodwill impairment. Under the market approach, the Company derives the fair value of its reporting units based on revenue and earnings multiples of comparable publicly-traded companies. It is possible that assumptions underlying the impairment analysis will change in such a manner that impairment in value may occur in the future. See Note 11 of the Notes to Consolidated Financial Statements for information regarding the Company's annual impairment testing.

Impairment of Long-Lived Assets — Property, plant and equipment, right-of-use ("ROU") lease assets and amortizable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets.

Non-amortizable trade names are assessed for impairment at least annually and as triggering events or "indicators of potential impairment" occur. The Company performs its annual impairment test in the fourth quarter of its fiscal year. The Company evaluates the potential impairment by estimating the fair value of the non-amortizing intangible assets using the "relief from royalty" method. When the fair value of the non-amortizable trade name is less than the carrying value of the trade name, a further analysis is performed to measure and recognize the amount of the impairment loss, if any. Impairment losses, limited to the carrying value of the non-amortizable trade name, represent the excess of the carrying amount over the implied fair value of that non-amortizable trade name.

Customer Advances — Customer advances include amounts received in advance of the completion of vehicles in the Fire & Emergency, Commercial and Defense segments. Advances with the Fire & Emergency segment bear interest at fixed rates that approximate the prime rate at the time of the advance.

Other Long-Term Liabilities — Other long-term liabilities are comprised principally of the portions of the Company's pension liability, other post-employment benefit liability, tax liability, accrued warranty, accrued product liability, customer advances and lease liabilities that are not expected to be settled in the subsequent twelve month period.

Foreign Currency Translation — All balance sheet accounts have been translated into U.S. dollars using the exchange rates in effect at the balance sheet date. Income statement amounts have been translated using the average exchange rate during the period in which the transactions occurred. Resulting translation adjustments are included in "Accumulated other comprehensive loss." Foreign currency transaction gains or losses are included in "Miscellaneous, net" in the Consolidated Statements of Income. The Company recorded a net foreign currency transaction gain of $2.7 million in fiscal 2021, a net foreign currency transaction loss of $2.7 million in fiscal 2020 and a net foreign currency transaction gain of $2.1 million in fiscal 2019.

Derivative Financial Instruments — The Company recognizes all derivative financial instruments, such as foreign exchange contracts, in the consolidated financial statements at fair value regardless of the purpose or intent for holding the instrument. Changes in the fair value of derivative financial instruments are either recognized periodically in income or in equity as a component of comprehensive income depending on whether the derivative financial instrument qualifies for hedge accounting, and if so, whether it qualifies as a fair value hedge or cash flow hedge. Generally, changes in fair values of derivatives accounted for as fair value hedges are recorded in income along with the portions of the changes in the fair values of the hedged items that relate to the hedged risks. Changes in fair values of derivatives accounted for as cash flow hedges, to the extent they are effective as hedges, are recorded in other comprehensive income, net of deferred income taxes. Changes in fair value of derivatives not qualifying as hedges are reported in income. Cash flows from derivatives that are accounted for as cash flow or fair value hedges are included in the Consolidated Statements of Cash Flows in the same category as the item being hedged.

Reclassifications — Certain reclassifications have been made to the fiscal 2020 and 2019 financial statements to conform with the fiscal 2021 presentation. Income taxes receivable, which were previously presented in "Other current assets", are now presented as a separate line within the September 30, 2021 Consolidated Balance Sheet to improve the comparability between periods. Foreign currency transaction (gains) losses, which were presented as a separate line item within the Consolidated Statements of Cash Flows for fiscal 2020 and 2019, are now presented within "Other non-cash adjustments". Investments in unconsolidated affiliates, which were previously presented within changes in "Other investing activities" within the Consolidated Statements of Cash Flows for fiscal 2020 and 2019, are now presented as a separate line item to improve the comparability between periods.

Recent Accounting Pronouncements — In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments. The standard requires a change in the measurement approach for credit losses on financial assets measured on an amortized cost basis from an incurred loss method to an expected loss method, thereby eliminating the requirement that a credit loss be considered probable to impact the valuation of a financial asset measured on an amortized cost basis. The standard requires the measurement of expected credit losses to be based on relevant information about past events, including historical experience, current conditions, and a reasonable and supportable forecast that affects the collectability of the related financial asset. The Company adopted ASU 2016-13 on October 1, 2020 following the modified retrospective method of transition. The adoption of ASU 2016-13 did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Intangibles - Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment. The standard simplifies the measurement of goodwill impairment by eliminating the requirement that an entity compute the implied fair value of goodwill based on the fair values of its assets and liabilities to measure impairment. Instead, goodwill impairment will be measured as the difference between the fair value of the reporting unit and the carrying value of the reporting unit. The standard also clarifies the treatment of the income tax effect of tax deductible goodwill when measuring goodwill impairment loss. The Company adopted ASU 2017-04 on October 1, 2020. The adoption of ASU 2017-04 did not have an impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The standard aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The Company adopted ASU 2018-15 on October 1, 2020 on a prospective basis. The adoption of ASU 2018-15 did not have a material impact on the Company's consolidated financial statements.

Standards not yet adopted

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740), Simplifying the Accounting for Income Taxes. The standard simplifies the accounting for income taxes by removing certain exceptions to the general principles in Accounting Standards Codification (ASC) 740 such as recognizing deferred taxes for equity investments, the incremental approach to performing intraperiod tax allocation and calculating income taxes in interim periods. The standard also simplifies accounting for income taxes under U.S. GAAP by clarifying and amending existing guidance, including the recognition of deferred taxes for goodwill, the allocation of taxes to members of a consolidated group and requiring that an entity reflect the effect of enacted changes in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The Company will be required to adopt ASU 2019-12 as of October 1, 2021. The Company does not expect the adoption of ASU 2019-12 will have a material impact on the Company's consolidated financial statements.

3. Revenue Recognition

The Company recognizes revenue in accordance with ASC 606. Accordingly, revenue is recognized when control of the goods or services promised under a contract are transferred to the customer either at a point in time (e.g., upon delivery) or over time (e.g., as the Company performs under the contract) in an amount that reflects the consideration to which the Company expects to be entitled in exchange for the goods or services. The Company accounts for a contract when it has approval and commitment from both parties, the rights and payment terms of the parties are identified, the contract has commercial substance and collectability of consideration is probable. If collectability is not probable, the sale is deferred until collection becomes probable or payment is received.

Contracts are reviewed to determine whether there is one or multiple performance obligations. A performance obligation is a promise to transfer a distinct good or service to a customer and represents the unit of accounting for revenue recognition. For contracts with multiple performance obligations, the expected consideration (e.g., the transaction price) is allocated to each performance obligation identified in the contract based on the relative standalone selling price of each performance obligation, which is determinable based on observable standalone selling prices or is estimated using an expected cost plus a margin approach. Revenue is then recognized for the transaction price allocated to the performance obligation when control of the promised goods or services underlying the performance obligation is transferred. When the amount of consideration allocated to a performance obligation through this process differs from the invoiced amount, it results in a contract asset or liability. The identification of performance obligations within a contract requires significant judgment.

The following is a description of the primary activities from which the Company generates revenue.

Access Equipment, Fire & Emergency and Commercial segments revenue

The Company derives revenue in the Access Equipment, Fire & Emergency and Commercial segments (non-defense segments) through the sale of machinery, vehicles and related aftermarket parts and services. Customers include distributors, equipment rental providers and end-users. Contracts with customers generally exist upon the approval of a quote and/or purchase order by the Company and customer. Each contract is also assessed at inception to determine whether it is necessary to combine the contract with other contracts.

The Company's non-defense segments offer various customer incentives within contracts, such as sales and marketing rebates, volume discounts and interest subsidies, some of which are variable and therefore must be estimated by the Company. Transaction prices may also be impacted by rights of return, primarily within the aftermarket parts business, which requires the Company to record a liability and asset representing its rights and obligations in the event a return occurs. The estimated return liability is based on historical experience rates.

Revenue for performance obligations consisting of machinery, vehicle and aftermarket parts (together, “product”) is recognized when the customer obtains control of the product, which typically occurs at a point in time, based on the shipping terms within the contract. In the Commercial segment, refuse collection and concrete mixer products are sold on both Company owned chassis and customer owned chassis. When performing work on a customer owned chassis, revenue is recognized over time based on the cost-to-cost method, as the Company is enhancing a customer owned asset.

All non-defense segments offer aftermarket services related to their respective products such as repair, refurbishment and maintenance (together, “services”). The Company generally recognizes revenue on service performance obligations over time using the method that results in the most faithful depiction of transfer of control to the customer. Non-defense segments also offer extended warranty coverage as an option on most products. The Company considers extended warranties to be service-type warranties and therefore a performance obligation. Service-type warranties differ from the Company’s standard, or assurance-type warranties, as they are generally separately priced and negotiated as part of the contract and/or provide additional coverage beyond what the customer or customer group that purchases the product would receive under an assurance-type warranty. The Company has concluded that its extended warranties are stand-ready obligations to perform and therefore recognizes revenue ratably over the coverage period. The Company also provides a standard warranty on its products and services at no additional cost to its customers in most instances. See Note 16 of the Notes to Consolidated Financial Statements for further discussion on product assurance warranties.

Defense segment revenue

The majority of the Company’s Defense segment sales are derived through long-term contracts with the U.S. government to design, develop, manufacture or modify defense products. These contracts, which also include those under the U.S. Government-sponsored Foreign Military Sales (FMS) program, accounted for approximately 95% of Defense segment revenue in fiscal 2021. Contracts with Defense segment customers are generally fixed-price or cost-reimbursement type contracts. Under fixed-price contracts, the price paid to the Company is generally not adjusted to reflect the Company’s actual costs except for costs incurred as a result of contract modifications. Certain fixed-price contracts include an incentive component under which the price paid to the Company is subject to adjustment based on the actual costs incurred. Under cost-reimbursement contracts, the price paid to the Company is determined based on the allowable costs incurred to perform plus a fee. The fee component of cost-reimbursement contracts can be fixed based on negotiations at contract inception or can vary based on performance against target costs established at the time of contract inception. The Company also designs, develops, manufactures or modifies defense products for international customers through Direct Commercial Sale contracts. The Defense segment supports its products through the sale of aftermarket parts and services. Aftermarket contracts can range from long-term supply agreements to ad hoc purchase orders for replacement parts.

The Company evaluates Defense segment contracts at inception to identify performance obligations. The goods and services in Defense segment contracts are typically not distinct from one another as they are generally customized and have complex inter-relationships and the Company is responsible for overall management of the contract. As a result, Defense segment contracts are typically accounted for as a single performance obligation. The Defense segment provides standard warranties for its products for periods that typically range from one to two years. These assurance-type warranties typically cannot be purchased separately and do not meet the criteria to be considered a performance obligation. See Note 16 of the Notes to Consolidated Financial Statements for further discussion on product assurance warranties.

The Company determines the transaction price for each contract at inception based on the consideration that it expects to receive for the goods and services promised under the contract. This determination is made based on the Company’s current rights, excluding the impact of any subsequent contract modifications (including unexercised options) until they become legally enforceable. Contract modifications frequently occur within the Defense segment. The Company evaluates each modification to identify changes that impact price or scope of its contracts, which are then assessed to determine if the modification should be accounted for as an adjustment to an existing contract or as a separate contract.

Contract modifications within the Defense segment are generally accounted for as a cumulative effect adjustment to existing contracts as they are not distinct from the goods and services within the existing contract.

For Defense segment contracts that include a variable component of the sale price, the Company estimates variable consideration. Variable consideration is included within the contract's transaction price to the extent it is probable that a significant reversal of revenue will not occur. The Company evaluates its estimates of variable consideration on an ongoing basis and any adjustments are accounted for as changes in estimates in the period identified. Common forms of variable consideration within Defense segment contracts include cost reimbursement contracts that contain incentives, customer reimbursement rights and regulatory or customer negotiated penalties tied to contract performance.

The Company recognizes revenue on Defense segment contracts as performance obligations are satisfied and control of the underlying goods and services is transferred to the customer. In making this evaluation, the Defense segment considers contract terms, payment terms and whether there is an alternative future use for the good or service. Through this process the Company has concluded that substantially all of the Defense segment's performance obligations, including a majority of performance obligations for aftermarket goods and services, transfer control to the customer over time. For U.S. government and FMS program contracts, this determination is supported by the inclusion of clauses within contracts that allow the customer to terminate a contract at its convenience. When the clause is present, the Company is entitled to compensation for the work performed through the date of notification at a price that reflects actual costs plus a reasonable margin in exchange for transferring its work in process to the customer. For contracts that do not contain termination for convenience provisions, the Company is generally able to support the over time transfer of control determination as a result of the customized nature of its goods and services, which create assets without an alternative use and contractual rights. When control is not determined to be continuous over the term of the contract, the Company initially defers contract costs that relate to the contract or anticipated contract, generate or enhance assets that will be utilized in satisfying future performance obligations and are expected to be recovered. Deferred contract costs are subsequently amortized on a systematic basis consistent with the pattern of the transfer of the goods and services to which it relates.

The Defense segment recognizes revenue on its performance obligations that are satisfied over time by measuring progress using the cost-to-cost method of percentage-of-completion because it best depicts the transfer of control to the customer. Under the cost-to-cost method of percentage-of-completion, the Defense segment measures progress based on the ratio of costs incurred to date to total estimated costs for the performance obligation. The Company recognizes changes in estimated sales or costs and the resulting profit or loss on a cumulative basis. Cumulative estimate-at-completion adjustments represent the cumulative effect of the changes on prior periods. If a loss is expected on a performance obligation, the complete estimated loss is recorded in the period in which the loss is identified.

There is significant judgment involved in estimating sales and costs within the Defense segment. Each contract is evaluated at contract inception to identify risks and estimate revenue and costs. In performing this evaluation, the Defense segment considers risks of contract performance such as technical requirements, schedule, duration and key contract dependencies. These considerations are then factored into the Company's estimated revenue and costs. Preliminary contract estimates are subject to change throughout the duration of the contract as additional information becomes available that impacts risks and estimated revenue and costs. In addition, as contract modifications (e.g., new orders) are received, the additional units are factored into the overall contract estimate of costs and transaction price.

Contract adjustments resulted in changes within Defense segment results as follows (in millions, except for per share amounts):

	Fiscal Year Ended September 30,		
	2021	2020	2019
Net sales	$ 13.1	$ 31.2	$ 63.9
Operating income	19.4	16.2	44.7
Net income	14.9	12.4	34.5
Diluted earnings per share	0.21	0.18	0.49

Disaggregation of Revenue

The table below presents consolidated net sales disaggregated by segment and timing of revenue recognition (in millions):

	Fiscal Year Ended September 30, 2021					
	Access Equipment	**Defense**	**Fire & Emergency**	**Commercial**	**Corporate and Intersegment Eliminations**	**Total**
Point in time	$ 3,006.9	$ 43.5	$ 1,205.9	$ 532.8	$ (25.1)	$ 4,764.0
Over time	65.2	2,482.1	20.7	404.8	0.5	2,973.3
	$ 3,072.1	$ 2,525.6	$ 1,226.6	$ 937.6	$ (24.6)	$ 7,737.3

	Fiscal Year Ended September 30, 2020					
	Access Equipment	**Defense (a)**	**Fire & Emergency (a)**	**Commercial**	**Corporate and Intersegment Eliminations (a)**	**Total**
Point in time	$ 2,437.5	$ 34.8	$ 1,085.1	$ 556.7	$ (36.0)	$ 4,078.1
Over time	77.6	2,276.7	21.9	401.1	1.4	2,778.7
	$ 2,515.1	$ 2,311.5	$ 1,107.0	$ 957.8	$ (34.6)	$ 6,856.8

	Fiscal Year Ended September 30, 2019					
	Access Equipment	**Defense (a)**	**Fire & Emergency (a)**	**Commercial**	**Corporate and Intersegment Eliminations (a)**	**Total**
Point in time	$ 4,001.6	$ 45.4	$ 1,192.5	$ 591.7	$ (30.1)	$ 5,801.1
Over time	78.1	2,052.1	18.2	430.5	2.0	2,580.9
	$ 4,079.7	$ 2,097.5	$ 1,210.7	$ 1,022.2	$ (28.1)	$ 8,382.0

(a) Results have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

See Note 24 of the Notes to Consolidated Financial Statements for further disaggregated sales information.

Contract Assets and Contract Liabilities

The Company is generally entitled to bill its customers upon satisfaction of its performance obligations, with the exception of its long-term contracts in the Defense segment which typically allow for billing upon acceptance of the finished good, payments received from customers received in advance of performance and extended warranties that are billed in advance of the warranty coverage period. Customer payment is usually received shortly after billing and payment terms generally do not exceed one year. See Note 8 of the Notes to Consolidated Financial Statements for additional information on the Company's receivable balances.

With the exception of the Fire & Emergency segment, the Company's contracts typically do not contain a significant financing component. In the Fire & Emergency segment, customers earn interest on customer advances at a rate determined in a separate financing transaction between the Fire & Emergency segment and the customer at contract inception. Interest charges of $17.2 million, $15.6 million and $14.5 million were recorded in "Interest expense" in the Consolidated Statements of Income for fiscal 2021, 2020 and 2019, respectively.

The timing of billing does not always match the timing of revenue recognition. In instances where a customer pays consideration in advance or when the Company is entitled to bill a customer in advance of recognizing the related revenue, the Company records a contract liability within "Customer advances" in the Consolidated Balance Sheet. The Company reduces contract liabilities when the Company transfers control of promised goods and services. Contract liabilities consisted of the following (in millions):

	September 30,	
	2021	2020
Customer advances	$ 654.3	$ 491.4
Other current liabilities	82.0	59.5
Other long-term liabilities	175.2	53.7
Total contract liabilities	$ 911.5	$ 604.6

	Fiscal Year Ended September 30,		
	2021	2020	2019
Beginning liabilities recognized in revenue	$ 521.7	$ 441.0	$ 530.9

In instances where the Company recognizes revenue prior to having an unconditional right to payment, the Company records a contract asset within "Unbilled receivables, net" in the Consolidated Balance Sheet. The Company reduces contract assets when the Company has an unconditional right to payment. The Company periodically assesses its contract assets for impairment. Contract assets and liabilities are determined on a net basis for each contract. The Company did not record any impairment losses on contract assets during fiscal 2021, 2020 or 2019.

The Defense segment recognizes an asset for costs incurred on existing and highly probable anticipated contracts prior to the transfer of control of goods or services to the customer. Deferred contract related costs of $50.6 million at September 30, 2021 are included in "Other long-term assets" within the Company's Consolidated Balance Sheet, of which $4.8 million related to costs for anticipated contracts, $42.3 million related to engineering costs, $2.2 million related to setup costs and $1.3 million related to tooling.

The Company offers a variety of service-type warranties, including optionally priced extended warranty programs. Outstanding balances related to service-type warranties are included within contract liabilities disclosed above. Revenue related to service-type warranties is deferred until after the expiration of the standard warranty period. The revenue is then recognized in income over the term of the extended warranty period in proportion to the costs that are expected to be incurred. Changes in the Company's service-type warranties were as follows (in millions):

	Fiscal Year Ended September 30,	
	2021	2020
Balance at beginning of period	$ 64.4	$ 68.2
Deferred revenue for new service-type warranties	26.2	23.6
Amortization of deferred revenue	(25.0)	(27.9)
Foreign currency translation	0.2	0.5
Balance at end of period	$ 65.8	$ 64.4

Classification of service-type warranties in the Consolidated Balance Sheets consisted of the following (in millions):

	September 30,	
	2021	2020
Other current liabilities	$ 21.8	$ 24.7
Other long-term liabilities	44.0	39.7
	$ 65.8	$ 64.4

Remaining Performance Obligations

As of September 30, 2021, the Company had unsatisfied performance obligations for contracts with an original duration greater than one year totaling $5.3 billion, of which $3.5 billion is expected to be satisfied and revenue recognized in fiscal 2022, $1.6 billion is expected to be satisfied and revenue recognized in fiscal 2023 and $235.3 million is expected to be satisfied and revenue recognized beyond fiscal 2023.

4. Stock-Based Compensation

In February 2017, the Company's shareholders approved the 2017 Incentive Stock and Awards Plan (the "2017 Stock Plan"). The 2017 Stock Plan replaced the 2009 Incentive Stock and Awards Plan (as amended, the "2009 Stock Plan"). While no new awards will be granted under the 2009 Stock Plan, awards previously made under the 2009 Stock Plan that were outstanding as of the approval date of the 2017 Stock Plan will remain outstanding and continue to be governed by the provisions of that plan. At September 30, 2021, the Company had reserved 4,426,671 shares of Common Stock available for issuance to provide for the exercise of outstanding stock options and the issuance of Common Stock under incentive compensation awards, including awards issued prior to the effective date of the 2017 Stock Plan.

Under the 2017 Stock Plan, officers, directors, including non-employee directors, and employees of the Company may be granted stock options, stock appreciation rights (SAR), performance shares, performance units, shares of Common Stock, restricted stock, restricted stock units (RSU) or other stock-based awards. The 2017 Stock Plan provides for the granting of options to purchase shares of the Company's Common Stock at not less than the fair market value of such shares on the date of grant. Stock options granted under the 2017 Stock Plan generally become exercisable in equal installments over a three-year period, beginning with the first anniversary of the date of grant of the option, unless a shorter or longer duration is established by the Human Resources Committee of the Board of Directors at the time of the option grant. Stock options terminate not more than ten years from the date of grant. The exercise price of stock options and the market value of restricted stock unit awards are determined based on the closing market price of the Company's Common Stock on the date of grant. Except to the extent vesting is accelerated upon early retirement and except for performance shares and performance units, vesting is based solely on continued service as an employee of the Company. The Company recognizes stock-based compensation expense over the requisite service period for vesting of an award, or to an employee's eligible retirement date, if earlier and applicable.

Information related to the Company's equity-based compensation plans in effect as of September 30, 2021 was as follows:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options or Vesting of Share Awards	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders	1,115,679	$ 77.96	3,310,992
Equity compensation plans not approved by security holders	—	—	—
	1,115,679	$ 77.96	3,310,992

Total stock-based compensation expense was as follows (in millions):

	Fiscal Year Ended September 30,		
	2021	2020	2019
Stock options	$ 1.8	$ 6.8	$ 6.9
Stock awards (shares and units)	19.3	15.8	15.0
Performance share awards	6.1	6.7	7.1
Cash-settled stock appreciation rights	1.1	0.2	0.4
Cash-settled restricted stock unit awards	1.5	0.7	0.6
Total stock-based compensation cost	29.8	30.2	30.0
Income tax benefit recognized for stock-based compensation	(4.4)	(3.6)	(4.9)
Stock-based compensation cost, net of tax	$ 25.4	$ 26.6	$ 25.1

Stock Options — A summary of the Company's stock option activity is as follows:

	Fiscal Year Ended September 30,					
	2021		2020		2019	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding, beginning of year	1,083,402	$ 74.38	1,328,390	$ 62.62	1,268,984	$ 57.03
Granted	—	—	301,025	90.28	372,450	66.09
Forfeited	(8,065)	81.40	(40,965)	79.00	(24,175)	72.88
Expired	(3,999)	86.59	(5,869)	84.25	(8,721)	76.92
Exercised	(599,662)	71.38	(499,179)	52.18	(280,148)	40.62
Outstanding, end of year	471,676	77.96	1,083,402	74.38	1,328,390	62.62
Exercisable, end of year	251,049	74.73	537,241	68.16	709,826	55.11

Stock options outstanding and exercisable as of September 30, 2021 were as follows (in millions, except share and per share amounts):

	Outstanding				Exercisable			
Exercise Prices	Options	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Options	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value
$40.00 - $60.00	14,838	1.1	$ 41.52	$ 0.9	14,838	1.1	$ 41.52	$ 0.9
$60.01 - $80.00	201,069	6.0	66.28	7.3	122,137	5.2	66.40	4.4
$80.01 - $100.00	255,769	7.6	89.25	3.3	114,074	6.9	87.97	1.6
	471,676	6.7	77.96	$ 11.5	251,049	5.7	74.73	$ 6.9

The aggregate intrinsic values in the tables above represent the total pre-tax intrinsic value (difference between the Company's closing stock price on the last trading day of fiscal 2021 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on September 30, 2021. This amount changes based on the fair market value of the Company's Common Stock.

The total intrinsic value of options exercised for fiscal 2021, 2020 and 2019 was $22.6 million, $18.5 million and $10.2 million, respectively. The actual income tax benefit realized totaled $3.5 million, $4.3 million and $2.4 million for those same periods.

As of September 30, 2021, total unrecognized compensation cost related to outstanding stock options was $0.7 million, net of estimated forfeitures, which the Company expects to be recognized over a weighted-average period of 1.1 years.

The Company uses the Black-Scholes valuation model to value stock options utilizing the following weighted-average assumptions:

	Fiscal Year Ended September 30,	
Options Granted During	2020	2019
Assumptions:		
Expected term (in years)	5.4	5.4
Expected volatility	34.10%	33.40%
Risk-free interest rate	1.63%	2.87%
Expected dividend yield	1.37%	1.50%

The expected option term represents the period of time that the options granted are expected to be outstanding and was based on historical experience. The Company used its historical stock prices over the expected term as the basis for the Company's volatility assumption. The assumed risk-free interest rates were based on five-year U.S. Treasury rates in effect at the time of grant. The expected dividend yield was based on average actual yield on the ex-dividend date. The weighted-average per share grant date fair values for stock option grants during fiscal 2020 and 2019 were $26.16 and $20.00, respectively.

Stock Awards — A summary of the Company's stock award activity is as follows:

	Fiscal Year Ended September 30,					
	2021		2020		2019	
	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value
Nonvested, beginning of year	346,808	$ 79.44	411,510	$ 72.66	332,473	$ 69.15
Granted	307,025	82.80	183,725	87.82	278,175	69.98
Forfeited	(36,545)	78.81	(27,076)	80.57	(13,610)	71.17
Vested	(222,400)	80.39	(221,351)	73.64	(185,528)	62.47
Nonvested, end of year	394,888	81.58	346,808	79.44	411,510	72.66

The total fair value of shares vested during fiscal 2021, 2020 and 2019 was $21.0 million, $18.6 million and $12.3 million, respectively. The actual income tax benefit realized totaled $2.0 million, $3.1 million and $2.1 million for those same periods.

As of September 30, 2021, total unrecognized compensation cost related to stock awards was $11.6 million, net of estimated forfeitures, which the Company expects to be recognized over a weighted-average period of 2.0 years.

Performance Share Awards — A summary of the Company's performance share awards activity is as follows:

	Fiscal Year Ended September 30,					
	2021		2020		2019	
	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value
Nonvested, beginning of year	110,450	$ 89.54	124,750	$ 84.10	98,375	$ 89.11
Granted	86,550	86.09	55,325	109.09	73,950	74.70
Forfeited	(52,099)	90.03	(16,615)	92.88	(1,600)	93.92
Performance adjustments	63,843	80.45	33,941	87.44	31,768	71.43
Vested	(136,269)	80.73	(86,951)	92.73	(77,743)	76.12
Nonvested, end of year	72,475	93.62	110,450	89.54	124,750	84.10

Performance share awards generally vest over a three-year service period following the grant date. Performance shares vest under two separate measurement criteria. The first type vest only if the Company's total shareholder return (TSR) over the three year term of the awards compares favorably to that of a comparator group of companies. The second type vest only if the Company's return on invested capital (ROIC) over the vesting period compares favorably to that of a comparator group of companies. Potential payouts range from zero to 200% of the target awards and changes from target amounts are reflected as performance adjustments. Actual payouts for TSR performance share awards vesting in fiscal 2021, 2020 and 2019 were 185%, 111% and 126% of target levels, respectively. Actual payout for the ROIC performance share award vesting in fiscal 2021, 2020 and 2019 were 200%, 200%, and 200% of target levels. In October 2021, 55,819 shares of Common Stock were issued from treasury for unpaid performance shares that vested in fiscal 2021.

The total fair value of performance shares vested during fiscal 2021, 2020 and 2019 was $15.4 million, $6.9 million and $5.8 million, respectively. The actual income tax benefit realized totaled $0.5 million, $0.2 million and $1.4 million for the same periods.

As of September 30, 2021, the Company had $5.3 million of unrecognized compensation expense related to performance share awards, which will be recognized over a weighted-average period of 1.9 years.

The grant date fair values of the TSR performance share awards were estimated using a Monte Carlo simulation model utilizing the following weighted-average assumptions:

Total Shareholder Return Performance Shares Granted During	Fiscal Year Ended September 30,		
	2021	2020	2019
Assumptions:			
Expected term (in years)	2.87	2.87	2.86
Expected volatility	40.33%	31.16%	32.72%
Risk-free interest rate	0.23%	1.59%	2.80%

The Company used its historical stock prices as the basis for the Company's volatility assumption. The assumed risk-free interest rates were based on U.S. Treasury rates in effect at the time of grant. The expected term was based on the vesting period. The weighted-average fair value used to record compensation expense for TSR performance share awards granted during fiscal 2021, 2020 and 2019 was $94.86, $137.74 and $85.89 per award, respectively.

The grant date fair value of the ROIC awards were determined based on the Company's stock price at the time of the grant and the anticipated awards expected to vest. Compensation expense is recorded ratably over the vesting period based on the amount of award that is expected to be earned under the plan formula, adjusted each reporting period based on current information.

Cash-Settled Stock Appreciation Rights — The Company did not grant employees any cash-settled SARs in fiscal 2021. In fiscal 2020 and 2019, the Company granted employees 14,875 and 18,250 cash-settled SARs, respectively. Each SAR award represents the right to receive cash equal to the excess of the per share price of the Company's Common Stock on the date that a participant exercises such right over the grant date price of the Company's Common Stock. Compensation cost for SARs is remeasured at each reporting period based on the estimated fair value on the date of grant using the Black Scholes option-pricing model, utilizing assumptions similar to stock option awards and is recognized as an expense over the requisite service period. The total value of SARs exercised during fiscal 2021, 2020 and 2019 was $0.5 million, $0.7 million and $0.6 million, respectively.

Cash-Settled Restricted Stock Units — In fiscal 2021, 2020 and 2019 the Company granted employees 14,550, 7,925 and 8,350 cash-settled RSUs, respectively. Each RSU award provides recipients the right to receive cash equal to the value of a share of the Company's Common Stock at predetermined vesting dates. Compensation cost for RSUs is remeasured at each reporting period and is recognized as an expense over the requisite service period. The total value of RSUs vested during fiscal 2021, 2020 and 2019 was $0.7 million, $0.8 million and $0.4 million, respectively.

5. Employee Benefit Plans

Defined Benefit Plans — Oshkosh and certain of its subsidiaries sponsor multiple defined benefit pension plans for certain employees providing services to Oshkosh, Oshkosh Defense, Airport Products, Oshkosh Commercial and Pierce. The benefits provided are based primarily on average compensation, years of service and date of birth. Hourly plans are generally based on years of service and a benefit dollar multiplier. The Company periodically amends the plans, including changing the benefit dollar multipliers and other revisions. In December 2012, salaried participants in the pension plans no longer receive credit, other than for vesting purposes, for eligible earnings. In December 2013, the Pierce pension plan was amended to close participation in the plan for new production employees. In October 2016, the Oshkosh Defense hourly defined benefit pension plan was closed to new production employees. The Company commenced a plan to terminate its defined benefit plan for salaried participants. As a result, the plan is being presented on a liquidation basis in fiscal 2021.

Determination of defined benefit pension and postretirement plan obligations and their associated expenses requires the use of actuarial valuations to estimate the benefits that employees earn while working, as well as the present value of those benefits. The Company uses the services of independent actuaries to assist with these calculations. The Company determines the discount rate used each year based on the rate of return currently available on a portfolio of high-quality fixed-income investments with a maturity that is consistent with the projected benefit payout period. The Company's long-term rate of return on assets is based on consideration of historical and forward-looking returns and the current asset allocation strategy.

Supplemental Executive Retirement Plans (SERP) — The Company maintains defined benefit and defined contribution SERPs for certain executive officers of Oshkosh and its subsidiaries. In fiscal 2013, the Oshkosh defined benefit SERP was amended to freeze benefits under the plan and certain executive officers became eligible for the new Oshkosh defined contribution SERP. At the same time, the Company established the Trust to fund obligations under the Oshkosh SERPs. As of September 30, 2021, the Trust held assets of $21.3 million. The Trust assets are subject to claims of the Company's creditors. The Trust assets are included in "Other current assets" and "Other long-term assets" in the Consolidated Balance Sheets. The Company recognized $2.6 million, $1.6 million and $1.6 million of expense under the Oshkosh defined contribution SERP in fiscal 2021, 2020 and 2019, respectively.

Postretirement Medical Plans — Oshkosh and certain of its subsidiaries sponsor multiple postretirement benefit plans for Oshkosh Defense, JLG, and Kewaunee hourly employees, retirees and their spouses. The plans generally provide health benefits based on years of service and date of birth. These plans are unfunded.

Changes in benefit obligations and plan assets, as well as the funded status of the Company's defined benefit pension plans and postretirement benefit plans as of and for the fiscal years ended September 30, 2021 and 2020, were as follows (in millions):

	Pension Benefits		Postretirement Health and Other	
	2021	2020	2021	2020
Accumulated benefit obligation at September 30	$ 594.2	$ 601.1	$ 53.3	$ 53.3
Change in projected benefit obligation				
Benefit obligation at October 1	$ 613.6	$ 546.5	$ 53.3	$ 51.4
Service cost	11.5	10.1	2.2	3.5
Interest cost	16.4	17.1	1.2	1.6
Actuarial loss (gain)	(22.6)	44.0	(1.1)	5.4
Plan amendments	—	9.8	—	(6.5)
Benefits paid	(16.4)	(15.8)	(2.3)	(2.1)
Currency translation adjustments	1.7	1.9	—	—
Benefit obligation at September 30	$ 604.2	$ 613.6	$ 53.3	$ 53.3
Change in plan assets				
Fair value of plan assets at October 1	$ 437.3	$ 408.9	$ —	$ —
Actual return on plan assets	71.3	35.4	—	—
Company contributions	25.2	11.4	2.3	2.1
Expenses paid	(2.9)	(4.3)	—	—
Benefits paid	(16.4)	(15.8)	(2.3)	(2.1)
Currency translation adjustments	1.4	1.7	—	—
Fair value of plan assets at September 30	$ 515.9	$ 437.3	$ —	$ —
Funded status of plan - underfunded at September 30	$ (88.3)	$ (176.3)	$ (53.3)	$ (53.3)
Recognized in consolidated balance sheet at September 30				
Prepaid benefit cost (long-term asset)	$ 2.1	$ —	$ —	$ —
Accrued benefit liability (current liability)	(2.0)	(1.9)	(2.4)	(2.5)
Accrued benefit liability (long-term liability)	(88.4)	(174.4)	(50.9)	(50.8)
	$ (88.3)	$ (176.3)	$ (53.3)	$ (53.3)
Recognized in accumulated other comprehensive income (loss) as of September 30 (net of taxes)				
Net actuarial loss	$ (29.0)	$ (89.0)	$ (5.1)	$ (6.1)
Prior service (cost) benefit	(11.6)	(13.4)	11.5	12.6
	$ (40.6)	$ (102.4)	$ 6.4	$ 6.5

Weighted-average assumptions as of September 30				
Discount rate	2.91%	2.71%	2.61%	2.36%
Expected return on plan assets	4.46%	4.89%	n/a	n/a

Pension benefit plans with accumulated benefit obligations in excess of plan assets consisted of the following (in millions):

	September 30,	
	2021	2020
Projected benefit obligation	$ 565.7	$ 613.6
Accumulated benefit obligation	555.7	601.1
Fair value of plan assets	475.4	437.3

The components of net periodic benefit cost for fiscal years ended September 30 were as follows (in millions):

	Pension Benefits			Postretirement Health and Other		
	2021	2020	2019	2021	2020	2019
Components of net periodic benefit cost						
Service cost	$ 11.5	$ 10.1	$ 9.1	$ 2.2	$ 3.5	$ 3.1
Interest cost	16.4	17.1	18.7	1.2	1.6	1.9
Expected return on plan assets	(19.8)	(20.6)	(19.9)	—	—	—
Amortization of prior service cost (benefit)	2.3	1.6	1.7	(1.4)	(0.9)	(1.5)
Curtailment/settlement	—	0.1	1.2	—	—	—
Amortization of net actuarial loss (gain)	4.9	3.3	0.2	0.3	(0.2)	(0.2)
Expenses paid	3.0	4.0	2.5	—	—	—
Net periodic benefit cost	$ 18.3	$ 15.6	$ 13.5	$ 2.3	$ 4.0	$ 3.3
Other changes in plan assets and benefit obligations recognized in other comprehensive income						
Net actuarial loss (gain)	$ (74.1)	$ 29.4	$ 63.3	$ (1.1)	$ 5.5	$ 1.4
Prior service cost (benefit)	—	9.8	0.2	—	(6.5)	—
Amortization of prior service benefit (cost)	(2.3)	(1.6)	(1.7)	1.4	0.9	1.5
Amortization of net actuarial (loss) gain	(4.9)	(3.3)	(0.2)	(0.3)	0.2	0.2
	$ (81.3)	$ 34.3	$ 61.6	$ —	$ 0.1	$ 3.1
Weighted-average assumptions						
Discount rate	2.71%	3.17%	4.18%	2.36%	3.10%	4.20%
Expected return on plan assets	4.89%	5.49%	5.50%	n/a	n/a	n/a

Components of net periodic benefit cost other than “Service cost” and “Expenses paid” are included in “Miscellaneous, net” in the Consolidated Statements of Income.

Amounts expected to be recognized in pension and supplemental employee retirement plan net periodic benefit costs during fiscal 2022 included in “Accumulated other comprehensive loss” in the Consolidated Balance Sheet at September 30, 2021 are prior service costs of $0.6 million ($0.4 million net of tax) and unrecognized net actuarial losses of $0.2 million ($0.2 million net of tax).

The Company’s Board of Directors has appointed an Investment Committee (Committee), which consists of members of management, to manage the investment of the Company’s pension plan assets. The Committee has established and operates under an Investment Policy. The Committee determines the asset allocation and target ranges based upon periodic asset/liability studies and capital market projections. The Committee retains external investment managers to invest the assets and an adviser to monitor the performance of the investment managers. The Investment Policy prohibits certain investment transactions, such as commodity contracts, margin transactions, short selling and investments in Company securities, unless the Committee gives prior approval.

The weighted-average of the Company's pension plan asset allocations and target allocations at September 30, 2021 by asset category, were as follows:

	Target %	Actual
Asset Category		
Fixed income	50% - 60%	53%
Large-cap equity	15% - 25%	22%
Mid-cap equity	5% - 15%	11%
Small-cap equity	5% - 10%	8%
Global equity	0% - 5%	1%
Other	0% - 10%	5%
		100%

The Company's pension plan investment strategy is based on an expectation that, over time, equity securities will provide higher returns than debt securities. The plans primarily minimize the risk of larger losses under this strategy through diversification of investments by asset class, by investing in different styles of investment management within the classes and using a number of different investment managers. Beginning in fiscal 2016, the Company implemented a dynamic liability driven investment strategy for those pension plans with frozen benefits. The objective of this strategy is to more closely align the pension plan assets with the pension plan liabilities in terms of how both respond to changes in interest rates. Plan assets are allocated to two investment categories, including a category containing high quality fixed income securities and another category comprised of traditional securities and alternative asset classes. Assets are managed externally according to guidelines approved by the Company. Over time, the Company is reducing assets allocated to the return seeking category and correspondingly increasing assets allocated to the high quality fixed income category to align assets more closely with the pension plan obligations.

The plans' expected return on assets is based on management's and the Committee's expectations of long-term average rates of return to be achieved by the plans' investments. These expectations are based on the plans' historical returns and expected returns for the asset classes in which the plans are invested.

The fair value of plan assets by major category and level within the fair value hierarchy was as follows (in millions):

	Quoted Prices for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
September 30, 2021				
Common stocks				
U.S. companies (a)	$ 94.7	$ 7.6	$ —	$ 102.3
International companies (b)	—	13.9	—	13.9
Mutual funds (a)	100.4	—	—	100.4
Government and agency bonds (c)	—	12.7	—	12.7
Corporate bonds and notes (d)	—	8.9	—	8.9
Money market funds (e)	24.5	—	—	24.5
Other	—	—	0.9	0.9
	$ 219.6	$ 43.1	$ 0.9	263.6
Investments measured at net asset value (NAV) (f)				252.3
				$ 515.9
September 30, 2020				
Common stocks				
U.S. companies (a)	$ 77.4	$ 8.1	$ —	$ 85.5
International companies (b)	—	13.5	—	13.5
Mutual funds (a)	81.5	—	—	81.5
Government and agency bonds (c)	—	7.7	—	7.7
Corporate bonds and notes (d)	—	8.3	—	8.3
Money market funds (e)	12.5	—	—	12.5
Other	—	—	0.8	0.8
	$ 171.4	$ 37.6	$ 0.8	209.8
Investments measured at net asset value (NAV) (f)				227.5
				$ 437.3

(a) Primarily valued using a market approach based on the quoted market prices of identical instruments that are actively traded on public exchanges.

(b) Valuation model looks at underlying security "best" price, exchange rate for underlying security's currency against the U.S. dollar and ratio of underlying security to American depository receipt.

(c) These investments consist of debt securities issued by the U.S. Treasury, U.S. government agencies and U.S. government-sponsored enterprises and have a variety of structures, coupon rates and maturities. These investments are considered to have low default risk as they are guaranteed by the U.S. government. Fixed income securities are primarily valued using a market approach with inputs that include broker quotes, benchmark yields, base spreads and reported trades.

(d) These investments consist of debt obligations issued by a variety of private and public corporations. These are investment grade securities which historically have provided a steady stream of income. Fixed income securities are primarily valued using a market approach with inputs that include broker quotes, benchmark yields, base spreads and reported trades.

(e) These investments largely consist of short-term investment funds and are valued using a market approach based on the quoted market prices of identical instruments.

(f) These investments consist of privately placed funds that are valued based on NAV. NAV of the funds is based on the fair value of each fund's underlying investments. In accordance with ASC Subtopic 820-10, certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

The following table sets forth additional disclosures for the fair value measurement of the fair value of pension plans assets that calculate fair value based on NAV per share practical expedient as of September 30, 2021 (in millions):

	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period (1)
Common collective trust	$ 252.3	$ —	N/A	15 days

(1) Represents the maximum redemption period. A portion of the investment does not have any redemption period restrictions.

The following table sets forth additional disclosures for the fair value measurement of the fair value of pension plans assets that calculate fair value based on NAV per share practical expedient as of September 30, 2020 (in millions):

	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period (1)
Common collective trust	$ 227.5	$ —	N/A	15 days

(1) Represents the maximum redemption period. A portion of the investment does not have any redemption period restrictions.

The Company's policy is to fund the pension plans in amounts that comply with contribution limits imposed by law. The Company expects to make contributions of approximately $10.0 million to its pension plans in fiscal 2022.

The Company's estimated future benefit payments under Company sponsored plans were as follows (in millions):

Fiscal Year Ending September 30,	Pension Benefits		Postretirement Health and Other
	Qualified	Non-Qualified	
2022	$ 16.9	$ 2.0	$ 2.4
2023	18.6	2.0	2.7
2024	20.2	2.0	3.2
2025	21.8	1.9	3.6
2026	23.3	2.0	4.2
2027-2031	133.8	10.0	21.2

Multi-Employer Pension Plans — The Company participates in the Boilermaker-Blacksmith National Pension Trust (Employer Identification Number 48-6168020), a multi-employer defined benefit pension plan related to collective bargaining employees at the Company's Kewaunee facility. The Company's contributions and pension benefits payable under the plan and the administration of the plan are determined by the terms of the related collective-bargaining agreement, which expires on May 1, 2022. The multi-employer plan poses different risks to the Company than single-employer plans in the following respects:

1. The Company's contributions to the multi-employer plan may be used to provide benefits to all participating employees of the program, including employees of other employers.
2. In the event that another participating employer ceases contributions to the multi-employer plan, the Company may be responsible for any unfunded obligations along with the remaining participating employers.
3. If the Company chooses to withdraw from the multi-employer plan, the Company may be required to pay a withdrawal liability based on the underfunded status of the plan at that time.

As of March 31, 2021, the plan-certified zone status as defined by the Pension Protection Act of 2006 was Yellow and accordingly the plan has implemented a financial improvement plan. The Company's contributions to the multi-employer plan did not exceed 5% of the total plan contributions for fiscal 2021, 2020 or 2019. The Company made contributions to the plan of $1.4 million, $1.5 million and $1.4 million in fiscal 2021, 2020 and 2019, respectively.

401(k) and Defined Contribution Pension Replacement Plans — The Company has defined contribution 401(k) plans for substantially all domestic employees. The plans allow employees to defer 2% to 100% of their income on a pre-tax basis. Each employee who elects to participate is eligible to receive Company matching contributions, which are based on employee contributions to the plans, subject to certain limitations. For pension replacement plans, the Company contributes between 2% and 6% of an employee's base pay, depending on age. Amounts expensed for Company matching and discretionary contributions were $45.5 million, $39.5 million and $43.3 million in fiscal 2021, 2020 and 2019, respectively.

6. Income Taxes

Pre-tax income was taxed in the following jurisdictions (in millions):

	Fiscal Year Ended September 30,		
	2021	2020	2019
Domestic	$ 441.6	$ 429.7	$ 697.9
Foreign	56.3	9.4	52.8
	$ 497.9	$ 439.1	$ 750.7

Significant components of the provision for income taxes were as follows (in millions):

	Fiscal Year Ended September 30,		
	2021	2020	2019
Allocated to Income Before Losses of Unconsolidated Affiliates			
Current:			
Federal	$ (94.7)	$ 70.1	$ 140.9
Foreign	8.5	8.2	(0.2)
State	22.8	12.1	20.2
Total current	(63.4)	90.4	160.9
Deferred:			
Federal	108.1	14.3	2.1
Foreign	(5.6)	9.7	7.3
State	(13.9)	(1.6)	1.0
Total deferred	88.6	22.4	10.4
	$ 25.2	$ 112.8	$ 171.3
Allocated to Other Comprehensive Income (Loss)			
Deferred federal, state and foreign	$ (20.0)	$ 8.8	$ (14.9)

The reconciliation of income tax computed at the U.S. federal statutory tax rates to income tax expense was:

	Fiscal Year Ended September 30,		
	2021	2020	2019
Effective Rate Reconciliation			
U.S. federal tax rate	21.0%	21.0%	21.0%
State income taxes, net	2.2%	2.8%	2.5%
Foreign taxes	1.7%	0.8%	-0.2%
Tax audit settlements	-1.0%	—%	—%
Valuation allowance	-1.3%	3.3%	-0.1%
Domestic tax credits	-2.5%	-3.2%	-1.0%
Foreign-derived intangible income deduction	—%	-0.4%	-1.0%
Mandatory repatriation tax - U.S. Tax Reform	—%	—%	0.7%
CARES Act net operating loss carryback	-15.1%	—%	—%
Other, net	0.1%	1.4%	0.9%
	5.1%	25.7%	22.8%

Under U.S. Internal Revenue Service (IRS) procedures, a taxpayer can change automatic tax accounting methods without explicit prior IRS consent, but they are generally required to maintain the new tax accounting method for five years. In 2019, acknowledging that taxpayers may require multiple tax accounting method changes associated with the implementation of the Tax Cuts and Jobs Act of 2017 (Tax Reform Act), the IRS waived the five-year "eligibility rule" for certain tax accounting method changes for the first three years ending on or after November 20, 2018. Citing a need to help companies impacted by the COVID-19 pandemic, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) allows a taxpayer to carryback net operating losses generated in years beginning after December 31, 2017 and before January 1, 2021 for five years.

In fiscal 2021, the Company implemented a plan to make certain tax accounting method changes and change the timing of certain deductible payments. The plan generated a fiscal 2021 net operating loss of approximately $800 million. The Company was able to carryback the net operating loss to prior tax years with higher federal statutory rates. The Company's effective tax rate for fiscal 2021 reflects a discrete tax benefit of $75.3 million related to this plan. Certain tax positions taken to implement the plan are highly complex and subject to judgmental estimates. The Company recorded a liability for unrecognized tax benefits of $13.6 million reflecting the uncertainty of those tax positions, of which $3.7 million impacted the Company's provision for income taxes.

During fiscal 2021, the Company recorded net discrete tax benefits of $96.0 million, which included a discrete tax benefit of $75.3 million as a result of the net operating losses (NOL) carrybacks and a discrete benefit of $11.7 million related to the release of a valuation allowance against certain foreign net deferred tax assets in Europe. During fiscal 2020, the Company recorded net discrete tax charges of $8.0 million, which included a valuation allowance against certain foreign net deferred tax assets in Europe of $11.4 million, offset in part by benefits related to excess tax deductions from share-based compensation. During fiscal 2019, the Company recorded discrete tax charges of $1.9 million, which included charges related to new tax legislation in the United States, offset in part by benefits related to excess tax deductions from share-based compensation, provision to return adjustments for federal, state, and foreign jurisdictions and tax reserve releases due to expiration of statutes of limitations and other resolutions.

The Tax Reform Act contains a provision that requires recognition of revenue for tax purposes no later than when recognized in an audited financial statement. The Company determined that revenue from the sale of goods under U.S. defense production contracts was not required to be recognized under this provision until customer acceptance. The Company filed its fiscal 2019 tax returns on this basis and originally intended to file its fiscal 2020 tax returns on this basis. The U.S. Treasury Department released regulations in January 2021 providing for a method to defer a portion of the revenue that would otherwise be recognized under the provision of the Tax Reform Act. The Company intends to early apply the regulations for purposes of its fiscal 2021 tax returns and adopt this revenue deferral method. In addition, the Company changed its position regarding the realization of revenue under U.S. production contracts and filed its fiscal 2020 tax returns following the provision of the Tax Reform Act and intends to similarly amend its fiscal 2019 tax returns. The deferred taxes and noncurrent liabilities on the balance sheet for the position intended to be taken on the fiscal 2020 tax returns have been reversed. The Company has recorded an accrual to the income tax payable for tax due with the amended fiscal 2019 tax returns including estimated interest charges by the IRS.

Deferred income tax assets and liabilities were comprised of the following (in millions):

	September 30, 2021	September 30, 2020
Deferred tax assets:		
Other long-term liabilities	$ 57.3	$ 127.0
Losses and credits	61.5	34.8
Accrued warranty	16.3	15.8
Other current liabilities	24.5	17.7
Payroll-related obligations	26.2	18.5
Other	8.9	6.0
Gross deferred tax assets	194.7	219.8
Less valuation allowance	(6.2)	(17.4)
Deferred tax assets, net	188.5	202.4
Deferred tax liabilities:		
Intangible assets	(51.6)	(42.2)
Property, plant and equipment	(143.9)	(55.9)
Inventories	(18.0)	(18.6)
Other	(40.6)	(7.1)
Deferred tax liabilities	(254.1)	(123.8)
Net deferred tax asset (liability)	$ (65.6)	$ 78.6

The net deferred tax asset is classified in the Consolidated Balance Sheets as follows (in millions):

	September 30, 2021	September 30, 2020
Long-term net deferred tax asset	$ 8.3	$ 78.6
Long-term net deferred tax liability	(73.9)	—
Net deferred tax asset (liability)	$ (65.6)	$ 78.6

As of September 30, 2021, the Company had $17.7 million of net operating loss carryforwards available to reduce future taxable income of certain foreign subsidiaries in countries which allow such losses to be carried forward anywhere from seven years to an unlimited period. In addition, the Company had $40.4 billion of state net operating loss carryforwards, which can be carried forward anywhere from five years to an unlimited period and state credit carryforwards of $28.9 million, which are subject to expiration in 2027 to 2036. Deferred tax assets for foreign net operating loss carryforwards, state net operating loss carryforwards, state credit carryforwards and foreign tax credit carryforwards were $4.5 million, $30.7 million, $19.8 million and $6.4 million, respectively. Amounts are reviewed for recoverability based on historical taxable income, the expected reversals of existing temporary differences, tax-planning strategies and projections of future taxable income. The Company maintains a valuation allowance against foreign deferred tax assets of $0.8 million and foreign tax credit deferred tax assets of $5.4 million as of September 30, 2021.

At September 30, 2021, the Company had undistributed earnings of $380.4 million from its investment in non-U.S. subsidiaries. The Company has not recognized deferred tax liabilities for temporary differences related to the Company's foreign operations as the Company considers that its undistributed earnings are intended to be indefinitely reinvested. Should the Company's undistributed earnings from its investment in non-U.S. subsidiaries be distributed in the future in the form of dividends or otherwise, the Company may be subject to foreign and domestic income taxes and withholding taxes estimated at $22.4 million, including the impact of the regulations discussed below.

On August 21, 2020, the U.S. Treasury Department and the IRS released final regulations related to the Tax Reform Act (the "final tax regulations") and the foreign dividends received deduction and global intangible low-taxed income. The final tax regulations contained language that modified certain provisions of the Tax Reform Act and previously issued guidance and are effective retroactively to the Company's 2018 tax year and purport to cause certain intercompany transactions the Company engaged in during 2018 to produce U.S. taxable income upon a subsequent distribution from a controlled foreign corporation.

The Company has analyzed the tax regulations and concluded that the U.S. Treasury Department exceeded regulatory authority and that the temporary tax regulations are contrary to the congressional intent of the underlying statute. The Company believes it has strong arguments in favor of its position and that it has met the more likely than not recognition threshold that its position will be sustained. The Company intends to vigorously defend its position, however, due to the uncertainty involved in challenging the validity of regulations as well as a potential litigation process, there can be no assurances that the temporary tax regulations will be invalidated, modified or that a court of law will rule in favor of the Company. An unfavorable resolution of this issue would result in $18.4 million of tax liability which is included in the $22.4 million disclosed withholding tax above. The payment of such liability would only occur if the undistributed earnings were distributed.

A reconciliation of gross unrecognized tax benefits, excluding interest and penalties, was as follows (in millions):

	Fiscal Year Ended September 30,		
	2021	2020	2019
Balance at beginning of year	$ 79.8	$ 97.3	$ 33.7
Additions for tax positions related to current year	15.8	46.2	63.3
Additions for tax positions related to prior years	0.6	1.4	5.4
Reductions for tax positions related to prior years	(46.0)	(61.8)	(0.8)
Settlements	—	(1.3)	(0.9)
Lapse of statutes of limitations	(4.2)	(2.0)	(3.4)
Balance at end of year	$ 46.0	$ 79.8	$ 97.3

As of September 30, 2021, net unrecognized tax benefits of $21.9 million would affect the Company's effective tax rate if recognized. The Company recognizes accrued interest and penalties, if any, related to unrecognized tax benefits in the "Provision for income taxes" in the Consolidated Statements of Income. During fiscal 2021, 2020 and 2019, the Company recognized expense of $0.7 million, $1.3 million and $0.1 million related to interest and penalties, respectively. At September 30, 2021 and 2020, the Company had accruals for the payment of interest and penalties of $6.4 million and $5.7 million, respectively. During fiscal 2022, it is reasonably possible that federal, state and foreign tax audit resolutions could reduce unrecognized tax benefits by approximately $2.8 million, either because the Company's tax positions are sustained on audit, because the Company agrees to their disallowance or the statute of limitations closes. In addition to the interest related to uncertain tax positions, the Company recognized net interest income of $1.6 million related to federal income tax refunds in fiscal 2021.

The Company files federal income tax returns, as well as multiple state, local and non-U.S. jurisdiction tax returns. The Company is regularly audited by federal, state and foreign tax authorities. As of September 30, 2021, tax years open for examination under applicable statutes were as follows:

Tax Jurisdiction	Open Tax Years
Australia	2016 - 2021
Belgium	2019 - 2021
Brazil	2016 - 2021
Canada	2017 - 2021
China	2016 - 2021
Mexico	2017 - 2021
Romania	2016 - 2021
Netherlands	2015 - 2021
United Kingdom	2019 - 2021
Other Non-U.S. Countries	2015 - 2021
United States (federal general)	2018 - 2021
United States (state and local)	2007 - 2021

7. Earnings Per Share

The reconciliation of basic weighted-average shares outstanding to diluted weighted-average shares outstanding was as follows:

	Fiscal Year Ended September 30,		
	2021	2020	2019
Basic weighted-average common shares outstanding	68,482,363	68,149,324	69,819,980
Dilutive stock options and other equity-based compensation awards	726,388	638,405	738,255
Diluted weighted-average common shares outstanding	69,208,751	68,787,729	70,558,235

Options not included in the computation of diluted earnings per share attributable to common shareholders because they would have been anti-dilutive were as follows:

	Fiscal Year Ended September 30,		
	2021	2020	2019
Stock options	121,274	581,634	506,207

8. Receivables

Receivables consisted of the following (in millions):

	September 30,	
	2021	2020
Trade receivables - U.S. government	$ 133.5	$ 105.8
Trade receivables - other	849.2	734.0
Finance receivables	6.4	18.8
Other receivables	39.3	17.1
	1,028.4	875.7
Less allowance for doubtful accounts	(3.6)	(9.6)
	$ 1,024.8	$ 866.1

Classification of receivables in the Consolidated Balance Sheets consisted of the following (in millions):

	September 30,	
	2021	2020
Current receivables	$ 1,017.3	$ 857.6
Long-term receivables	7.5	8.5
	$ 1,024.8	$ 866.1

Finance receivable accrual status consisted of the following (in millions):

	September 30,	
	2021	2020
Receivables on nonaccrual status	$ —	$ 0.2
Receivables past due 90 days or more and still accruing	—	—
Receivables subject to general reserves	5.9	16.3
Allowance for doubtful accounts	(0.1)	(0.4)
Receivables subject to specific reserves	0.5	2.5
Allowance for doubtful accounts	(0.5)	(2.3)

Receivables subject to specific reserves also include loans that the Company has modified in troubled debt restructurings as a concession to customers experiencing financial difficulty. To minimize the economic loss, the Company may modify certain finance receivables. Modifications generally consist of restructured payment terms and time-frames in which no payments are required. Losses on troubled debt restructurings were not significant during fiscal 2021, 2020 or 2019, respectively.

Changes in the Company's allowance for doubtful accounts by type of receivable were as follows (in millions):

	Fiscal Year Ended September 30, 2021			
	Finance Receivables	Notes Receivable	Trade and Other Receivables	Total
Allowance for doubtful accounts at beginning of year	$ 2.7	$ —	$ 6.9	$ 9.6
Provision for doubtful accounts, net of recoveries	(2.1)	—	(3.4)	(5.5)
Charge-off of accounts	—	—	(0.5)	(0.5)
Allowance for doubtful accounts at end of year	$ 0.6	$ —	$ 3.0	$ 3.6

	Fiscal Year Ended September 30, 2020			
	Finance Receivables	Notes Receivable	Trade and Other Receivables	Total
Allowance for doubtful accounts at beginning of year	$ 2.2	$ 0.4	$ 8.7	$ 11.3
Provision for doubtful accounts, net of recoveries	0.5	—	(1.1)	(0.6)
Charge-off of accounts	—	(0.4)	(0.7)	(1.1)
Allowance for doubtful accounts at end of year	$ 2.7	$ —	$ 6.9	$ 9.6

9. Inventories

Inventories consisted of the following (in millions):

	September 30,	
	2021	2020
Raw materials	$ 873.5	$ 745.7
Partially finished products	276.2	295.2
Finished products	265.2	565.0
Inventories at FIFO cost	1,414.9	1,605.9
Excess of FIFO cost over LIFO cost	(147.5)	(100.5)
	$ 1,267.4	$ 1,505.4

Liquidation of previously established LIFO layers had a favorable impact on net income and diluted earnings per share of $9.5 million and $0.14 per share, respectively, in fiscal 2021. There were no material liquidations of previously established LIFO layers in fiscal 2020 or 2019.

10. Property, Plant and Equipment

Property, plant and equipment consisted of the following (in millions):

	September 30, 2021	September 30, 2020
Land and land improvements	$ 71.4	$ 63.9
Buildings	407.3	377.1
Machinery and equipment	729.5	723.7
Software and related costs	203.0	175.6
Equipment on operating lease to others	18.8	21.7
Construction in progress	37.1	35.0
	1,467.1	1,397.0
Less accumulated depreciation	(871.2)	(831.1)
	$ 595.9	$ 565.9

Depreciation expense was $87.5 million (including $3.6 million of accelerated depreciation related to restructuring actions), $89.1 million (including $6.9 million of accelerated depreciation related to restructuring actions) and $76.7 million in fiscal 2021, 2020 and 2019, respectively. Capitalized interest was insignificant for all reported periods.

Equipment on operating lease to others represents the cost of equipment shipped to customers for whom the Company has guaranteed the residual value and equipment on short-term leases. These transactions are accounted for as operating leases with the related assets capitalized and depreciated over their estimated economic lives of five to ten years. Cost less accumulated depreciation for equipment on operating lease to others at September 30, 2021 and 2020 was $15.4 million and $18.9 million, respectively.

11. Goodwill and Purchased Intangible Assets

As of July 1, 2021, the Company performed its annual impairment review relative to goodwill and indefinite-lived intangible assets (principally non-amortizable trade names). To derive the fair value of its reporting units, the Company utilized both the income and market approaches. For the annual impairment testing in the fourth quarter of fiscal 2021, the Company used a weighted-average cost of capital, depending on the reporting unit, of 8.5% to 13.0% (8.0% to 13.5% at July 1, 2020) and a terminal growth rate of 3.0% (3.0% at July 1, 2020). Under the market approach, the Company derived the fair value of its reporting units based on revenue and earnings multiples of comparable publicly-traded companies. As a corroborative source of information, the Company reconciles its estimated fair value to within a reasonable range of its market capitalization, which includes an assumed control premium (an adjustment reflecting an estimated fair value on a control basis), to verify the reasonableness of the fair value of its reporting units obtained through the aforementioned methods. The control premium is estimated based upon control premiums observed in comparable market transactions. To derive the fair value of its trade names, the Company utilized the “relief from royalty” approach.

At July 1, 2021, approximately 85% of the Company’s recorded goodwill and indefinite-lived purchased intangibles were concentrated within the JLG reporting unit in the Access Equipment segment. Assumptions utilized in the impairment analysis are highly judgmental. While the Company currently believes that an impairment of intangible assets at JLG is unlikely, events and conditions that could result in the impairment of intangibles at JLG include a sharp prolonged decline in economic conditions, significantly increased pricing pressure on JLG’s margins or other factors leading to reductions in expected long-term sales or profitability at JLG. Based on the Company’s annual impairment review, the Company concluded that there was no impairment of goodwill or indefinite-lived intangible assets. Changes in estimates or the application of alternative assumptions could have produced significantly different results.

The Company acquired Pratt Miller on January 19, 2021. See Note 1 of the Notes to Consolidated Financial Statements for additional information.

The following table presents changes in goodwill during fiscal 2021 and 2020 (in millions):

	Access Equipment	Defense	Fire & Emergency	Commercial	Total
Net goodwill at September 30, 2019	$ 868.8	$ —	$ 106.1	$ 20.8	$ 995.7
Foreign currency translation	13.8	—	—	—	13.8
Net goodwill at September 30, 2020	882.6	—	106.1	20.8	1,009.5
Foreign currency translation	(2.0)	—	—	0.1	(1.9)
Acquisition	—	44.4	—	—	44.4
Net goodwill at September 30, 2021	$ 880.6	$ 44.4	$ 106.1	$ 20.9	$ 1,052.0

The following table presents details of the Company's goodwill allocated to the reportable segments (in millions):

	September 30, 2021			September 30, 2020		
	Gross	Accumulated Impairment	Net	Gross	Accumulated Impairment	Net
Access Equipment	$ 1,812.7	$ (932.1)	$ 880.6	$ 1,814.7	$ (932.1)	$ 882.6
Defense	44.4	—	44.4	—	—	—
Fire & Emergency	108.1	(2.0)	106.1	108.1	(2.0)	106.1
Commercial	188.5	(167.6)	20.9	196.7	(175.9)	20.8
	$ 2,153.7	$ (1,101.7)	$ 1,052.0	$ 2,119.5	$ (1,110.0)	$ 1,009.5

Details of the Company's total purchased intangible assets were as follows (in millions):

	September 30, 2021			
	Weighted-Average Life	Gross	Accumulated Amortization	Net
Amortizable intangible assets:				
Distribution network	39.1	$ 55.4	$ (35.1)	$ 20.3
Technology-related	11.9	104.7	(103.9)	0.8
Customer relationships	12.6	572.6	(550.0)	22.6
Other	12.1	23.6	(17.6)	6.0
	14.4	756.3	(706.6)	49.7
Non-amortizable trade names		417.1	—	417.1
		$ 1,173.4	$ (706.6)	$ 466.8

	September 30, 2020			
	Weighted-Average Life	Gross	Accumulated Amortization	Net
Amortizable intangible assets:				
Distribution network	39.1	$ 55.4	$ (33.8)	$ 21.6
Technology-related	11.9	104.7	(103.3)	1.4
Customer relationships	12.8	554.7	(545.6)	9.1
Other	16.3	16.4	(15.0)	1.4
	14.7	731.2	(697.7)	33.5
Non-amortizable trade names		384.7	—	384.7
		$ 1,115.9	$ (697.7)	$ 418.2

When determining the value of customer relationships for purposes of allocating the purchase price of an acquisition, the Company looks at existing customer contracts of the acquired business to determine if they represent a reliable future source of income and hence, a valuable intangible asset for the Company. The Company determines the fair value of the customer relationships based on the estimated future benefits the Company expects from the acquired customer contracts. In performing its evaluation and estimation of the useful lives of customer relationships, the Company looks to the historical growth rate of revenue of the acquired company's existing customers as well as the historical attrition rates.

In connection with the valuation of intangible assets, a 40-year life was assigned to the value of the Pierce distribution network (net book value of $19.8 million at September 30, 2021). The Company believes Pierce maintains the largest North American fire apparatus distribution network. Pierce has exclusive contracts with each distributor related to the fire apparatus product offerings manufactured by Pierce. The useful life of the Pierce distribution network was based on a historical turnover analysis. Non-compete intangible asset lives are based on the terms of the applicable agreements.

The estimated future amortization expense of purchased intangible assets for the five years succeeding September 30, 2021 are as follows: 2022 - $11.0 million; 2023 - $7.2 million; 2024 - $4.3 million; 2025 - $4.2 million and 2026 - $4.2 million.

12. Leases

The Company leases certain real estate, information technology equipment, warehouse equipment, vehicles and other equipment almost exclusively through operating leases. The Company determines whether an arrangement contains a lease at inception. A lease liability and corresponding right of use (ROU) asset are recognized for qualifying leased assets based on the present value of fixed and certain index-based lease payments at lease commencement. Variable payments, which are generally determined based on the usage rate of the underlying asset, are excluded from the present value of lease payments and are recognized in the period in which the payment is made. To determine the present value of lease payments, the Company uses the stated interest rate in the lease, when available, or more commonly a secured incremental borrowing rate that reflects risk, term and economic environment in which the lease is denominated. The incremental borrowing rate is determined using a portfolio approach based on the current rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. The Company has elected not to separate payments for lease components from payments for non-lease components in contracts that contain both components. Lease agreements may include options to extend or terminate the lease. Those options that are reasonably certain of exercise at lease commencement have been included in the term of the lease used to recognize the right of use assets and lease liabilities. The lease terms of the Company's real estate and equipment leases extend up to 29 years and 18 years, respectively. The Company has elected not to recognize ROU assets or lease liabilities for leases with a term of twelve months or less. Expense is recognized on a straight-line basis over the lease term for operating leases.

The components of lease costs were as follows (in millions):

	Fiscal Year Ended September 30,	
	2021	**2020**
Operating lease cost	$ 53.3	$ 57.4
Variable lease cost	34.0	46.1
Short-term lease cost	9.5	8.4

Supplemental information related to leases was as follows (in millions):

	Balance Sheet Classification	September 30, 2021 Finance leases	Operating leases	Total
Lease right of use assets	Other long-term assets	$ 22.2	$ 194.7	$ 216.9
Current lease liabilities	Other current liabilities	6.9	39.3	46.2
Long-term lease liabilities	Other long-term liabilities	15.6	160.8	176.4
Weighted average remaining lease term		3.5 years	8 years	
Weighted average discount rates		1.9%	2.9%	

	Balance Sheet Classification	September 30, 2020 Finance leases	Operating leases	Total
Lease right of use assets	Other long-term assets	$ 13.2	$ 149.0	$ 162.2
Current lease liabilities	Other current liabilities	3.6	43.5	47.1
Long-term lease liabilities	Other long-term liabilities	9.7	109.1	118.8
Weighted average remaining lease term		4.0 years	5.5 years	
Weighted average discount rates		2.4%	2.9%	

The table below presents the right of use asset balance for operating leases disaggregated by segment and type of lease (in millions):

	September 30, 2021					
	Access Equipment	Defense	Fire & Emergency	Commercial	Corporate and intersegment eliminations	Total
Real estate leases	$ 84.3	$ 55.6	$ 6.2	$ 15.9	$ 12.2	$ 174.2
Equipment leases	5.5	2.0	1.7	2.5	8.8	20.5
	$ 89.8	$ 57.6	$ 7.9	$ 18.4	$ 21.0	$ 194.7

	September 30, 2020					
	Access Equipment	Defense	Fire & Emergency	Commercial	Corporate and intersegment eliminations	Total
Real estate leases	$ 61.4	$ 28.2	$ 6.5	$ 17.9	$ 7.0	$ 121.0
Equipment leases	7.3	4.2	2.2	1.9	12.4	28.0
	$ 68.7	$ 32.4	$ 8.7	$ 19.8	$ 19.4	$ 149.0

Maturities of operating lease liabilities at September 30, 2021 and minimum payments for operating leases having initial or remaining non-cancelable terms in excess of one year were as follows (in millions):

Amounts due in		
2022	$	44.8
2023		35.0
2024		25.7
2025		20.9
2026		16.8
Thereafter		83.2
Total lease payments		226.4
Less: imputed interest		(26.3)
Present value of lease liability	$	200.1

13. Investments in Unconsolidated Affiliates

Equity method investments — Investments in equity securities where the Company's ownership interest exceeds 20% and the Company does not have a controlling interest or where the ownership is less than 20% and for which the Company has a significant influence are accounted for by the equity method.

Investments in unconsolidated affiliates accounted for under the equity method consisted of the following (in millions):

		September 30,			
	Ownership %		**2021**		**2020**
Mezcladores Trailers de Mexico, S.A. de C.V.	49%	$	8.3	$	7.9
BME Fire Trucks LLC	25%		5.1		—
Construction Robotics, LLC	10%		2.9		1.8
AutoTech Fund II, L.P.	7%		6.5		2.9
Carnegie Foundry LLC	7%		5.0		—
Westly Capital Partners Fund IV, L.P.	7%		1.1		—
		$	28.9	$	12.6

Recorded investments generally represent the Company's maximum exposure to loss as a result of the Company's ownership interest. Earnings or losses are reflected in "Equity in losses of unconsolidated affiliates" in the Consolidated Statements of Income. Due to the timing and availability of information, earnings or losses from unconsolidated affiliates accounted for using the equity method are recorded on a three-month lag.

The Company and an unaffiliated third party are joint venture partners in Mezcladores Trailers de Mexico, S.A. de C.V. (Mezcladoras). Mezcladoras is a manufacturer and distributor of industrial and commercial machinery with primary operations in Mexico. The Company recognized sales to Mezcladoras of $3.4 million, $3.3 million and $3.6 million in fiscal 2021, 2020 and 2019, respectively. The Company recognizes income on sales to Mezcladoras at the time of shipment in proportion to the outside third-party interest in Mezcladoras and recognizes the remaining income upon the joint venture's sale of inventory to an unaffiliated customer. The Company earns a service fee for certain operational support services provided to Mezcladoras. The Company recognized service fees of $0.8 million, $1.1 million and $1.4 million in fiscal 2021, 2020 and 2019, respectively.

The Company holds an equity interest in BME Fire Trucks LLC (Boise Mobile). Boise Mobile is a manufacturer and distributor of custom fire apparatus specializing in challenging environments, such as wild fires. There were no material transactions between the Company and Boise Mobile in fiscal 2021.

Investments in equity securities — Investments in equity securities where the Company does not have a controlling interest or significant influence are recorded at fair value to the extent it is readily determinable. Investments in equity securities without a readily determinable fair value are recorded at cost and adjusted for any impairments and any observable price changes in orderly transactions for the identical or a similar investment of the same issuer should they occur. Gains or losses are reflected in "Miscellaneous, net" in the Consolidated Statements of Income.

Investments in unconsolidated affiliates not accounted for under the equity method consisted of the following (in millions):

	September 30, 2021			September 30, 2020		
	Cost Basis	Unrealized Gain (Loss)	Fair Value	Cost Basis	Unrealized Gain (Loss)	Fair Value
Equity investments with readily determinable fair value	$ 25.0	$ (4.4)	$ 20.6	$ —	$ —	$ —

	September 30, 2021			September 30, 2020		
	Cost Basis	Accumulated Impairment and Adjustments	Carrying Value	Cost Basis	Accumulated Impairment and Adjustments	Carrying Value
Equity investments without readily determinable fair value	$ 1.7	$ —	$ 1.7	$ —	$ —	$ —

14. Other Long-Term Assets

Other long-term assets consisted of the following (in millions):

	September 30,	
	2021	2020
Lease right of use asset (See Note 12 of Notes to Consolidated Financial Statements)	$ 216.9	$ 162.2
Investments in affiliates (See Note 13 of Notes to Consolidated Financial Statements)	51.2	12.6
Deferred contract costs (See Note 3 of Notes to Consolidated Financial Statements)	50.6	—
Rabbi trust, less current portion	15.4	17.9
Deferred income taxes, net (See Note 6 of Notes to Consolidated Financial Statements)	8.3	78.6
Customer finance receivables	2.4	5.6
Other	14.3	10.1
	359.1	287.0
Less allowance for doubtful receivables	(0.1)	(0.5)
	$ 359.0	$ 286.5

The rabbi trust (the "Trust") holds investments to fund certain of the Company's obligations under its nonqualified SERP. Trust investments include money market and mutual funds. The Trust assets are subject to claims of the Company's creditors.

15. Credit Agreements

The Company was obligated under the following debt instruments (in millions):

	September 30, 2021		
	Principal	Debt Issuance Costs	Debt, Net
Senior Term Loan	$ 225.0	$ (0.2)	$ 224.8
4.600% Senior notes due May 2028	300.0	(2.6)	297.4
3.100% Senior notes due March 2030	300.0	(3.4)	296.6
	$ 825.0	$ (6.2)	$ 818.8

	September 30, 2020		
	Principal	Debt Issuance Costs	Debt, Net
Senior Term Loan	$ 225.0	$ (0.3)	$ 224.7
4.600% Senior notes due May 2028	300.0	(3.0)	297.0
3.100% Senior notes due March 2030	300.0	(3.8)	296.2
	$ 825.0	$ (7.1)	$ 817.9
Other short-term debt			$ 5.2

On April 3, 2018, the Company entered into a Second Amended and Restated Credit Agreement with various lenders (the "Credit Agreement"). The Credit Agreement provides for (i) an unsecured revolving credit facility (the "Revolving Credit Facility") that matures in April 2023 with an initial maximum aggregate amount of availability of $850 million and (ii) an unsecured $325 million term loan (the "Term Loan") due in quarterly principal installments of $4.1 million commencing September 30, 2019 with a balloon payment of $264.1 million due at maturity in April 2023. The Company has prepaid all required quarterly principal installments and $39.1 million of the balloon payment on the Term Loan.

At September 30, 2021, outstanding letters of credit of $17.2 million reduced the available capacity under the Revolving Credit Facility to $832.8 million.

Under the Credit Agreement, the Company is obligated to pay (i) an unused commitment fee ranging from 0.125% to 0.275% per annum of the average daily unused portion of the aggregate revolving credit commitments under the Credit Agreement and (ii) a fee ranging from 0.563% to 1.75% per annum of the maximum amount available to be drawn for each letter of credit issued and outstanding under the Credit Agreement.

Borrowings under the Credit Agreement bear interest at a variable rate equal to (i) LIBOR plus a specified margin, which may be adjusted upward or downward depending on whether certain criteria are satisfied, or (ii) for dollar-denominated loans only, the base rate (which is the highest of (a) the administrative agent's prime rate, (b) the federal funds rate plus 0.50% or (c) the sum of 1% plus one-month LIBOR) plus a specified margin, which may be adjusted upward or downward depending on whether certain criteria are satisfied. At September 30, 2021, the interest spread on the Revolving Credit Facility and Term Loan was 125 basis points. The weighted-average interest rate on borrowings outstanding under the Term Loan at September 30, 2021 was 1.33%.

The Credit Agreement contains various restrictions and covenants, including requirements that the Company maintain certain financial ratios at prescribed levels and restrictions, subject to certain exceptions, on the ability of the Company and certain of its subsidiaries to consolidate or merge, create liens, incur additional indebtedness, and dispose of substantially all assets.

The Credit Agreement contains the following financial covenants:

- Leverage Ratio: A maximum leverage ratio (defined as, with certain adjustments, the ratio of the Company's consolidated indebtedness to consolidated net income for the previous four quarters before interest, taxes, depreciation, amortization, non-cash charges and certain other items (EBITDA)) as of the last day of any fiscal quarter of 3.75 to 1.00.

- Interest Coverage Ratio: A minimum interest coverage ratio (defined as, with certain adjustments, the ratio of the Company's consolidated EBITDA to the Company's consolidated cash interest expense for the previous four quarters) as of the last day of any fiscal quarter of 2.50 to 1.00.

The Company was in compliance with the financial covenants contained in the Credit Agreement as of September 30, 2021.

In May 2018, the Company issued $300.0 million of 4.600% unsecured senior notes due May 15, 2028 (the "2028 Senior Notes"). The Company used the net proceeds from the sale of the 2028 Senior Notes to repay certain outstanding notes of the Company and to pre-pay $49.2 million of quarterly principal installment payments under the Term

Loan. In February 2020, the Company issued $300.0 million of 3.100% unsecured senior notes due March 1, 2030 (the “2030 Senior Notes”) at a discount of $1.2 million. The Company used a portion of the net proceeds from the sale of the 2030 Senior Notes to redeem certain outstanding notes of the Company. The Company used the remaining net proceeds to pre-pay all outstanding future quarterly principal installments, as well as pay down a portion of the balloon payment due at maturity on the Term Loan. The Company recognized approximately $8.5 million of expense associated with the 2030 Senior Notes transaction, comprised of unamortized debt issuance costs and call premium costs on the 2025 Senior Notes. Expenses related to the transaction are included in interest expense. Additionally, approximately $2.9 million of debt issuance costs were capitalized to long-term debt in connection with the transaction. The 2028 Senior Notes and the 2030 Senior Notes were issued pursuant to an indenture (the “Indenture”) between the Company and a trustee. The indenture contains customary affirmative and negative covenants. The Company has the option to redeem the 2028 and 2030 Senior Notes at any time for a premium.

In September 2019, the Company entered into a 220.0 million Chinese renminbi uncommitted line of credit to provide short-term finance support to operations in China. At September 30, 2021, there were no outstanding borrowings on the uncommitted line of credit. There was 35.0 million Chinese renminbi ($5.2 million) outstanding on the uncommitted line of credit at September 30, 2020. The line of credit carries a variable interest rate that is set by the lender, which was 3.5% at both September 30, 2021 and September 30, 2020.

The fair value of the long-term debt is estimated based upon Level 2 inputs to reflect market rate of the Company’s debt. At September 30, 2021, the fair value of the 2028 Senior Notes and the 2030 Senior Notes was estimated to be $344 million ($342 million at September 30, 2020) and $317 million ($316 million at September 30, 2020), respectively. The fair value of the Term Loan approximated book value at both September 30, 2021 and 2020. See Note 23 of the Notes to Consolidated Financial Statements for the definition of a Level 2 input.

16. Warranties

The Company’s products generally carry explicit warranties that extend from six months to five years, based on terms that are generally accepted in the marketplace. Selected components (such as engines, transmissions, tires, etc.) included in the Company’s end products may include manufacturers’ warranties. These manufacturers’ warranties are generally passed on to the end customer of the Company’s products, and the customer would generally deal directly with the component manufacturer. Warranty costs recorded were $66.3 million, $57.9 million and $54.9 million in fiscal 2021, 2020 and 2019, respectively.

Provisions for estimated warranty and other related costs are recorded at the time of sale and are periodically adjusted to reflect actual experience. Certain warranty and other related claims involve matters of dispute that ultimately are resolved by negotiation, arbitration or litigation. At times, warranty issues arise that are beyond the scope of the Company’s historical experience. It is reasonably possible that additional warranty and other related claims could arise from disputes or other matters in excess of amounts accrued; however, the Company does not expect that any such amounts, while not determinable, would have a material effect on the Company’s consolidated financial condition, results of operations or cash flows.

Changes in the Company’s assurance-type warranty liability were as follows (in millions):

	Fiscal Year Ended September 30,	
	2021	2020
Balance at beginning of year	$ 67.4	$ 65.1
Warranty provisions	50.1	43.1
Settlements made	(65.0)	(55.9)
Changes in liability for pre-existing warranties, net	16.2	14.8
Foreign currency translation	—	0.3
Acquisition	0.3	—
Balance at end of year	$ 69.0	$ 67.4

Changes in the liability for pre-existing warranties in fiscal 2021 and 2020 of $16.9 million and $12.3 million, respectively, within the Defense segment primarily relate to additional warranty costs on the Joint Light Tactical Vehicle

(JLTV) program. The liabilities associated with service-type warranties are disclosed in Note 3 of the Notes to Consolidated Financial Statements.

17. Guarantee Arrangements

Customers of the Company, from time to time, may fund purchases of the Company's equipment through third-party finance companies. In certain instances, the Company may be requested to provide support for these arrangements through credit or residual value guarantees, by which the Company agrees to make payments to the finance companies in certain circumstances as further described below.

Credit Guarantees: The Company is party to multiple agreements whereby at September 30, 2021 the Company guaranteed an aggregate of $846.6 million in indebtedness of customers. The Company estimated that its maximum loss exposure under these contracts at September 30, 2021 was $167.0 million. Terms of these guarantees coincide with the financing arranged by the customer and generally do not exceed five years. Under the terms of these agreements and upon the occurrence of certain events, the Company generally has the ability to, among other things, take possession of the underlying collateral. If the financial condition of the customers were to deteriorate and result in their inability to make payments, then loss provisions in excess of amounts provided for at inception may be required. Given the Company's position as original equipment manufacturer and its knowledge of end markets, the Company, when called upon to fulfill a guarantee, generally has been able to liquidate the financed equipment at a minimal loss, if any, to the Company. While the Company does not expect to experience losses under these agreements that are materially in excess of the amounts reserved, it cannot provide any assurance that the financial condition of the third parties will not deteriorate resulting in the third parties' inability to meet their obligations. In the event that this occurs, the Company cannot guarantee that the collateral underlying the agreements will be sufficient to avoid losses materially in excess of the amounts reserved. Any losses under these guarantees would generally be mitigated by the value of any underlying collateral, including financed equipment. During periods of economic weakness, collateral values generally decline and can contribute to higher exposure to losses.

Residual Value Guarantees: The Company is party to multiple agreements whereby at September 30, 2021 the Company guaranteed to support an aggregate of $94.1 million of customer equipment value. The Company estimated that its maximum loss exposure under these contracts at September 30, 2021 was $10.9 million. Terms of these guarantees coincide with the financing arranged by the customer and generally do not exceed five years. Under the terms of these agreements, the Company guarantees that a piece of equipment will have a minimum residual value at a future date. If the counterparty is not able to recover the agreed upon residual value through sale, or alternative disposition, the Company is responsible for a portion of the shortfall. The Company is generally able to mitigate a portion of the risk associated with these guarantees by staggering the maturity terms of the guarantees, diversification of the portfolio and leveraging knowledge gained through the Company's own experience in the used equipment markets. There can be no assurance the Company's historical experience in used equipment markets will be indicative of future results. The Company's ability to recover losses experienced from its guarantees may be affected by economic conditions in used equipment markets at the time of loss. During periods of economic weakness, residual values generally decline and can contribute to higher exposure to losses.

Changes in the Company's guarantee liability were as follows (in millions):

	Fiscal Year Ended September 30,	
	2021	2020
Balance at beginning of year	$ 15.5	$ 15.8
Adoption of ASC 326	(0.6)	—
Provision for new credit guarantees	2.4	4.9
Changes for pre-existing guarantees, net	(0.5)	(0.5)
Amortization of previous guarantees	(2.8)	(5.0)
Foreign currency translation	0.1	0.3
Balance at end of year	$ 14.1	$ 15.5

Due to the adoption of ASC 326, the portion of the guarantee liabilities that relates to current expected credit losses is now recognized separately and is recorded within “Other current liabilities” and “Other long-term liabilities” in the Company’s Consolidated Balance Sheets.

18. Restructuring and Other Charges

In June 2020, the Access Equipment segment announced that it would close its Medias, Romania manufacturing facility and relocate the production to factories in the United States, Mexico and China. The Company also announced that it would close its service center in Riverside, California. Both facilities were closed to simplify and better align operations to support customers and enable sustainable growth. The Company ceased all operations in Medias as of June 30, 2021 and in Riverside as of December 31, 2020. The Access Equipment segment also initiated targeted reductions in its salaried workforce in response to the ongoing COVID-19 pandemic. The Company incurred restructuring charges of $3.1 million and $10.4 million during fiscal 2021 and 2020, respectively, for severance, other post-employment-related benefits, lease impairments, long-lived asset impairments and lease termination costs. The Access Equipment segment incurred additional charges of $7.4 million related to these restructuring actions during fiscal 2021, consisting of $2.8 million of accelerated depreciation, $4.1 million of inventory obsolescence and $0.5 million of other operational costs. The Access Equipment segment incurred additional charges of $4.7 million related to these restructuring actions during fiscal 2020, consisting of $2.8 million of accelerated depreciation, $1.6 million in inventory obsolescence and $0.3 million of other operational costs.

In July 2020, the Commercial segment announced that it will cease production of rear discharge concrete mixers at its Dodge Center, Minnesota, facility and relocate it to London, Ontario and the Dodge Center factory would be dedicated to refuse collection vehicle manufacturing. Both product lines benefit from the focused facilities. The Commercial segment incurred restructuring charges of $1.5 million during fiscal 2020, consisting of severance costs and other post-employment-related benefits. In addition, the Commercial segment experienced $4.1 million of accelerated depreciation as a result of this action during fiscal 2020.

Pre-tax restructuring charges were as follows (in millions):

	Fiscal Year Ended September 30,					
	2021			2020		
	Cost of Sales	Selling, General and Administrative Expenses	Total	Cost of Sales	Selling, General and Administrative Expenses	Total
Access Equipment	$ 4.6	$ (1.5)	$ 3.1	$ 2.9	$ 7.5	$ 10.4
Commercial	0.1	—	0.1	0.7	0.8	1.5
Fire & Emergency	—	—	—	0.3	1.1	1.4
Corporate	—	(0.4)	(0.4)	—	1.1	1.1
Total	$ 4.7	$ (1.9)	$ 2.8	$ 3.9	$ 10.5	$ 14.4

Changes in the Company’s restructuring reserves, included within “Other current liabilities” in the Consolidated Balance Sheets, were as follows (in millions):

	Employee Severance and Termination Benefits	Property, Plant and Equipment Impairment	Other Costs	Total
Balance at September 30, 2019	$ —	$ —	$ —	$ —
Restructuring provision	13.3	0.8	0.3	14.4
Utilized - cash	(3.5)	—	—	(3.5)
Utilized - noncash	—	(0.8)	—	(0.8)
Foreign currency translation	(0.1)	—	—	(0.1)
Balance at September 30, 2020	9.7	—	0.3	10.0
Restructuring provision	—	2.3	0.5	2.8
Utilized - cash	(9.3)	—	(2.3)	(11.6)
Utilized - noncash	—	(2.3)	1.6	(0.7)
Balance at September 30, 2021	$ 0.4	$ —	$ 0.1	$ 0.5

19. Contingencies, Significant Estimates and Concentrations

Personal Injury Actions and Other — Product and general liability claims are made against the Company from time to time in the ordinary course of business. The Company is generally self-insured for future claims up to $5.0 million per claim. Accordingly, a reserve is maintained for the estimated costs of such claims. At September 30, 2021 and 2020, the estimated net liabilities for product and general liability claims totaled $49.5 million and $33.8 million, respectively. There is inherent uncertainty as to the eventual resolution of unsettled claims. Management, however, believes that any losses in excess of established reserves will not have a material effect on the Company's financial condition, results of operations or cash flows.

Market Risks — The Company was contingently liable under bid, performance and specialty bonds totaling $1.13 billion and $721.1 million at September 30, 2021 and 2020, respectively. Open standby letters of credit issued by the Company's banks in favor of third parties totaled $22.3 million and $64.4 million at September 30, 2021 and 2020, respectively.

Other Matters — The Company is subject to other environmental matters and legal proceedings and claims, including patent, antitrust, product liability, warranty and state dealership regulation compliance proceedings that arise in the ordinary course of business. Although the final results of all such matters and claims cannot be predicted with certainty, management believes that the ultimate resolution of all such matters and claims will not have a material effect on the Company's financial condition, results of operations or cash flows. Actual results could vary, among other things, due to the uncertainties involved in litigation.

At September 30, 2021, approximately 19% of the Company's workforce was covered under collective bargaining agreements.

The Company derived a significant portion of its revenue from the DoD, as follows (in millions):

	Fiscal Year Ended September 30,		
	2021	2020	2019
DoD	$ 2,395.1	$ 2,300.4	$ 2,006.9
Foreign military sales	139.2	71.2	27.7
Total DoD sales	$ 2,534.3	$ 2,371.6	$ 2,034.6

No other customer represented more than 10% of sales for fiscal 2021, 2020 or 2019.

Certain risks are inherent in doing business with the DoD, including technological changes and changes in levels of defense spending. All DoD contracts contain a provision that they may be terminated at any time at the convenience of the U.S. government. In such an event, the Company is entitled to recover allowable costs plus a reasonable profit earned to the date of termination. Major contracts for military systems are performed over extended periods of time and are subject to changes in scope of work and delivery schedules. Pricing negotiations on changes and settlement of claims often extend over prolonged periods of time. The Company's ultimate profitability on such contracts may depend on the eventual outcome of an equitable settlement of contractual issues with the Company's customers.

Because the Company is a relatively large defense contractor, the Company's U.S. government contract operations are subject to extensive annual audit processes and to U.S. government investigations of business practices and cost classifications from which legal or administrative proceedings can result. Based on U.S. government procurement regulations, under certain circumstances the Company could be fined, as well as suspended or debarred from U.S. government contracting. During a suspension or debarment, the Company would also be prohibited from selling equipment or services to customers that depend on loans or financial commitments from the Export-Import Bank, Overseas Private Investment Corporation and similar U.S. government agencies.

The Company recognized an $18.5 million gain during fiscal 2020 upon receipt of proceeds for a claim under its property and business interruption insurance. The claim was primarily for property damage and lost profits due to a weather-related roof collapse that occurred at one of the Commercial segment's facilities in February 2019. The gain was recognized as a reduction of cost of sales ($10.8 million), a reduction of selling, general and administrative expense ($1.5 million) and miscellaneous income ($6.2 million).

20. Shareholders' Equity

In May 2019, the Company's Board of Directors approved a Common Stock repurchase authorization of 10,000,000 shares. The Company repurchased 927,934 shares of its Common Stock under this authorization in fiscal 2021 at a cost of $107.8 million. The Company repurchased 550,853 shares of Common Stock under this authorization in fiscal 2020 at a cost of $40.8 million. The Company repurchased 4,866,532 shares of Common Stock under this authorization in fiscal 2019 at a cost of $350.1 million. The Company has remaining authority to repurchase 6,531,394 shares of Common Stock as of September 30, 2021.

21. Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) by component were as follows (in millions):

	Employee Pension and Postretirement Benefits, Net of Tax	Cumulative Translation Adjustments	Derivative Instruments, Net of Tax	Accumulated Other Comprehensive Income (Loss)
Balance at September 30, 2018	$ (10.9)	$ (96.2)	$ 0.3	$ (106.8)
Tax impact of U.S. tax reform on Accumulated Other Comprehensive Income (ASU 2018-02)	(9.1)	—	—	(9.1)
Balance at October 1, 2018	(20.0)	(96.2)	0.3	(115.9)
Other comprehensive income (loss) before reclassifications	(49.5)	(36.3)	—	(85.8)
Amounts reclassified from accumulated other comprehensive income (loss)	0.1	—	—	0.1
Net current period other comprehensive income (loss)	(49.4)	(36.3)	—	(85.7)
Balance at September 30, 2019	(69.4)	(132.5)	0.3	(201.6)
Other comprehensive income (loss) before reclassifications	(29.3)	30.4	(0.5)	0.6
Amounts reclassified from accumulated other comprehensive income (loss)	2.8	—	(0.2)	2.6
Net current period other comprehensive income (loss)	(26.5)	30.4	(0.7)	3.2
Balance at September 30, 2020	(95.9)	(102.1)	(0.4)	(198.4)
Other comprehensive income (loss) before reclassifications	57.1	3.8	1.5	62.4
Amounts reclassified from accumulated other comprehensive income (loss)	4.6	—	0.4	5.0
Net current period other comprehensive income (loss)	61.7	3.8	1.9	67.4
Balance at September 30, 2021	$ (34.2)	$ (98.3)	$ 1.5	$ (131.0)

Reclassifications out of accumulated other comprehensive income (loss) included in the computation of net periodic pension and postretirement benefit cost (See Note 5 of the Notes to Consolidated Financial Statements for additional details regarding employee benefit plans) were as follows (in millions):

	Classification of income (expense)	Fiscal Year Ended September 30, 2021	2020	2019
Amortization of employee pension and postretirement benefits items				
Prior service costs	Miscellaneous, net	$ 0.9	$ 0.7	$ 0.2
Actuarial (gains) losses	Miscellaneous, net	5.2	3.1	—
Total before tax		6.1	3.8	0.2
Tax benefit		(1.5)	(1.0)	(0.1)
Net of tax		$ 4.6	$ 2.8	$ 0.1

22. Derivative Financial Instruments and Hedging Activities

The Company uses forward foreign currency exchange contracts (derivatives) to reduce the exchange rate risk of specific foreign currency denominated transactions. These derivatives typically require the exchange of a foreign currency for U.S. dollars at a fixed rate at a future date. At times, the Company has designated these hedges as either cash flow hedges or fair value hedges under FASB ASC Topic 815, *Derivatives and Hedging*, as follows:

Fair Value Hedging Strategy: The Company enters into forward foreign exchange contracts to hedge firm commitments denominated in foreign currencies. The purpose of the Company's foreign currency hedging activities is to protect the Company from risk that the eventual U.S. dollar-equivalent cash flows from the sale of products to international customers will be adversely affected by changes in exchange rates.

Cash Flow Hedging Strategy: To protect against the impact of movements in foreign exchange rates on forecasted purchases or sales transactions denominated in foreign currency, the Company has a foreign currency cash flow hedging program. The Company hedges portions of its forecasted transactions denominated in foreign currency with forward contracts.

At September 30, 2021, the total notional U.S. dollar equivalent of outstanding forward foreign exchange contracts designated as hedges in accordance with ASC Topic 815 was $113.5 million. Net gains or losses related to these contracts are recorded within the same line item in the Consolidated Statements of Income impacted by the hedged item. The maximum length of time the Company is hedging its exposure to the variability in future cash flows is two years.

The Company enters into forward foreign currency exchange contracts to create economic hedges to manage foreign exchange risk exposure associated with non-functional currency denominated receivables and payables resulting from global sales and sourcing activities. The Company has not designated these derivative contracts as hedge transactions under FASB ASC Topic 815, and accordingly, the mark-to-market impact of these derivatives is recorded each period in current earnings within "Miscellaneous, net" in the Consolidated Statements of Income. The fair value of foreign currency related derivatives is included in the Consolidated Balance Sheets in "Other current assets" and "Other current liabilities." At September 30, 2021, the U.S. dollar equivalent of these outstanding forward foreign exchange contracts totaled $64.0 million in notional amounts covering a variety of foreign currency exposures.

The fair values of all open derivative instruments were as follows (in millions):

	September 30, 2021				September 30, 2020			
	Other Current Assets	Other Long Term Assets	Other Current Liabilities	Other Long Term Liabilities	Other Current Assets	Other Long Term Assets	Other Current Liabilities	Other Long Term Liabilities
Cash flow hedges:								
Foreign exchange contracts	$ 0.5	$ 1.8	$ —	$ —	$ —	$ —	$ 0.5	$ —
Not designated as hedging instruments:								
Foreign exchange contracts	0.2	0.1	1.5	0.2	—	—	2.0	—
	$ 0.7	$ 1.9	$ 1.5	$ 0.2	$ —	$ —	$ 2.5	$ —

The pre-tax effects of derivative instruments consisted of the following (in millions):

	Classification of Gains (Losses)	Fiscal Year Ended September 30, 2021	2020	2019
Cash flow hedges:				
Foreign exchange contracts	Cost of sales	$ (0.7)	$ 0.6	$ 1.3
Not designated as hedging instruments:				
Foreign exchange contracts	Miscellaneous, net	0.2	1.7	(1.7)
		$ (0.5)	$ 2.3	$ (0.4)

23. Fair Value Measurement

FASB ASC Topic 820, *Fair Value Measurements and Disclosures*, defines fair value as the price that would be received to sell an asset or paid to transfer a liability (i.e., exit price) in an orderly transaction between market participants at the measurement date. FASB ASC Topic 820 requires disclosures that categorize assets and liabilities measured at fair value into one of three different levels depending on the assumptions (i.e., inputs) used in the valuation. Level 1 provides the most reliable measure of fair value, while Level 3 generally requires significant management judgment.

The three levels are defined as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Observable inputs other than quoted prices in active markets for identical assets or liabilities, such as quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets.

Level 3: Unobservable inputs reflecting management's own assumptions about the inputs used in pricing the asset or liability.

The fair values of the Company's financial assets and liabilities were as follows (in millions):

	Level 1	Level 2	Level 3	Total
September 30, 2021				
Assets:				
SERP plan assets [a]	$ 21.3	$ —	$ —	$ 21.3
Investment in equity securities [b]	20.6	—	—	20.6
Foreign currency exchange derivatives [c]	—	2.6	—	2.6
Liabilities:				
Foreign currency exchange derivatives [c]	$ —	$ 1.7	$ —	$ 1.7

	Level 1	Level 2	Level 3	Total
September 30, 2020				
Assets:				
SERP plan assets [a]	$ 21.4	$ —	$ —	$ 21.4
Liabilities:				
Foreign currency exchange derivatives [c]	$ —	$ 2.5	$ —	$ 2.5

(a) Represents investments in a rabbi trust for the Company's non-qualified SERP. The fair values of these investments are determined using a market approach. Investments include mutual funds for which quoted prices in active markets are available. The Company records changes in the fair value of investments in "Miscellaneous, net" in the Consolidated Statements of Income.

(b) Represents investments in equity securities for which quoted prices in active markets are available. The Company records changes in the fair value of investments in "Miscellaneous, net" in the Consolidated Statements of Income.

(c) Based on observable market transactions of forward currency prices.

See Notes 5, 13 and 15 of the Notes to Consolidated Financial Statements for fair value information related to pension assets, investments and debt.

Items Measured at Fair Value on a Nonrecurring Basis — In addition to items that are measured at fair value on a recurring basis, the Company also has assets and liabilities in its balance sheet that are measured at fair value on a nonrecurring basis. As these assets and liabilities are not measured at fair value on a recurring basis, they are not included in the tables above. Assets and liabilities that are measured at fair value on a nonrecurring basis include long-lived assets (See Note 1 of Notes to Consolidated Financial Statements fair value of assets acquired and liabilities assumed through acquisition, Note 10 of the Notes to Consolidated Financial Statements for impairments of long-lived assets, Note 11 of the Notes to Consolidated Financial Statements for impairment valuation analysis of intangible assets and Note 12 of the Notes to Consolidated Financial Statements for impairments of right of use assets). The Company has determined that the fair value measurements related to each of these assets rely primarily on Company-specific inputs and the Company's assumptions about the use of the assets, as observable inputs are not available. As such, the Company has determined that each of these fair value measurements reside within Level 3 of the fair value hierarchy.

24. Business Segment Information

The Company is organized into four reportable segments based on the internal organization used by the Chief Executive Officer for making operating decisions and measuring performance and based on the similarity of customers served, common management, common use of facilities and economic results attained. The Company's segments are as follows:

Access Equipment: This segment consists of JLG and JerrDan. JLG designs and manufactures aerial work platforms and telehandlers that are sold worldwide for use in a wide variety of construction, industrial, institutional and general maintenance applications to position workers and materials at elevated heights. Access Equipment customers include equipment rental companies, construction contractors, manufacturing companies and home improvement centers. JerrDan designs, manufactures and markets towing and recovery equipment in the U.S. and abroad.

Defense: This segment consists of Oshkosh Defense, Pratt Miller and snow removal vehicles for military and civilian airports. These business units design and manufacture tactical wheeled vehicles and supply parts and services for the U.S. military and for other militaries around the world, as well as offer engineering and product development services primarily to customers in the motorsports and multiple ground vehicle markets. Sales to the DoD accounted for 95%, 96% and 94% of the segment's sales for fiscal 2021, 2020 and 2019, respectively.

Fire & Emergency: This segment includes Pierce, Airport Products and Kewaunee. These business units design, manufacture and market commercial and custom fire vehicles, simulators and emergency vehicles primarily for fire departments, airports and other governmental units, and broadcast vehicles for broadcasters and TV stations in the U.S. and abroad.

Commercial: This segment includes McNeilus, London, IMT and Oshkosh Commercial. McNeilus and London design, manufacture, market and distribute refuse collection vehicles and components. McNeilus, London and Oshkosh Commercial also design, manufacture, market and distribute concrete mixer vehicles and components. IMT is a designer and manufacturer of field service vehicles and truck-mounted cranes for niche markets. Sales are made primarily to commercial and municipal customers in the Americas.

In accordance with FASB ASC Topic 280, *Segment Reporting*, for purposes of business segment performance measurement, the Company does not allocate to individual business segments costs or items that are of a non-operating nature or organizational or functional expenses of a corporate nature. The caption "Corporate" includes corporate office expenses, share-based compensation, costs of certain business initiatives and shared services or operations benefiting multiple segments, and results of insignificant operations. Identifiable assets of the business segments exclude general corporate assets, which principally consist of cash and cash equivalents, certain property, plant and equipment, and certain other assets pertaining to corporate activities. Intersegment sales generally include amounts invoiced by a segment for work performed for another segment. Amounts are based on actual work performed and agreed-upon pricing, which is intended to be reflective of the contribution made by the supplying business segment. The accounting policies of the reportable segments are the same as those described in Note 2 of the Notes to Consolidated Financial Statements.

Selected financial information concerning the Company's reportable segments and product lines is as follows (in millions):

	Fiscal Year Ended September 30,								
	2021			2020			2019		
	External Customers	Inter-segment	Net Sales	External Customers	Inter-segment	Net Sales	External Customers	Inter-segment	Net Sales
Access Equipment									
Aerial work platforms	$ 1,471.4	$ —	$ 1,471.4	$ 1,101.7	$ —	$ 1,101.7	$ 1,944.4	$ —	$ 1,944.4
Telehandlers	769.4	—	769.4	680.4	—	680.4	1,254.9	—	1,254.9
Other	826.5	4.8	831.3	723.6	9.4	733.0	880.4	—	880.4
Total Access Equipment	3,067.3	4.8	3,072.1	2,505.7	9.4	2,515.1	4,079.7	—	4,079.7
Defense (a)	2,524.1	1.5	2,525.6	2,300.4	11.1	2,311.5	2,085.7	11.8	2,097.5
Fire & Emergency (a)	1,211.6	15.0	1,226.6	1,098.0	9.0	1,107.0	1,194.4	16.3	1,210.7
Commercial									
Refuse collection	465.9	—	465.9	437.2	—	437.2	451.9	—	451.9
Concrete	364.8	—	364.8	403.5	—	403.5	439.9	—	439.9
Other	102.9	4.0	106.9	110.6	6.5	117.1	128.3	2.1	130.4
Total Commercial	933.6	4.0	937.6	951.3	6.5	957.8	1,020.1	2.1	1,022.2
Corporate and intersegment eliminations (a)	0.7	(25.3)	(24.6)	1.4	(36.0)	(34.6)	2.1	(30.2)	(28.1)
Consolidated	$ 7,737.3	$ —	$ 7,737.3	$ 6,856.8	$ —	$ 6,856.8	$ 8,382.0	$ —	$ 8,382.0

(a) Results for fiscal 2020 and fiscal 2019 have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

	Fiscal Year Ended September 30,		
	2021	2020	2019
Operating income (loss):			
Access Equipment [a]	$ 249.1	$ 198.6	$ 502.6
Defense [b] [c]	197.8	188.1	207.8
Fire & Emergency [b] [d]	174.2	146.5	172.0
Commercial [e]	71.0	81.2	66.8
Corporate [f]	(147.4)	(125.7)	(152.2)
Consolidated	544.7	488.7	797.0
Interest expense, net of interest income [g]	(44.7)	(51.8)	(47.6)
Miscellaneous other (expense) income [h]	(2.1)	2.2	1.3
Income before income taxes and losses of unconsolidated affiliates	$ 497.9	$ 439.1	$ 750.7

(a) Fiscal 2021 results include $3.1 million of restructuring costs and $7.4 million operating expenses related to restructuring plans. Fiscal 2020 results include $10.4 million of restructuring costs and $4.7 million operating expenses related to restructuring plans.

(b) Results for fiscal 2020 and fiscal 2019 have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

(c) Fiscal 2021 results include $1.0 million of acquisition related costs. Fiscal 2020 results include reimbursement of $0.9 million of legal costs associated with an arbitration settlement.

(d) Fiscal 2020 includes $1.4 million of restructuring costs.

(e) Fiscal 2020 results include $1.5 million of restructuring costs, $4.1 million of accelerated depreciation related to restructuring actions, a gain of $12.3 million arising from a business interruption insurance recovery and a gain on the sale of a business of $3.1 million.

(f) Fiscal 2021 includes a $0.4 million benefit from restructuring activities. Fiscal 2020 includes $1.1 million of restructuring costs.

(g) Fiscal 2020 results include $8.5 million in debt extinguishment costs and $3.3 million of interest income from an arbitration settlement in the Defense segment.

(h) Fiscal 2020 results include a $6.2 million gain from insurance proceeds in excess of property loss in the Commercial segment.

	Fiscal Year Ended September 30,		
	2021	2020	2019
Depreciation and amortization:			
Access Equipment (a)	$ 37.9	$ 42.1	$ 58.2
Defense (b)	27.8	20.1	17.8
Fire & Emergency (b)	10.0	10.0	9.0
Commercial (c)	13.1	17.1	12.4
Corporate	15.2	14.9	17.8
Consolidated	$ 104.0	$ 104.2	$ 115.2
Capital expenditures:			
Access Equipment (d)	$ 55.8	$ 56.5	$ 61.4
Defense (b)	23.8	32.4	32.0
Fire & Emergency (b)	8.1	6.7	12.2
Commercial (d)	21.3	18.9	18.1
Corporate (e)	5.8	15.7	50.5
Consolidated	$ 114.8	$ 130.2	$ 174.2

(a) Includes $3.6 million and $2.8 million of accelerated depreciation associated with restructuring actions in fiscal 2021 and fiscal 2020, respectively.

(b) Results for fiscal 2020 and fiscal 2019 have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

(c) Includes $4.1 million of accelerated depreciation associated with restructuring actions in fiscal 2020.

(d) Capital expenditures include both the purchase of property, plant and equipment and equipment held for rental.

(e) Capital expenditures include capital spending for the construction of the Company's new global headquarters in fiscal 2019.

	September 30,	
	2021	2020
Identifiable assets:		
Access Equipment:		
U.S.	$ 2,191.3	$ 2,151.4
Europe, Africa and Middle East	470.9	383.4
Rest of the world	371.4	359.0
Total Access Equipment	3,033.6	2,893.8
Defense: (a)		
U.S.	1,151.1	1,078.7
Rest of the world	7.2	7.2
Total Defense	1,158.3	1,085.9
Fire & Emergency - U.S. (a)	536.3	563.6
Commercial:		
U.S.	377.8	370.7
Rest of the world	54.8	47.5
Total Commercial	432.6	418.2
Corporate - U.S. (b)	1,730.8	854.4
Consolidated	$ 6,891.6	$ 5,815.9

(a) Results for September 30, 2020 have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

(b) Primarily includes cash and short-term investments and the Company's global headquarters.

The following table presents net sales by geographic region based on product shipment destination (in millions):

	Fiscal Year Ended September 30, 2021					
	Access Equipment	Defense	Fire & Emergency	Commercial	Eliminations	Total
Net sales:						
North America	$ 2,358.9	$ 2,337.8	$ 1,147.4	$ 929.0	$ (24.6)	$ 6,748.5
Europe, Africa and Middle East	273.4	183.2	46.7	1.5	—	504.8
Rest of the World	439.8	4.6	32.5	7.1	—	484.0
Consolidated	$ 3,072.1	$ 2,525.6	$ 1,226.6	$ 937.6	$ (24.6)	$ 7,737.3

	Fiscal Year Ended September 30, 2020					
	Access Equipment	Defense (a)	Fire & Emergency (a)	Commercial	Eliminations (a)	Total
Net sales:						
North America	$ 1,881.6	$ 2,200.4	$ 1,029.3	$ 947.0	$ (34.6)	$ 6,023.7
Europe, Africa and Middle East	275.3	107.0	29.8	1.6	—	413.7
Rest of the World	358.2	4.1	47.9	9.2	—	419.4
Consolidated	$ 2,515.1	$ 2,311.5	$ 1,107.0	$ 957.8	$ (34.6)	$ 6,856.8

	Fiscal Year Ended September 30, 2019					
	Access Equipment	Defense (a)	Fire & Emergency (a)	Commercial	Eliminations (a)	Total
Net sales:						
North America	$ 3,147.9	$ 2,012.1	$ 1,086.9	$ 997.8	$ (28.1)	$ 7,216.6
Europe, Africa and Middle East	548.6	84.0	27.7	3.9	—	664.2
Rest of the World	383.2	1.4	96.1	20.5	—	501.2
Consolidated	$ 4,079.7	$ 2,097.5	$ 1,210.7	$ 1,022.2	$ (28.1)	$ 8,382.0

(a) Results for fiscal 2020 and fiscal 2019 have been reclassified to reflect the move of the airport snow removal vehicle business from the Fire & Emergency segment to the Defense segment.

25. Subsequent Event

On October 6, 2021, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31. Accordingly, the Company will have an abbreviated fiscal year that runs from October 1, 2021 through December 31, 2021. The Company's next full fiscal year will begin on January 1, 2022.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures. In accordance with Rule 13a-15(b) of the Exchange Act, the Company's management evaluated, with the participation of the Company's President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of September 30, 2021. Based upon their evaluation of these disclosure controls and procedures, the President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of September 30, 2021 to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time period specified in the Securities and Exchange Commission rules and forms, and to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of published financial statements in accordance with generally accepted accounting principles.

The Company's management, with the participation of the Company's President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, has assessed the effectiveness of the Company's internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, the Company's management has concluded that, as of September 30, 2021, the Company's internal controls over financial reporting were effective based on that framework.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the effectiveness to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Deloitte & Touche LLP, the Company's independent registered public accounting firm, issued an attestation report on the effectiveness of the Company's internal control over financial reporting as of September 30, 2021, which is included herein.

Attestation Report of Independent Registered Public Accounting Firm. The attestation report required under this Item 9A is contained in Item 8 of Part II of this Annual Report on Form 10-K under the heading "Report of Independent Registered Public Accounting Firm."

Changes in Internal Control over Financial Reporting. There were no changes in the Company's internal control over financial reporting, with the exception of those changes related to the implementation of a new Enterprise Resource Planning (ERP) system within the Fire & Emergency segment, which occurred during the quarter ended September 30, 2021, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

The Company has no information to report pursuant to Item 9B.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information to be included under the captions “Proposal 1: Elections of Directors,” “Governance of the Company — Audit Committee” and “Stock Ownership — Delinquent Section 16(a) Reports”, if applicable, in the Company’s definitive proxy statement for the 2022 annual meeting of shareholders, to be filed with the Securities and Exchange Commission, is hereby incorporated by reference in answer to this item. Reference is also made to the information under the heading “Information about our Executive Officers” included under Part I of this report.

The Company has adopted the Oshkosh Corporation Code of Ethics Applicable to Directors and Senior Executives, including, the Company’s President and Chief Executive Officer, the Company’s Executive Vice President and Chief Financial Officer, the Company’s Executive Vice President, General Counsel and Secretary, the Company’s Senior Vice President Finance and Controller and the Presidents, Vice Presidents of Finance and Controllers of the Company’s business units, or persons holding positions with similar responsibilities at business units, and other officers elected by the Company’s Board of Directors at the vice president level or higher. The Company has posted a copy of the Oshkosh Corporation Code of Ethics Applicable to Directors and Senior Executives on the Company’s website at www.oshkoshcorp.com, and any such Code of Ethics is available in print to any shareholder who requests it from the Company’s Secretary. The Company intends to satisfy the disclosure requirements under Item 10 of Form 10-K regarding amendments to, or waivers from, the Oshkosh Corporation Code of Ethics Applicable to Directors and Senior Executives by posting such information on its website at www.oshkoshcorp.com.

The Company is not including the information contained on its website as part of, or incorporating it by reference into, this report.

ITEM 11. EXECUTIVE COMPENSATION

The information to be included under the captions “Compensation Discussion and Analysis,” “Compensation Tables,” “Compensation Agreements” and “Director Compensation” contained in the Company’s definitive proxy statement for the 2022 annual meeting of shareholders, to be filed with the Securities and Exchange Commission, is hereby incorporated by reference in answer to this item.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information to be included under the caption “Stock Ownership — Stock Ownership of Directors, Executive Officers and Other Large Shareholders” in the Company’s definitive proxy statement for the 2022 annual meeting of shareholders, to be filed with the Securities and Exchange Commission, is hereby incorporated by reference in answer to this item.

Equity Compensation Plan Information

The following table provides information about the Company’s equity compensation plans as of September 30, 2021.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options or Vesting of Share Awards(1)	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders	1,115,679	$ 77.96	3,310,992
Equity compensation plans not approved by security holders	—	—	—
	1,115,679	$ 77.96	3,310,992

(1) Represents options to purchase shares of the Company’s Common Stock granted under the 2009 Incentive Stock and Awards Plan, as amended and restated, and 2017 Incentive Stock and Award Plan, both of which were approved by the Company’s shareholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information to be included under the caption “Governance of the Company — Board of Directors Independence,” “Governance of the Company — Audit Committee,” “Governance of the Company — Governance Committee,” “Governance of the Company — Human Resources Committee” and “Governance of the Company — Policies and Procedures Regarding Related Person Transactions” in the Company’s definitive proxy statement for the 2022 annual meeting of shareholders, to be filed with the Securities and Exchange Commission, is hereby incorporated by reference in answer to this item.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information to be included under the caption “Proposal 2: Ratification of the Appointment of Independent Auditor for Fiscal 2022 — Audit and Non-Audit Fees” in the Company’s definitive proxy statement for the 2022 annual meeting of shareholders, to be filed with the Securities and Exchange Commission, is hereby incorporated by reference in answer to this item.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1.Financial Statements: The following consolidated financial statements of the Company and the report of the Independent Registered Public Accounting Firm included in the Annual Report to Shareholders for the fiscal year ended September 30, 2021, are contained in Item 8:

2. Financial Statement Schedules:

All schedules are omitted because they are not applicable, or the required information is included in the consolidated financial statements or notes thereto.

3. Exhibits:

The exhibits listed in the following Exhibit Index are filed as part of this Annual Report on Form 10-K. Each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report is identified in the Exhibit Index by an asterisk following the Exhibit Number.

EXHIBIT INDEX

3.1	Articles of Incorporation of Oshkosh Corporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated June 30, 2014 (File No. 1-31371)).
3.2	By-Laws of Oshkosh Corporation, as amended effective October 6, 2021.
4.1	Second Amended and Restated Credit Agreement, dated April 3, 2018, among Oshkosh Corporation, various subsidiaries of Oshkosh Corporation party thereto as borrowers and various lenders and agents party thereto (incorporated by reference to Exhibit 4.1 the Company's Current Report on Form 8-K dated April 9, 2018 (File No. 1-31371)).
4.2	Indenture, dated as of May 17, 2018, between Oshkosh Corporation and Computershare Trust Company, National Association, as trustee (as successor to Wells Fargo Bank, National Association) (incorporated by reference to the Exhibit 4.1 to the Company's Current Report on Form 8-K dated May 21, 2018 (File No. 1-31371)).
4.3	Supplemental Indenture, dated May 17, 2018, between Oshkosh Corporation and Computershare Trust Company, National Association, as trustee (as successor to Wells Fargo Bank, National Association) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, dated May 21, 2018 (File No. 1-31371)).
4.4	Second Supplemental Indenture, dated February 26, 2020, between Oshkosh Corporation and Computershare Trust Company, National Association, as trustee (as successor to Wells Fargo Bank, National Association) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated February 26, 2020 (File No. 1-31371)).
4.5	Description of Registrants Securities (incorporated by reference to Exhibit 4.7 to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019 (File No. 1-31371)).

10.1	Oshkosh Corporation Executive Retirement Plan, amended and restated effective December 31, 2008 (incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended September 30, 2008 (File No. 1-31371)).*
10.2	Form of Key Executive Employment and Severance Agreement between Oshkosh Corporation and each of Bryan K. Brandt, Ignacio A. Cortina, Thomas P. Hawkins, James W. Johnson, Bradley M. Nelson, Frank R. Nerenhausen, Anupam Khare, John C. Pfeifer, Michael E. Pack, Emma M. McTague and Jason P. Babb (each of the persons identified has signed this form or a substantially similar) (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 (File No. 1-31371)).*
10.3	Summary of Cash Compensation for Non-Employee Directors.*
10.4	Oshkosh Corporation Deferred Compensation Plan for Directors and Executive Officers (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 1-31371)).*
10.5	Oshkosh Corporation 2009 Incentive Stock and Awards Plan as Amended and Restated, as amended January 18, 2012 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (File No. 1-31371)).*
10.6	Form of Oshkosh Corporation 2009 Incentive Stock and Awards Plan Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, dated September 18, 2009 (File No. 1-31371)).*
10.7	Form of Oshkosh Corporation 2009 Incentive Stock and Awards Plan Stock Appreciation Rights Award Agreement for awards granted on or after September 19, 2011 (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K for the year ended September 30, 2011 (File No. 1-31371)).*
10.8	Form of Oshkosh Corporation 2009 Incentive Stock and Awards Plan Non-Employee Director Stock Option Award (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2009 (File No. 1-31371)).*
10.9	Oshkosh Corporation KEESA Rabbi Trust Agreement, dated as of January 31, 2013, between Oshkosh Corporation and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013 (File No. 1-31371)).*
10.10	Oshkosh Corporation Supplemental Retirement Plans Rabbi Trust Agreement, dated as of January 31, 2013, between Oshkosh Corporation and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013 (File No. 1-31371)).*
10.11	Oshkosh Corporation Defined Contribution Executive Retirement Plan, as amended and restated effective June 1, 2014 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014 (File No. 1-31371)).*
10.12	Oshkosh Corporation 2017 Incentive Stock and Awards Plan (incorporated by reference to Attachment B to Oshkosh Corporation's definitive proxy statement on Schedule 14A for the Oshkosh Corporation Annual Meeting of Shareholders held on February 7, 2017 (File No. 1-31371)).*
10.13	Framework for Awards of Performance Share based on Total Shareholder Return under the Oshkosh Corporation 2017 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*

10.14	Framework for Awards of Performance Shares based on Return on Invested Capital under the Oshkosh Corporation 2017 Incentive Stock Awards Plan (incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
10.15	Form of Oshkosh Corporation 2017 Incentive Stock and Awards Plan Stock Options Award Agreement (incorporated by reference to Exhibit 10.29 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
10.16	Form of Oshkosh Corporation 2017 Incentive Stock and Awards Plan Stock Appreciation Rights Award Agreement (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
10.17	Form of Oshkosh Corporation 2017 Incentive Stock and Awards Plan Restricted Stock Unit Award Agreements (Retirement Vesting) (incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
10.18	Form of Oshkosh Corporation 2017 Incentive Stock and Awards Plan Restricted Stock Unit Award Agreement (International) (incorporated by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
10.19	Form of Oshkosh Corporation 2017 Incentive Stock and Awards Plan Restricted Stock Unit Award Agreement (Stock Settled on Vesting - General) (incorporated by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K for the year ended September 30, 2017 (File No. 1-31371)).*
21	Subsidiaries of Registrant.
23	Consent of Deloitte & Touche LLP.
31.1	Certification by the President and Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act, dated November 16, 2021.
31.2	Certification by the Executive Vice President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act, dated November 16, 2021.
32.1	Written Statement of the President and Chief Executive Officer, pursuant to 18 U.S.C. ss. 1350, dated November 16, 2021.
32.2	Written Statement of the Executive Vice President and Chief Financial Officer, pursuant to 18 U.S.C. ss. 1350, dated November 16, 2021.
101.INS	The instance document does not appear in the interactive data file because its XBRL (Extensible Business Reporting Language) tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculations Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definitions Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentations Linkbase Document.

104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

* Denotes a management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

		OSHKOSH CORPORATION
November 16, 2021	By	/s/ John C. Pfeifer
		John C. Pfeifer, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities on the dates indicated.

November 16, 2021	By	/s/ John C. Pfeifer John C. Pfeifer, President, Chief Executive Officer and Director (Principal Executive Officer)
November 16, 2021	By	/s/ Michael E. Pack Michael E. Pack, Executive Vice President and Chief Financial Officer (Principal Financial Officer)
November 16, 2021	By	/s/ James C. Freeders James C. Freeders, Senior Vice President Finance and Controller (Principal Accounting Officer)
November 16, 2021	By	/s/ Keith J. Allman Keith J. Allman, Director
November 16, 2021	By	/s/ Douglas L. Davis Douglas L. Davis, Director
November 16, 2021	By	/s/ Tyrone M. Jordan Tyrone M. Jordan, Director
November 16, 2021	By	/s/ Kimberley Metcalf-Kupres Kimberley Metcalf-Kupres, Director
November 16, 2021	By	/s/ Stephen D. Newlin Stephen D. Newlin, Chairman of Board
November 16, 2021	By	/s/ Craig P. Omtvedt Craig P Omtvedt, Director
November 16, 2021	By	/s/ Duncan J. Palmer Duncan J. Palmer, Director
November 16, 2021	By	/s/ Sandra E. Rowland Sandra E. Rowland, Director
November 16, 2021	By	/s/ John S. Shiely John S. Shiely, Director

Exhibit 3.2
As amended October 6, 2021

BY-LAWS

OF

OSHKOSH CORPORATION
(a Wisconsin corporation)

ARTICLE I. OFFICES

1.01 Principal and Business Offices. The corporation may have such principal and other business offices, either within or without the State of Wisconsin, as the Board of Directors may designate or as the business of the corporation may require from time to time.

1.02 Registered Office. The registered office of the corporation required by the Wisconsin Business Corporation Law to be maintained in the State of Wisconsin may be, but need not be, identical with the principal office in the State of Wisconsin, and the address of the registered office may be changed from time to time by the Board of Directors or by the registered agent. The business office of the registered agent of the corporation shall be identical to such registered office.

ARTICLE II. SHAREHOLDERS

2.01 Annual Meeting. The annual meeting of the shareholders (the "Annual Meeting") shall be held each year at such time and on such date as may be fixed by or under the authority of the Board of Directors. If the day fixed for the Annual Meeting shall be a legal holiday in the State of Wisconsin, then such meeting shall be held on the next succeeding Business Day (as defined below). In fixing a meeting date for any Annual Meeting, the Board of Directors may consider such factors as it deems relevant within the good faith exercise of its business judgment. At each Annual Meeting, the shareholders shall elect individuals to the Board of Directors in accordance with these by-laws. At any such Annual Meeting, only other business properly brought before the Annual Meeting in accordance with Section 2.11 may be transacted.

2.02 Special Meeting.

(a) A special meeting of the shareholders (a "Special Meeting") may be called only by (i) a majority of the Board of Directors, (ii) the Chairman of the Board or (iii) the Chief Executive Officer. The Chief Executive Officer shall call a Special Meeting upon the demand, in accordance with this Section 2.02, of the holders of record representing at least 10% of all the votes entitled to be cast on any issue proposed to be considered at the Special Meeting.

(b) To enable the corporation to determine the shareholders entitled to demand a Special Meeting, the Board of Directors may fix a record date to determine the shareholders entitled to make such a demand (the "Demand Record Date"). The Demand Record Date shall not precede the date on which the Board of Directors adopts the resolution fixing the Demand Record Date and shall not be more than ten days after the date on which the resolution fixing the Demand Record Date is adopted by the Board of Directors. Any shareholder of record entitled to demand a Special Meeting who is seeking to have shareholders demand a Special Meeting shall, by sending written notice to the Secretary at the principal offices of the corporation, by hand or by certified or registered mail, return receipt requested, request the Board of Directors to fix a Demand Record Date. The Board of Directors shall promptly, but in all events within ten days after the date on which a valid request to fix a Demand Record Date is received, adopt a resolution fixing the Demand Record Date and shall make a public announcement of such Demand Record Date. If no Demand Record Date has been fixed by the Board of Directors within ten days after the date on which such request is received by the Secretary at the principal offices of the corporation, then the Demand Record Date shall be the 10th day after the first date on which a valid written request to set a Demand Record Date is received by the Secretary at the principal offices of the corporation. To be valid, such written request shall set forth the purpose or purposes for which the Special Meeting is to be held, shall be signed by one or more shareholders of record and by the beneficial owner or owners, if any, on whose behalf the request is made, shall bear the date of signature of each such shareholder and any such beneficial owner and shall set forth all information that would be required to be set forth in a notice described in Section 2.11(a)(ii) delivered by such shareholder or shareholders as if the notice related to an Annual Meeting.

(c) For a shareholder or shareholders to demand a Special Meeting, a written demand or demands for a Special Meeting by the holders of record as of the Demand Record Date of shares representing at least 10% of all the votes entitled to be cast on any issue proposed to be considered at the Special Meeting, calculated as if the Demand Record Date were the record date for the Special Meeting, must be delivered to the Secretary at the principal offices of the corporation. To be valid, each written demand by a shareholder for a Special Meeting shall set forth the specific purpose or purposes for which the Special Meeting is to be held (which purpose or purposes shall be limited to the purpose or purposes set forth in the written request to set a Demand Record Date received by the corporation pursuant to Section 2.02(b)), shall be signed by one or more persons who as of the Demand Record Date are shareholders of record and by the beneficial owners, if any, on whose behalf the demand is made, shall bear the date of signature of each such shareholder and any such beneficial owner, shall set forth the name and address of each such shareholder (as they appear in the corporation's books) and any such beneficial owner signing such demand and the class or series and number of shares of the corporation that are owned of record and/or beneficially by each such shareholder and any such beneficial owner, shall be sent to the Secretary at the principal offices of the corporation, by hand or by certified or registered mail, return receipt requested, and shall be received by the Secretary at the principal offices of the corporation within seventy days after the Demand Record Date.

(d) The corporation shall not be required to call a Special Meeting upon shareholder demand unless, in addition to the documents required by Section 2.02(c), the Secretary receives a written agreement signed by each Soliciting Shareholder (as defined below) pursuant to which each Soliciting Shareholder, jointly and severally, agrees to pay the corporation's costs of holding the Special Meeting, including the costs of preparing and mailing proxy materials for the corporation's own solicitation, provided that if each of the resolutions introduced by any Soliciting Shareholder at such meeting is adopted, and each of the individuals nominated by or on behalf of any Soliciting Shareholder for election as a director at such meeting is elected, then the Soliciting Shareholders shall not be required to pay such costs. For purposes of these by-laws, the following terms shall have the respective meanings set forth below:

(i) "Affiliate" of any Person (as defined herein) shall mean any Person controlling, controlled by or under common control with such first Person.

(ii) "Business Day" shall mean any day other than a Saturday, a Sunday or a day on which banking institutions in the State of Wisconsin are authorized or obligated by law or executive order to close.

(iii) "Participant" shall have the meaning assigned to such term in paragraphs (a)(iii), (iv), (v) and (vi) of Instruction 3 to Item 4 of Schedule 14A of the rules promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

(iv) "Person" shall mean any individual, firm, corporation, partnership, joint venture, association, trust, unincorporated organization or other entity.

(v) "Proxy" shall have the meaning assigned to such term in Rule 14a-1 promulgated under the Exchange Act (and, in such Rule 14a-1, a consent or authorization shall be interpreted to include signature on a demand for purposes of construing all the definitions in this Section 2.02(d)).

(vi) "Solicitation" shall have the meaning assigned to such term in Rule 14a-1 promulgated under the Exchange Act.

(vii) "Soliciting Shareholder" shall mean, with respect to any Special Meeting demanded by a shareholder or shareholders, each of the following Persons:

(A) if the number of shareholders signing the demand or demands of meeting delivered to the Secretary at the principal offices of the corporation pursuant to Section 2.02(c) is ten or fewer, each Person signing any such demand; or

(B) if the number of shareholders signing the demand or demands of meeting delivered to the corporation pursuant to Section 2.02(c) is more than ten, each Person who either (I) was a Participant in any Solicitation of such demand or demands or (II) at the time of the delivery to the Secretary at the principal offices of the corporation of the documents described in Section 2.02(c) had engaged or intends to engage in any Solicitation of Proxies for use at such Special Meeting (other than a Solicitation of Proxies on behalf of the corporation).

A "Soliciting Shareholder" shall also mean each Affiliate of a Soliciting Shareholder described in clause (A) or (B) above who is a member of such Soliciting Shareholder's "group" for purposes of Rule 13d-5(b) under the Exchange Act, and any other Affiliate of such a Soliciting Shareholder, if a majority of the directors then in office determines, reasonably and in good faith, that such Affiliate should be required to sign the written notice described in Section 2.02(c) and/or the written agreement described in this Section 2.02(d) to prevent the purposes of this Section 2.02 from being evaded.

(e) Except as provided in the following sentence, any Special Meeting shall be held at such date and hour as may be designated by whichever of the Board of Directors, the Chairman of the Board or the Chief Executive Officer shall have called such meeting. In the case of any Special Meeting called by the Chief Executive Officer upon the demand of shareholders (a "Demand Special Meeting"), such meeting shall be held at such date and hour as may be designated by the Board of Directors; provided, however, that the date of any Demand Special Meeting shall be not more than seventy days after the Meeting Record Date (as defined in Section 2.05(a)); and provided further that in the event that the directors then in office fail to designate a date and hour for a Demand Special Meeting within ten days after the date that valid written demands for such meeting by the holders of record as of the Demand Record Date of shares representing at least 10% of all the votes entitled to be cast on any issue proposed to be considered at the Special Meeting, calculated as if the Demand Record Date were the record date for the Special Meeting, are delivered to the corporation (the "Delivery Date"), then such meeting shall be held at 10:00 A.M., local time, on the 100th day after the Delivery Date or, if such 100th day is not a Business Day, on the first preceding Business Day. In fixing a meeting date for any Special Meeting, the Board of Directors or the Chairman of the Board may consider such factors as it, he or she deems relevant within the good faith exercise of its, his or her business judgment, including, without limitation, the nature of the action proposed to be taken, the facts and circumstances surrounding any demand for such meeting and any plan of the Board of Directors, the Chairman of the Board or the Chief Executive Officer to call an Annual Meeting or Special Meeting for the conduct of related business.

(f) The corporation may engage regionally or nationally recognized independent inspectors of elections to act as an agent of the corporation for the purpose of promptly performing a ministerial review of the validity of any purported written demand or demands for a Special Meeting received by the Secretary. For the purpose of permitting the inspectors to perform such review, no purported demand shall be deemed to have been delivered to the corporation until the earlier of (i) five Business Days following receipt by the Secretary of such purported demand and (ii) such date as the independent inspectors certify to the corporation that the valid demands received by the Secretary represent at least 10% of all the votes entitled to be cast on any issue proposed to be considered at the Special Meeting, calculated as if the Demand Record Date were the record date for the Special Meeting. Nothing contained in this Section 2.02(f) shall in any way be construed to suggest or imply that the Board of Directors or any shareholder shall not be entitled to contest the validity of any demand, whether during or after such five Business Day period, or to take any other action (including, without limitation, the commencement, prosecution or defense of any litigation with respect thereto).

2.03 Place of Meeting. The Board of Directors or the Chairman of the Board may designate any place, either within or without the State of Wisconsin, as the place of meeting for any Annual Meeting or Special Meeting. However, the Board of Directors may determine, in its sole discretion, that any Annual Meeting or any Special Meeting shall not be held at any place, but shall be held solely by means of remote communication. If no designation is made and the Board of Directors has not determined to hold such a meeting by means of remote communication, then the place of meeting shall be the principal office of the corporation. Any meeting may be postponed or adjourned pursuant to Section 2.07 to reconvene at any place designated by vote of the Board of Directors or by the Chairman of the Board.

2.04 Notice of Meeting.

(a) Written notice stating the place (if any), day and hour of an Annual Meeting or Special Meeting shall be delivered not less than ten days nor more than seventy days before the date of the meeting (unless a different date is required by the law or the articles of incorporation), by or at the direction of the Chairman of the Board or the Secretary, to each shareholder of record entitled to vote at such meeting and to such other persons as are required by the Wisconsin Business Corporation Law. If the Board of Directors has authorized participation by means of remote communication, the notice of the meeting also shall describe the means of remote communication to be used. In the event of any Demand Special Meeting, such notice of meeting shall be sent prior to the later of (x) two days after the Meeting Record Date for such Demand Special Meeting and (y) thirty days after the Delivery Date. For purposes of this Section 2.04, notice by "electronic transmission" (as defined in the Wisconsin Business Corporation Law) is written notice. Written notice pursuant to this Section 2.04 shall be deemed to be effective (i) when mailed, if mailed postpaid and addressed to the shareholder's address shown in the corporation's current record of shareholders or (ii) when electronically transmitted to the shareholder in a manner authorized by the shareholder.

(b) In the case of any Special Meeting, (i) the notice of meeting shall describe any business that the Board of Directors shall have theretofore determined to bring before the meeting and (ii) in the case of a Demand Special Meeting, the notice of meeting (A) shall describe any business set forth in the statement of purpose of the demands received by the corporation in accordance with Section 2.02, (B) shall contain all of the information required in the notice received by the corporation in accordance with Section 2.11(b) and (C) shall describe any business that the Board of Directors shall have theretofore determined to bring before the Demand Special Meeting. Except as otherwise provided in these by-laws, in the articles of incorporation or in the Wisconsin Business Corporation Law, the notice of an Annual Meeting need not include a description of the purpose or purposes for which the meeting is called.

(c) If any Annual Meeting or Special Meeting is adjourned to a different date, time, place or means of remote communication, then the corporation shall not be required to give notice of the new date, time, place or means of remote communication if the new date, time, place or means of remote communication is announced at the meeting before adjournment; provided, however, that if a new Meeting Record Date for an adjourned meeting is or must be fixed, then the corporation shall give notice of the adjourned meeting to persons who are shareholders as of the new Meeting Record Date.

2.05 Fixing of Record Date.

(a) The Board of Directors may fix in advance a date not less than ten days and not more than seventy days prior to the date of an Annual Meeting or Special Meeting as the record date for the determination of shareholders entitled to notice of, or to vote at, such meeting (the "Meeting Record Date"). In the case of any Demand Special Meeting, (i) the Meeting Record Date shall be not later than the 30th day after the Delivery Date and (ii) if the Board of Directors fails to fix the Meeting Record Date within thirty days after the Delivery Date, then the close of business on such 30th day shall be the Meeting Record Date. The shareholders of record on the Meeting Record Date shall be the shareholders entitled to notice of and to vote at the Annual Meeting or Special Meeting. When a determination of shareholders entitled to notice of or to vote at the Annual Meeting or Special Meeting has been made as provided in this section, such determination shall be applied to any adjournment thereof unless the Board of Directors fixes a new Meeting Record Date and except as otherwise required by law. A new Meeting Record Date must be set if a meeting is adjourned to a date more than one hundred twenty days after the date fixed for the original meeting.

(b) The Board of Directors may also fix in advance a date as the record date for the purpose of determining shareholders entitled to take any other action or determining shareholders for any other purpose other than those set forth in Section 2.02(a) and Section 2.05(a). Such record date shall not be more than seventy days prior to the date on which the particular action, requiring such determination of shareholders, is to be taken. If the Board of Directors does not fix a record date for the determination of shareholders entitled to receive a share dividend or distribution (other than a distribution involving a purchase, redemption or other acquisition of the corporation's shares), then the close of business on the date on which the resolution of the Board of Directors is adopted declaring the dividend or distribution shall be the record date.

2.06 Voting Records. After a Meeting Record Date has been fixed, the corporation shall prepare a list of the names of all of the shareholders entitled to notice of the meeting. The shareholders' list shall be arranged by class or series of shares, if any, and show the address of and number of shares held by each shareholder. Any shareholder or his, her or its agent or attorney, on written demand, may inspect the shareholders' list beginning two Business Days after the corporation gives the notice of the meeting for which the shareholders' list was prepared and continuing to the date of the meeting, at the corporation's principal office or at a place identified in the meeting notice in the city where the meeting will be held, and if and to the extent entitled to do so under the Wisconsin Business Corporation Law, may copy the shareholders' list, during regular business hours and at his, her or its expense, during the period that it is available for inspection hereunder. The corporation shall make the shareholders' list available at the meeting or, if the meeting is to be held by means of remote communication, on a reasonably accessible electronic network if the information required to gain access to the list is provided with the notice of the meeting, and any shareholder or his, her or its agent or attorney may inspect the shareholders' list at any time during the meeting or any adjournment thereof. Notwithstanding anything to the contrary in the preceding sentence, if the corporation determines that the list will be made available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to shareholders (and their proxies, agents or attorneys). If the meeting is held solely by means of remote communication, the information required to access the list shall be provided with the notice of the meeting. The original stock transfer books of the corporation shall be prima facie evidence as to who are the shareholders entitled to inspect the shareholders' list or to vote at any meeting of the shareholders. Refusal or failure to prepare or make available the shareholders' list shall not affect the validity of any action taken at a meeting of shareholders.

2.07 Quorum; Postponement; Adjournments.

(a) Shares entitled to vote as a separate voting group may take action on a matter at an Annual Meeting or Special Meeting only if a quorum of those shares exists with respect to that matter. Except as otherwise provided in the articles of incorporation or in the Wisconsin Business Corporation Law, a majority of the votes entitled to be cast on a matter by the voting group shall constitute a quorum of that voting group for action on that matter. Once a share is represented for any purpose at an Annual Meeting or Special Meeting, other than for the purpose of objecting to holding the meeting or transacting business at the meeting, it is considered present for purposes of determining whether a quorum exists for the remainder of the meeting and for any adjournment of the meeting unless a new Meeting Record Date is or must be set for the adjourned meeting. If a quorum exists, then action on a matter, other than the election of directors, by a voting group is approved if the votes cast within the voting group favoring the action exceed the votes cast opposing the action, unless the articles of incorporation or the Wisconsin Business Corporation Law requires a greater number of affirmative votes. Unless otherwise provided in the articles of incorporation, each director shall be elected by a plurality of the votes cast by the shares entitled to vote in the election of directors at a meeting at which a quorum is present.

(b) The Board of Directors acting by resolution may postpone and reschedule any previously scheduled Annual Meeting or Special Meeting; provided, however, that a Demand Special Meeting shall not be postponed beyond the 100th day following the Delivery Date. Any Annual Meeting or Special Meeting may be adjourned from time to time, whether or not there is a quorum, (i) at any time, upon a resolution by shareholders if the votes cast in favor of such resolution by the holders of shares of each voting group entitled to vote on any matter theretofore properly brought before the meeting exceed the number of votes cast against such resolution by the holders of shares of each such voting group or (ii) at any time prior to the transaction of any business at such meeting, by the Chairman of the Board or pursuant to a resolution of the Board of Directors; provided, however, that a Demand Special Meeting adjourned pursuant to clause (ii) must be reconvened on or before the 100th day following the Delivery Date. No notice of the time and place or means of remote communication of adjourned meetings need be given except as required by the Wisconsin Business Corporation Law. At any adjourned meeting at which a quorum shall be present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

2.08 Conduct of Meetings.

(a) The Chairman of the Board or, in his or her absence, the Chief Executive Officer or, in the Chief Executive Officer's absence, the President (if the Chief Executive Officer is not then the President) or a Vice President designated by the Board of Directors shall call any Annual Meeting or Special Meeting to order and shall act as chairman of the meeting, and the Secretary shall act as secretary of all meetings of the shareholders, but, in the absence of the Secretary, the presiding officer may appoint any other person to act as secretary of the meeting. The Board of Directors may, to the extent not prohibited by law, adopt by resolution such rules and regulations for the conduct of an Annual Meeting or Special Meeting as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations or procedures and to do such acts as, in the judgment of the chairman of the meeting, are appropriate for the proper conduct of an Annual Meeting or Special Meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may to the extent not prohibited by law include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to shareholders of record of the corporation, their duly authorized and constituted proxies (which shall be reasonable in number) or such other persons as the chairman of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; (v) limitations on the time allotted to questions or comments by participants; (vi) rules and procedures regarding the execution of election ballots before or after the time fixed for the commencement of the meeting; (vii) the appointment of an inspector of election or an officer or agent of the corporation authorized to tabulate votes; and (viii) rules and procedures to facilitate the conduct of, and participation in, the meeting by electronic means.

(b) If authorized by the Board of Directors in its sole discretion, and subject to the rest of this Section 2.08 and to any guidelines and procedures adopted by the Board of Directors, shareholders and proxies of shareholders not physically present at an Annual Meeting or Special Meeting may participate in such meeting by means of remote communication. If shareholders or proxies of shareholders participate in a meeting by means of remote communication, the participating shareholders or proxies of shareholders are deemed to be present in person and to vote at the meeting, whether the meeting is held at a designated place or solely by means of remote communication, if the corporation:

(i) has implemented reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a shareholder or proxy of a shareholder;

(ii) has implemented reasonable measures to provide shareholders and proxies of shareholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the shareholders, including an opportunity to read or hear the proceedings of the meeting concurrently with the proceedings; and

(iii) maintains a record of voting or action by any shareholder or proxy of a shareholder that votes or takes other action at the meeting by means of a remote communication

2.09 Proxies. At any Annual Meeting or Special Meeting, a shareholder entitled to vote may vote in person or by proxy. A shareholder entitled to vote at any Annual Meeting or Special Meeting may authorize another person to act for the shareholder by appointing the person as a proxy. The means by which a shareholder or the shareholder's authorized officer, director, employee, agent or attorney-in-fact may authorize another person to act for the shareholder by appointing the person as proxy include:

(a) Appointment of a proxy in writing by signing or causing the shareholder's signature to be affixed to an appointment form by any reasonable means, including, without limitation, by facsimile signature.

(b) Appointment of a proxy by transmitting or authorizing the transmission of an electronic transmission of the appointment to the person who will be appointed as proxy or to a proxy solicitation firm, proxy support service organization or like agent authorized to receive the transmission by the person who will be appointed as proxy. Every electronic transmission shall contain, or be accompanied by, information that can be used to reasonably determine that the shareholder transmitted or authorized the transmission of the electronic transmission. Any person charged with determining whether a shareholder transmitted or authorized the transmission of the electronic transmission shall specify the information upon which the determination is made.

An appointment of a proxy is effective when a signed appointment form or an electronic transmission of the appointment is received by the inspector of election or the officer or agent of the corporation authorized to tabulate votes. Unless the appointment form or electronic transmission states that the proxy is irrevocable and the appointment is coupled with an interest, a proxy may be revoked at any time before it is voted, either by written notice filed with the Secretary or the secretary of the meeting or by oral notice given by the shareholder to the presiding officer during the meeting. The presence of a shareholder who has made an effective proxy appointment shall not of itself constitute a revocation. A proxy appointment is valid for eleven months unless a different period is expressly provided in the appointment. The Board of Directors, the Chairman of the Board and the Chief Executive Officer each shall have the power and authority to make rules as to the validity and sufficiency of proxies.

2.10 Voting of Shares. Each outstanding share shall be entitled to one vote on each matter submitted to a vote at any Annual Meeting or Special Meeting, except to the extent that the voting rights of the shares of any class or classes are enlarged, limited or denied by the articles of incorporation.

2.11 Notice of Shareholder Business and Nomination of Directors.

(a) Annual Meetings.

(i) Nominations of persons for election to the Board of Directors and the proposal of other business to be considered by the shareholders may be made at an Annual Meeting (A) pursuant to the corporation’s notice of meeting, (B) by or at the direction of the Board of Directors, (C) by any shareholder of the corporation who (1) is a shareholder of record at the time of giving of notice provided for in this Section 2.11, (2) is entitled to vote with respect to such nomination or other business at the meeting under the articles of incorporation and (3) complies with the notice procedures set forth in this Section 2.11 or (D) with respect to nominations, by any shareholder of the corporation who is eligible under, and complies with the notice procedures set forth in, Section 2.15. Clause (C) and clause (D) in the preceding sentence shall be the exclusive means for a shareholder to make nominations or submit other business (other than matters properly brought under Rule 14a-8 under the Exchange Act and included in the corporation’s notice of meeting) before an Annual Meeting.

(ii) For nominations or other business to be properly brought before an Annual Meeting by a shareholder pursuant to Section 2.11(a)(i)(C), the shareholder must have given timely notice thereof in writing to the Secretary and such other business must otherwise be a proper matter for shareholder action. To be timely, a shareholder’s notice shall be received by the Secretary at the principal offices of the corporation not less than forty-five days nor more than seventy days prior to the first annual anniversary of the date set forth in the corporation’s proxy statement for the immediately preceding Annual Meeting as the date on which the corporation first made available to its shareholders definitive proxy materials for the immediately preceding Annual Meeting (the “Anniversary Date”); provided, however, that if the date for which the Annual Meeting is called is more than thirty days before or more than thirty days after the first annual anniversary of the immediately preceding Annual Meeting, then notice by the shareholder to be timely must be received by the Secretary not earlier than the close of business on the 100th day prior to the date of such Annual Meeting and not later than the later of (A) the 75th day prior to the date of such Annual Meeting or (B) the 10th day following the day on which public announcement of the date of such Annual Meeting is first made. In no event shall any adjournment or postponement of an Annual Meeting or the announcement thereof commence a new time period for the giving of a shareholder notice as described above. To be in proper form, a shareholder’s notice to the Secretary (whether given pursuant to this Section 2.11(a)(ii) or Section 2.02(b)) shall be signed by the shareholder of record who intends to make the nomination or introduce the other business and by the beneficial owner or owners, if any, on whose behalf the shareholder is acting, shall bear the date of signature of such shareholder and any such beneficial owner and shall set forth: (I) the name and address of such shareholder (as they appear on the corporation’s books) and any such beneficial owner; (II) the Share Information relating to each such shareholder and beneficial owner (which Share Information shall be supplemented by such shareholder and any such beneficial owner not later than ten days after the Meeting Record Date to disclose such Share Information as of the Meeting Record Date); (III) a representation that such shareholder is a holder of record of shares of the corporation entitled to vote under the articles of incorporation at such meeting with respect to such nomination or other business and intends to appear in person or by proxy at the meeting to make such nomination or introduce such other business; (IV) any other information relating to such shareholder and any such beneficial owner that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder; (V) in the case of any proposed nomination for election or re-election as a director, (1) the name and residence address of the person or persons to be nominated, (2) a description of all agreements, arrangements or understandings between such shareholder and any such beneficial owner and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination is to be made by such shareholder and any such beneficial owner, including without limitation any agreement, arrangement or understanding with any person as to how such nominee, if elected as a director of the corporation, will act or vote on any issue or question, (3) a description of all direct and indirect compensation and other material agreements, arrangements and understandings during the past three years and any other material relationships, between or among such shareholder and any such beneficial owner and their respective Affiliates and associates, or others acting in concert therewith, on the one hand, and each proposed nominee, and his or her respective Affiliates and associates, or others acting in concert therewith, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 of Regulation S-K of the Securities and Exchange Commission (the "SEC") if the shareholder making the nomination and any beneficial owner on whose behalf the nomination is made, or any Affiliate or associate thereof or person acting in concert therewith, were the "registrant" for purposes of such rule and the nominee were a director or executive officer of such registrant, (4) such other information regarding each nominee proposed by such shareholder and any such beneficial owner as would be required to be disclosed by such shareholder and any such beneficial owner in contested solicitations of proxies for elections of directors, or would be otherwise required to be disclosed, in each case pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder, and (5) the written consent of each nominee proposed by such shareholder and any such beneficial owner to be named in a proxy statement and to serve as a director of the corporation if so elected; (VI) in the case of any proposed removal of a director at a meeting called for the purpose of removing such director, (1) the names of the directors to be removed and (2) the reasons of such shareholder and any such beneficial owner for asserting that such directors should be removed; and (VII) in the case of any other business that such shareholder and any such beneficial owner propose to bring before the meeting, (1) a brief description of the business desired to be brought before the meeting and, if such business includes a proposal to amend these by-laws, the language of the proposed amendment, (2) the reasons of such shareholder and any such beneficial owner for conducting such business at the meeting, (3) any material interest in such business of such shareholder and any such beneficial owner and (4) a description of all agreements, arrangements or understandings between such shareholder and any such beneficial owner and any other person or persons (naming such person or persons) in connection with the proposal of such business by such shareholder. In the case of any proposed nomination for election or re-election as a director, the corporation may require any proposed nominee to furnish such other information as may reasonably be required by the corporation to determine the eligibility of such proposed nominee to serve as an independent director of the corporation or that could be material to a reasonable shareholder's understanding of the independence, or lack thereof, of such nominee.

For purposes of these by-laws, the term "Share Information" shall mean (1) the class or series and number of shares of the corporation that are owned, directly or indirectly, of record and/or beneficially by a shareholder, any beneficial owner on whose behalf the shareholder is acting and any of their respective Affiliates, (2) any option, warrant, convertible security, stock appreciation right or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the corporation or with a value derived in whole or in part from the value of any class or series of shares of the corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the corporation or otherwise (a "Derivative Instrument") directly or indirectly owned beneficially by such shareholder, any such beneficial owner and any of their respective Affiliates, and any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of the corporation, (3) any proxy, agreement, arrangement, understanding, or relationship pursuant to which such shareholder has a right to vote any shares of any security of the corporation, (4) any short interest in any security of the corporation (for purposes of these by-laws, a person shall be deemed to have a short interest in a security if such person directly or indirectly, through any agreement, arrangement, understanding, relationship or otherwise, has the opportunity to profit or share in any profit derived from any decrease in the value of the subject security), (5) any rights to dividends on the shares of the corporation owned beneficially by such shareholder that are separated or separable from the underlying shares of the corporation, (6) any proportionate interest in shares of the corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such shareholder or beneficial owner is a general partner or, directly or indirectly, beneficially owns an interest in a general partner and (7) any performance-related fees (other than asset-based fees) to which such shareholder, any such beneficial owner or any of their respective Affiliates are entitled based on any increase or decrease in the value of shares of the corporation or Derivative Instruments, if any, as of the date of such notice, including without limitation any such interests held by members of such person's immediate family as defined in Item 404 of Regulation S-K.

(iii) Notwithstanding anything in the second sentence of Section 2.11(a)(ii) to the contrary, if the number of directors to be elected to the Board of Directors is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the corporation at least forty-five days prior to the Anniversary Date, then a shareholder's notice required by this Section 2.11 shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary at the principal offices of the corporation not later than the close of business on the 10th day following the day on which such public announcement is first made by the corporation.

(b) Special Meetings. Only such business shall be conducted at a Special Meeting as shall have been described in the corporation's notice of meeting sent to shareholders pursuant to Section 2.04. Nominations of persons for election to the Board of Directors may be made at a Special Meeting at which directors are to be elected pursuant to the corporation's notice of meeting (i) by or at the direction of the Board of Directors or (ii) by any shareholder of the corporation who (A) is a shareholder of record at the time of giving of such notice of meeting, (B) is entitled to vote with respect to such nominations at the meeting under the articles of incorporation and (C) complies with the notice procedures set forth in this Section 2.11. Clause (ii) in the preceding sentence shall be the exclusive means for a shareholder to make nominations before a Special Meeting. Any shareholder permitted to nominate persons for election to the Board of Directors pursuant to such clause (ii) who desires to nominate persons for election to the Board of Directors at such a Special Meeting shall cause a written notice to be received by the Secretary at the principal offices of the corporation not earlier than ninety days prior to such Special Meeting and not later than the close of business on the later of (I) the 60th day prior to such Special Meeting and (II) the 10th day following the day on which public announcement is first made of the date of such Special Meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. Such written notice shall be signed by the shareholder of record who intends to make the nomination and by the beneficial owner or owners, if any, on whose behalf the shareholder is acting, shall bear the date of signature of such shareholder and any such beneficial owner and shall set forth: (1) the name and address of such shareholder (as they appear in the corporation's books) and any such beneficial owner; (2) the Share Information relating to each such shareholder and beneficial owner (which Share Information shall be supplemented by such shareholder and any such beneficial owner not later than ten days after the Meeting Record Date to disclose such Share Information as of the Meeting Record Date); (3) a representation that such shareholder is a holder of record of shares of the corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to make the nomination specified in the notice; (4) any other information relating to such shareholder and any such beneficial owner that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder; (5) the name and residence address of the person or persons to be nominated; (6) a description of all agreements, arrangements or understandings between such shareholder and any such beneficial owner and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination is to be made by such shareholder and any such beneficial owner, including without limitation any agreement, arrangement or understanding with any person as to how such nominee, if elected as a director of the corporation, will act or vote on any issue or question; (7) a description of all direct and indirect compensation and other material agreements, arrangements and understandings during the past three years and any other material relationships, between or among such shareholder and any such beneficial owner and their respective Affiliates and associates, or others acting in concert therewith, on the one hand, and each proposed nominee, and his or her respective Affiliates and associates, or others acting in concert therewith, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 of Regulation S-K of the SEC if the shareholder making the nomination and any beneficial owner on whose behalf the nomination is made, or any Affiliate or associate thereof or person acting in concert therewith, were the "registrant" for purposes of such rule and the nominee were a director or executive officer of such registrant; and (8) the written consent of each nominee proposed by such shareholder and any such beneficial owner to be named in a proxy statement and to serve as a director of the corporation if so elected. In no event shall any adjournment or postponement of a Special Meeting commence a new time period for the giving of a shareholder's notice as described above.

(c) General.

(i) Only persons who are nominated in accordance with the procedures set forth in this Section 2.11 or Section 2.15 shall be eligible to be elected as directors at an Annual Meeting or Special Meeting. Only such business shall be conducted at an Annual Meeting or Special Meeting as shall have been brought before such meeting in accordance with the procedures set forth in this Section 2.11. The chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the procedures set forth in this Section 2.11 or Section 2.15 and, if any proposed nomination or business is not in compliance with this Section 2.11 or Section 2.15, as the case may be, to declare that such defective nomination or proposal shall be disregarded.

(ii) For purposes of this Section 2.11, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the SEC pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(iii) Notwithstanding the foregoing provisions of this Section 2.11, a shareholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.11; provided, however, that any references in these by-laws to the Exchange Act or the rules and regulations promulgated thereunder are not intended to limit the requirements applicable to nominations or shareholder action pursuant to Sections 2.11(a)(ii) or 2.11(b). Nothing in this Section 2.11 shall be deemed to limit the corporation's obligation to include shareholder proposals in its proxy statement if such inclusion is required by Rule 14a-8 under the Exchange Act.

2.12 Voting of Shares by Certain Holders.

(a) Other Corporations. Shares standing in the name of another corporation may be voted, either in person or by proxy, by the president of such other corporation or any other officers appointed by such president. An appointment of a proxy executed by any principal officer of such other corporation or assistant thereto shall be conclusive evidence of the signer's authority to act, in the absence of express notice to the contrary, given in writing by the Board of Directors of such other company to the Secretary.

(b) Legal Representatives and Fiduciaries. Shares held by an administrator, executor, guardian, conservator, trustee in bankruptcy, receiver or assignee for creditors may be voted by such person, either in person or by proxy, without a transfer of such shares into such person's name, provided that there is filed with the Secretary before or at the time of the meeting proper evidence of such person's incumbency and the number of shares held. Shares held by a fiduciary may be voted by the person acting in such capacity, either in person or by proxy. A proxy executed by a fiduciary, shall be conclusive evidence of the signer's authority to act, in the absence of express notice to the contrary, given in writing to the Secretary.

(c) Pledges. A shareholder whose shares are pledged shall be entitled to vote such shares until the shares have been transferred into the name of the pledgee, and thereafter the pledgee shall be entitled to vote the shares so transferred.

(d) Treasury Stock and Subsidiaries. Neither treasury shares nor shares held by another corporation if a majority of the shares entitled to vote for the election of directors of such other corporation is held by this corporation shall be voted at any Annual Meeting or Special Meeting or counted in determining the total number of outstanding shares entitled to vote, but shares of its own issue held by this corporation in a fiduciary capacity, or held by such other corporation in a fiduciary capacity, shall be entitled to vote and shall be counted in determining the total number of outstanding shares entitled to vote.

(e) Minors. Shares held by a minor may be voted by such minor in person or by proxy, and no such vote shall be subject to disaffirmance or avoidance, unless, prior to such vote, the Secretary has received written notice or has actual knowledge that such shareholder is a minor.

(f) Incompetents and Spendthrifts. Shares held by a incompetent or spendthrift may be voted by such incompetent or spendthrift in person or by proxy, and no such vote shall be subject to disaffirmance or avoidance, unless, prior to such vote, the Secretary has actual knowledge that such shareholder has been adjudicated an incompetent or spendthrift or has actual knowledge of filing of judicial proceedings for appointment of a guardian.

(g) Joint Tenants. Shares registered in the names of two or more individuals who are named in the registration as joint tenants may be voted in person or by proxy signed by any one or more of such individuals if either (i) no other such individual or his or her legal representative is present at the meeting and claims the right to participate in the voting of such shares or prior to the vote filed with the Secretary a contrary written voting authorization or direction or written denial of authority of the individual present or signing the proxy proposed to be voted or (ii) all such other individuals are deceased and the Secretary has no actual knowledge that the survivor has been adjudicated not to be the successor to the interest of those deceased.

2.13 Waiver of Notice by Shareholders. Whenever any notice is required to be given to any shareholder of the corporation under the articles of incorporation, these by-laws or any provision of law, a waiver thereof in writing, signed at any time, whether before or after the time of the meeting, and delivered to the Secretary for inclusion in the corporation's records, by the shareholder entitled to such notice, shall be deemed equivalent to the giving of such notice; provided that such waiver in respect to any matter of which notice is required under any provision of the Wisconsin Business Corporation Law shall contain the same information as would have been required to be included in such notice, except the date, time and place or means of remote communication of the meeting. A shareholder's attendance at any Annual Meeting or Special Meeting, in person or by proxy, waives objection to all of the following: (a) lack of notice or defective notice of the meeting, unless the shareholder, at the beginning of the meeting or promptly upon arrival, objects to holding the meeting or transacting business at the meeting; and (b) consideration of a particular matter at the meeting that is not within the purpose described in the meeting notice, unless the shareholder objects to considering the matter when it is presented.

2.14 Unanimous Consent Without Meeting. Any action required or permitted by the articles of incorporation, these by-laws or any provision of law to be taken at an Annual Meeting or Special Meeting may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the shareholders entitled to vote with respect to the subject matter thereof and delivered to the Secretary for inclusion in the corporation's records.

2.15 Shareholder Nominations Included in the Corporation's Proxy Materials.

(a) Inclusion of Nominee in Proxy Statement. Subject to the provisions of this Section 2.15, if expressly requested in the relevant Nomination Notice (as defined below), the corporation shall include in its proxy statement for any Annual Meeting:

(i) the name of any person nominated for election (the "Nominee") to the Board of Directors, which shall also be included on the corporation's form of proxy and ballot for the relevant Annual Meeting, by any Eligible Holder (as defined below) or group of up to 20 Eligible Holders that has (individually and collectively, in the case of a group) satisfied, as determined by the Board of Directors or its designee, acting in good faith, all applicable conditions and complied with all applicable procedures set forth in this Section 2.15 (such Eligible Holder or group of Eligible Holders being a "Nominating Shareholder");

(ii) disclosure about the Nominee and the Nominating Shareholder required under SEC rules or any other applicable law, rule or regulation to be included in the proxy statement; and

(iii) any statement included by the Nominating Shareholder in the Nomination Notice for inclusion in the proxy statement in support of the Nominee's election to the Board of Directors (subject, without limitation, to Section 2.15(e)(ii)), if such statement does not exceed 500 words.

Notwithstanding anything herein to the contrary, the corporation may solicit shareholders against any Nominee and include in its proxy statement for any Annual Meeting any other information that the corporation or the Board of Directors determines, in their discretion, to include in the proxy statement relating to the nomination of the Nominee, including without limitation any statement in opposition to the nomination and any of the information provided pursuant to this Section 2.15.

(b) Maximum Number of Nominees.

(i) The corporation shall not be required to include in the proxy statement for an Annual Meeting more Nominees than that number of directors constituting 20% of the total number of directors of the corporation on the last day on which a Nomination Notice may be submitted pursuant to Section 2.15(d) (the "Final Nomination Date"), rounded down to the nearest whole number, but not less than two (the "Maximum Number"). The Maximum Number for a particular Annual Meeting shall be reduced by (A) Nominees nominated by a Nominating Shareholder for that Annual Meeting whose nomination is subsequently withdrawn after the Nominating Shareholder is notified by the corporation that the Nominees will be included in the corporation's proxy statement and proxy card for the Annual Meeting, (B) Nominees nominated by a Nominating Shareholder for such Annual Meeting pursuant to this Section 2.15 that the Board of Directors itself decides to nominate for election at such Annual Meeting and (C) the number of directors in office as of the Final Nomination Date who had been Nominees nominated by a Nominating Shareholder with respect to any of the preceding two Annual Meetings (including any Nominee who had been counted at any such Annual Meeting pursuant to the immediately preceding clause (B)) and whose reelection at the upcoming Annual Meeting is being recommended by the Board of Directors. If one or more vacancies for any reason occurs on the Board of Directors after the Final Nomination Date but before the date of the Annual Meeting and the Board of Directors resolves to reduce the size of the Board of Directors in connection with the occurrence of the vacancy or vacancies, then the Maximum Number shall be calculated based on the number of directors in office as so reduced.

(ii) Any Nominating Holder submitting more than one Nominee pursuant to this Section 2.15 for an Annual Meeting shall rank such Nominees based on the order in which the Nominating Holder desires such Nominees to be selected for inclusion in the corporation's proxy statement for such Annual Meeting if the number of Nominees pursuant to this Section 2.15 exceeds the Maximum Number. If the number of Nominees pursuant to this Section 2.15 for any Annual Meeting exceeds the Maximum Number, then the highest ranking Nominee who meets the requirements of this Section 2.15 from each Nominating Holder will be selected for inclusion in the corporation's proxy statement until the Maximum Number is reached, going in order of the amount (largest to smallest) of the shares of common stock of the corporation disclosed as owned in each Nominating Shareholder's Nomination Notice.

(iii) If, after the Final Nomination Date, (A) the corporation is notified, or the Board of Directors or its designee, acting in good faith, determines that a Nominating Shareholder has failed to satisfy or to continue to satisfy the eligibility requirements described in Section 2.15(c), any of the representations and warranties made in the Nomination Notice cease to be true and accurate in all material respects (or omit a material fact necessary to make the statements therein not misleading) or any material violation or breach occurs of the obligations, agreements, representations or warranties of the Nominating Shareholder or the Nominee under this Section 2.15, (B) a Nominating Shareholder or any qualified representative thereof does not appear at the Annual Meeting to present any nomination submitted pursuant to this Section 2.15, or the Nominating Shareholder withdraws its nomination, or (C) a Nominee becomes ineligible for inclusion in the corporation's proxy statement pursuant to this Section 2.15 or dies, becomes disabled or is otherwise disqualified from being nominated for election or serving as a director of the corporation or is unwilling or unable to serve as a director of the corporation, in each case as determined by the Board of Directors or its designee, acting in good faith, whether before or after the corporation's definitive proxy statement for such Annual Meeting is made available to shareholders, then the nomination of the Nominating Shareholder or such Nominee, as the case may be, shall be disregarded and no vote on such Nominee will occur (notwithstanding that proxies in respect of such vote may have been received by the corporation), the Nominating Shareholder may not cure in any way any defect preventing the nomination of the Nominee, and the corporation (1) may omit from its proxy statement and any ballot or form of proxy the disregarded Nominee and any information concerning such Nominee (including a Nominating Shareholder's statement in support) or any successor or replacement nominee proposed by the Nominating Shareholder or by any other Nominating Shareholder and (2) may otherwise communicate to its shareholders, including without limitation by amending or supplementing its proxy statement or ballot or form of proxy, that the Nominee will not be included as a Nominee in the proxy statement or on any ballot or form of proxy and will not be voted on at the Annual Meeting.

(c) Eligibility of Nominating Shareholder.

(i) An "Eligible Holder" is a person who has either (A) been a record holder of the shares of the corporation's common stock used to satisfy the eligibility requirements in this Section 2.15(c) continuously for the three-year period specified in Section 2.15(c)(ii) or (B) provides to the Secretary of the corporation, within the time period referred to in Section 2.15(d), evidence of continuous ownership of such shares for such three-year period from one or more securities intermediaries in a form and in substance that the Board of Directors or its designee, acting in good faith, determines would be deemed acceptable for purposes of a shareholder proposal under Rule 14a-8(b)(2) under the Exchange Act (or any successor rule).

(ii) An Eligible Holder or group of up to 20 Eligible Holders may submit a nomination in accordance with this Section 2.15 only if the person or group (in the aggregate) has continuously owned at least the Minimum Number (as defined below) of shares of the corporation's common stock throughout the three-year period preceding and including the date of submission of the Nomination Notice and continues to own at least the Minimum Number through the date of the Annual Meeting. A group of funds under common management and investment control shall be treated as one Eligible Holder for purposes of such limitation if such Eligible Holder shall provide together with the Nomination Notice documentation reasonably satisfactory to the corporation that demonstrates that the funds are under common management and investment control. For the avoidance of doubt, in the event of a nomination by a group of Eligible Holders, any and all requirements and obligations applicable to an individual Eligible Holder that are set forth in this Section 2.15, including the minimum holding period, shall apply to each member of such group; provided, however, that the Minimum Number shall apply to the ownership of the group in the aggregate, and a breach of any obligation, agreement, representation or warranty under this Section 2.15 by any member of a group shall be deemed a breach by the Nominating Shareholder. If any shareholder withdraws from a group of Eligible Holders at any time prior to the Annual Meeting, then the group of Eligible Shareholders shall only be deemed to own the shares held by the remaining members of the group and if, as a result of such withdrawal, the Nominating Shareholder no longer owns the Minimum Number of shares of the corporation's common stock, then the nomination shall be disregarded as provided in Section 2.15(b)(iii).

(iii) The "Minimum Number" of shares of the corporation's common stock means 3% of the number of outstanding shares of the corporation's common stock as of the most recent date for which such amount is given in any filing by the corporation with the SEC prior to the submission of the Nomination Notice.

(iv) For purposes of this Section 2.15, an Eligible Holder "owns" only those outstanding shares of common stock of the corporation as to which the Eligible Holder possesses both:

(A) the full voting and investment rights pertaining to such shares; and

(B) the full economic interest in (including the opportunity for profit and risk of loss on) such shares;

provided that the number of shares calculated in accordance with clauses (A) and (B) shall not include any shares (1) sold by such Eligible Holder or any of its affiliates in any transaction that has not been settled or closed, (2) borrowed by such Eligible Holder or any of its affiliates for any purpose or purchased by such Eligible Holder or any of its affiliates pursuant to an agreement to resell or (3) subject to any option, warrant, forward contract, swap, contract of sale, other derivative or similar instrument or agreement entered into by such Eligible Holder or any of its affiliates, whether any such instrument or agreement is to be settled with shares or with cash based on the notional amount or value of outstanding shares of common stock of the corporation, in any such case which instrument or agreement has, or is intended to have, the purpose or effect of (x) reducing in any manner, to any extent or at any time in the future, such Eligible Holder's or any of its affiliates' full right to vote or direct the voting of any such shares and/or (y) hedging, offsetting, or altering to any degree gain or loss arising from maintaining the full economic ownership of such shares by such Eligible Holder or any of its affiliates. An Eligible Holder "owns" shares held in the name of a nominee or other intermediary so long as the Eligible Holder retains the right to instruct how the shares are voted with respect to the election of directors and possesses the full economic interest in the shares. An Eligible Holder's ownership of shares shall be deemed to continue during any period in which the Eligible Holder has delegated any voting power by means of a proxy, power of attorney or other similar instrument or arrangement that is revocable at any time by the Eligible Holder. An Eligible Holder's ownership of shares shall be deemed to continue during any period in which the Eligible Holder has loaned such shares provided that the Eligible Holder has the power to recall such loaned shares on five business days' notice, recalls such loaned shares upon being notified by the corporation that any of the Eligible Holder's Nominees will be included in the corporation's proxy statement and proxy card for the Annual Meeting (subject to the provisions of this Section 2.15) and holds such shares through the date of the Annual Meeting. The terms "owned," "owning," "ownership" and other variations of the word "own" shall have correlative meanings. Whether outstanding shares of the corporation are "owned" for these purposes shall be determined by the Board. For purposes of this Section 2.15, the term "affiliate" or "affiliates" shall have the meaning ascribed thereto under the General Rules and Regulations under the Exchange Act.

(v) No person shall be permitted to be in more than one group constituting a Nominating Shareholder, and if any person appears as a member of more than one group, then it shall be deemed to be a member of the group that has the largest amount of shares of common stock of the corporation disclosed as owned in the Nomination Notice.

(d) <u>Nomination Notice</u>

. To nominate a Nominee for purposes of this Section 2.15, the Nominating Shareholder must have given timely notice thereof in writing to the Secretary. To be timely, a Nominating Shareholder's notice shall be received by the Secretary at the principal offices of the corporation not less than 120 days nor more than 150 days prior to the first annual anniversary of the date set forth in the corporation's proxy statement for the immediately preceding Annual Meeting as the date on which the corporation first made available to its shareholders definitive proxy materials for the immediately preceding Annual Meeting; provided, however, that if the date for which the Annual Meeting is called is more than thirty days before or more than thirty days after the first annual anniversary of the immediately preceding Annual Meeting, then notice by the Nominating Shareholder to be timely must be received by the Secretary by the later of the close of business on the date that is 180 days prior to the date of such Annual Meeting or the tenth day following the day on which public announcement of such Annual Meeting is first made. In no event shall any adjournment or postponement of any Annual Meeting or the announcement thereof commence a new time period for the giving of a Nomination Notice. To be in proper form, a Nominating Shareholder's notice to the Secretary for purposes of this Section 2.15 shall include all of the following information and documents (collectively, the "<u>Nomination Notice</u>"):

(i) A Schedule 14N (or any successor form) relating to the Nominee, completed and filed with the SEC by the Nominating Shareholder as applicable, in accordance with SEC rules;

(ii) A written notice of the nomination of such Nominee that includes the following additional information, agreements, representations and warranties by the Nominating Shareholder (including each group member):

(A) the information and representations that would be required to be set forth in a shareholder's notice of a nomination for the election of directors pursuant to Section 2.11(a);

(B) the details of any relationship that existed within the past three years and that would have been described pursuant to Item 6(e) of Schedule 14N (or any successor item) if it existed on the date of submission of the Schedule 14N;

(C) a representation and warranty that the shares of common stock of the corporation owned by the Nominating Shareholder were acquired in the ordinary course of business and not with the intent or objective to influence or change control of the corporation and are not being held with the purpose or effect of changing control of the corporation or to gain a number of seats on the Board of Directors that exceeds the maximum number of nominees that shareholders may nominate pursuant to this Section 2.15;

(D) a representation and warranty that the Nominating Shareholder satisfies the eligibility requirements set forth in Section 2.15(c) and has provided evidence of ownership to the extent required by Section 2.15(c)(i);

(E) a representation and warranty that the Nominating Shareholder will continue to satisfy the eligibility requirements described in Section 2.15(c) through the date of the Annual Meeting;

(F) a representation and warranty that the Nominating Shareholder has not nominated and will not nominate for election to the Board of Directors at the Annual Meeting any person other than the Nominees it is nominating pursuant to this Section 2.15;

(G) a representation and warranty that the Nominating Shareholder will not engage in, and will not be a "participant" in another person's, "solicitation" within the meaning of Rule 14a-1(l) (without reference to the exception in Section 14a-1(l)(2)(iv)) (or any successor rules) with respect to the Annual Meeting, other than with respect to its Nominees or any nominees of the Board of Directors;

(H) a representation and warranty that the Nominating Shareholder will not use any proxy card other than the corporation's proxy card in soliciting shareholders in connection with the election of a Nominee at the Annual Meeting;

(I) a representation and warranty that the Nominee's nomination for election to the Board of Directors or, if elected, Board membership would not violate applicable state or federal law or the rules of any stock exchange on which the corporation's securities are traded;

(J) a representation and warranty that the Nominee (1) qualifies as independent under the rules of any stock exchange on which the corporation's securities are traded, (2) meets the audit committee and compensation committee independence requirements under the rules of any stock exchange on which the corporation's securities are traded, (3) is a "non-employee director" for the purposes of Rule 16b-3 under the Exchange Act (or any successor rule), (4) is an "outside director" for the purposes of Section 162(m) of the Internal Revenue Code (or any successor provision), (5) meets the director qualifications set forth in Section 3.02, and (6) is not and has not been subject to any event specified in Rule 506(d)(1) of Regulation D (or any successor rule) under the Securities Act of 1933 or Item 401(f) of Regulation S-K (or any successor rule) under the Exchange Act, without reference to whether the event is material to an evaluation of the ability or integrity of the Nominee;

(K) details of any position of the Nominee as an officer or director of any competitor of the corporation (that is, any entity whose principal business is the sale of specialty trucks and truck bodies or access equipment), within the three years preceding the submission of the Nomination Notice;

(L) if desired, a statement for inclusion in the proxy statement in support of the Nominee's election to the Board of Directors, provided that such statement shall not exceed 500 words and shall fully comply with Section 14 of the Exchange Act and the rules and regulations thereunder, including Rule 14a-9; and

(M) in the case of a nomination by a group, the designation by all group members of one group member for purposes of receiving communications, notices and inquiries from the corporation and that is authorized to act on behalf of all group members with respect to matters relating to the nomination, including withdrawal of the nomination.

(iii) An executed agreement, in a form deemed satisfactory by the Board of Directors or its designee, acting in good faith, pursuant to which the Nominating Shareholder (including each group member) agrees:

(A) to comply with all applicable laws, rules and regulations in connection with the nomination, solicitation and election;

(B) to file any written solicitation or other written communication with the corporation's shareholders relating to one or more of the corporation's directors or director nominees or any Nominee with the SEC, regardless of whether any such filing is required under rule or regulation or whether any exemption from filing is available for such materials under any rule or regulation;

(C) to assume all liability (jointly and severally by all group members in the case of a nomination by a group) stemming from any action, suit or proceeding concerning any actual or alleged legal or regulatory violation arising out of any communication by the Nominating Shareholder, its affiliates and associates or their respective agents and representatives with the corporation, its shareholders or any other person in connection with the nomination or election of directors, including without limitation the Nomination Notice, or out of the facts, statements or other information that the Nominating Shareholder or its Nominees provided to the corporation in connection with the inclusion of such Nominees in the corporation's proxy statement;

(D) to indemnify and hold harmless (jointly with all other group members, in the case of a group member) the corporation and each of its directors, officers and employees individually against any liability, loss, damages, expenses or other costs (including attorneys' fees) incurred in connection with any threatened or pending action, suit or proceeding, whether legal, administrative or investigative, against the corporation or any of its directors, officers or employees arising out of or relating to any nomination submitted by the Nominating Shareholder pursuant to this Section 2.15 or a failure or alleged failure of the Nominating Shareholder to comply with, or any breach or alleged breach of, its obligations, agreements or representations under this Section 2.15; and

(E) in the event that any information included in the Nomination Notice, or any other communication by the Nominating Shareholder (including with respect to any group member) with the corporation, its shareholders or any other person in connection with the nomination or election ceases to be true and accurate in all material respects or omits a material fact necessary to make the statements made not misleading or that the Nominating Shareholder (including any group member) has failed to continue to satisfy the eligibility requirements described in Section 2.15(c), to promptly (and in any event within 48 hours of discovering such misstatement, omission or failure) notify the corporation and any other recipient of such communication of the misstatement or omission in such previously provided information and of the information that is required to correct the misstatement or omission and/or notify the corporation of the failure to continue to satisfy the eligibility requirements described in Section 2.15(c), as the case may be.

(iv) An executed agreement, in a form deemed satisfactory by the Board of Directors or its designee, acting in good faith, by the Nominee:

(A) to make such other acknowledgments, enter into such agreements and provide such other information as the Board of Directors requires of all directors, including promptly completing the corporation's director questionnaire;

(B) that the Nominee has read and agrees, if elected as a director of the corporation, to sign and adhere to the corporation's corporate governance guidelines and codes of ethics and any other corporation policies and guidelines applicable to directors; and

(C) that the Nominee is not and will not become a party to (1) any compensatory, payment, reimbursement, indemnification or other financial agreement, arrangement or understanding with any person or entity in connection with service or action as a director of the corporation that has not been disclosed to the corporation, (2) any agreement, arrangement or understanding with any person or entity as to how the Nominee would vote or act on any issue or question as a director (a "Voting Commitment") that has not been disclosed to the corporation or (3) any Voting Commitment that could limit or interfere with the Nominee's ability to comply, if elected as a director of the corporation, with his or her fiduciary duties under applicable law.

The information and documents required by this Section 2.15(d) shall be (i) provided with respect to and executed by each group member in the case of information applicable to group members and (ii) provided with respect to the persons specified in Instruction 1 to Items 6(c) and (d) of Schedule 14N (or any successor item) in the case of a Nominating Shareholder or group member that is an entity. The Nomination Notice shall be deemed submitted on the date on which all the information and documents referred to in this Section 2.15(d) (other than such information and documents contemplated to be provided after the date the Nomination Notice is provided) have been delivered to or, if sent by mail, received by the Secretary of the corporation.

(e) Exceptions.

(i) Notwithstanding anything to the contrary contained in this Section 2.15, the corporation may omit from its proxy statement and any ballot or form of proxy any Nominee and any information concerning such Nominee (including a Nominating Shareholder's statement in support), and no vote on such Nominee will occur (notwithstanding that proxies in respect of such vote may have been received by the corporation), and the Nominating Shareholder may not, after the Final Nomination Date, cure in any way any defect preventing the nomination of the Nominee, if:

(A) the corporation receives a notice pursuant to Section 2.11(a) that a shareholder intends to nominate a person for election to the Board of Directors at the Annual Meeting;

(B) the Board of Directors or its designee, acting in good faith, determines that such Nominee's nomination or election to the Board of Directors would result in the corporation violating or failing to be in compliance with these by-laws, the corporation's articles of incorporation or any applicable law, rule or regulation to which the corporation is subject, including any rules or regulations of any stock exchange on which the corporation's securities are traded;

(C) the Nominee was nominated for election to the Board of Directors pursuant to this Section 2.15 at one of the corporation's two preceding Annual Meetings and withdrew or became ineligible or unavailable for election at any such Annual Meeting; or

(D) the Nominee has been, within the past three years, an officer or director of a competitor, as defined for purposes of Section 8 of the Clayton Antitrust Act of 1914, as amended.

(ii) Notwithstanding anything to the contrary contained in this Section 2.15, the corporation may omit from its proxy statement, or may supplement or correct, any information, including all or any portion of the statement in support of the Nominee included in the Nomination Notice, if the Board of Directors or its designee, acting in good faith, determines that:

(A) such information is not true in all material respects or omits a material statement necessary to make the statements made not misleading;

(B) such information directly or indirectly impugns character, integrity or personal reputation of, or directly or indirectly makes charges concerning improper, illegal or immoral conduct or associations, without factual foundation, with respect to, any person; or

(C) the inclusion of such information in the proxy statement would otherwise violate SEC rules or any other applicable law, rule or regulation.

ARTICLE III. BOARD OF DIRECTORS

3.01 General Powers and Number. The business and affairs of the corporation shall be managed by its Board of Directors. The number of directors of the corporation shall be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by the affirmative vote of a majority of the total number of directors that the corporation would have if there were no vacancies. The Board of Directors shall annually choose, from among them, a Chairman of the Board, who shall serve as such until a successor is elected. The Chairman of the Board shall be a director that the Board has determined to be independent in accordance with the listing standards of the New York Stock Exchange Listed Company Rules in effect from time to time who has not previously served as an executive officer of the Company. The Chairman of the Board shall perform such duties and shall have such authority as are specified in these by-laws and as the Board of Directors may from time to time assign to him or her.

3.02 Tenure and Qualifications. Each director shall hold office until the next Annual Meeting, and until his or her successor shall have been elected, or until his or her prior death, resignation or removal. A Director may be removed from office by affirmative vote of a majority of the outstanding shares entitled to vote for the election of such director, taken at a meeting called for that purpose. A director may resign at any time by filing his or her written resignation with the Secretary, which shall be effective when the notice is delivered unless the notice specifies a later date. Directors need not be residents of the State of Wisconsin or shareholders of the corporation. No one shall be eligible for election as a director nor shall any directors be eligible for re-election after attaining the age of seventy-two without the prior approval of the Governance Committee of the Board of Directors, or of such other committee of the Board of Directors then in effect performing a similar function with respect to nomination of directors.

3.03 Certain Director Resignations.

(a) In an uncontested election of directors, any nominee for director who receives a greater number of votes "withheld" from his or her election than votes "for" his or her election (a "Majority Withheld Vote") will promptly tender his or her resignation to the Chairman of the Board following certification of the shareholder vote. For purposes of this by-law, a contested election is one in which the Chairman of the Board determines that, as of the Determination Date, the number of persons properly nominated to serve as directors of the corporation exceeds the number of directors to be elected. The "Determination Date" is (i) the day after the meeting of the Board of Directors at which the nominees for director of the Board of Directors for such election are approved, when such meeting occurs after the last day on which a shareholder may propose the nomination of a director for election in such election pursuant to the articles of incorporation or these by-laws, or (ii) the day after the last day on which a shareholder may propose the nomination of a director for election in such election pursuant to the articles of incorporation or these by-laws, when the last day for such a proposal occurs after the meeting of the Board of Directors at which the nominees for director of the Board of Directors for such election are approved, whichever of clause (i) or (ii) is applicable.

(b) The Resignation Committee (as defined in Section 3.03(e)) will promptly consider the resignation submitted by a director receiving a Majority Withheld Vote, and the Resignation Committee will recommend to the Board of Directors whether to accept the tendered resignation or reject it. In considering whether to recommend that the Board of Directors accept or reject the tendered resignation, the Resignation Committee will consider all factors deemed relevant by the members of such committee, including, without limitation, any stated reasons why shareholders "withheld" votes for election from such director and the qualifications of the director whose resignation has been tendered.

(c) The Board of Directors will act on the Resignation Committee's recommendation no later than 90 days following the date of the shareholders' meeting at which the election occurred. In considering such committee's recommendation, the Board of Directors will consider the factors considered by such committee and such additional information and factors the Board of Directors believes to be relevant. Following the Board of Directors' decision, the corporation will promptly publicly disclose in a Current Report on Form 8-K filed with or furnished to, as applicable, the SEC the Board of Directors' decision whether to accept the resignation as tendered, including a full explanation of the process by which the decision was reached and, if applicable, the reasons for rejecting the tendered resignation.

(d) Any director who tenders a resignation pursuant to this Section 3.03 will not participate in the recommendation of the Resignation Committee regarding whether or not to accept that director's tendered resignation. Any director who tenders a resignation pursuant to this Section 3.03 will not participate in the Board of Directors' deliberation or vote regarding whether or not to accept that director's tendered resignation. If directors constituting a quorum of the Board of Directors did not receive a Majority Withheld Vote in the election that prompted one or more directors to tender the resignations upon which the Resignation Committee and the Board of Directors must then act, then no director who tendered a resignation pursuant to this Section 3.03 in connection with such election will participate in the Board of Directors' deliberation or vote (i) regarding whether or not to accept any tendered resignations related to such election or (ii) regarding matters relating to the Resignation Committee as it relates to such resignation.

(e) The "Resignation Committee" shall be (i) the Governance Committee of the Board of Directors, or such other committee of the Board of Directors then in effect performing a similar function, if (A) less than a majority of the members of such committee received Majority Withheld Votes in the election that prompted one or more directors to tender the resignations upon which the Resignation Committee must then act or (B) all of the directors received Majority Withheld Votes in such election or (ii) a committee of the Board of Directors appointed by the Board of Directors and consisting only of directors who did not receive Majority Withheld Votes, if a majority of the members of the Governance Committee of the Board of Directors, or such other committee of the Board of Directors then in effect performing a similar function, but not all of the directors, received Majority Withheld Votes at such election.

(f) This by-law will be summarized or included in each proxy statement relating to an election of directors of the corporation.

3.04 Regular Meetings. The Board of Directors may provide, by resolution, the time and place, either within or without the State of Wisconsin, for the holding of regular meetings without other notice than such resolution.

3.05 Special Meetings. Special meetings of the Board of Directors may be called by or at the request of the Chairman of the Board, the Chief Executive Officer or the Secretary and shall be called by the Secretary upon the written request of a majority of the directors then in office. If such meeting shall be called upon the written request of a majority of the directors, the date of the meeting shall be within ten days of receipt by the Secretary or, in his absence by any Assistant Secretary, of their request, at a time determined by such officer. The Chairman of the Board, the Chief Executive Officer or the Secretary calling any special meeting of the Board of Directors, except as otherwise provided by by-law, may fix any place, either within or without the State of Wisconsin, as the place for holding any special meeting of the Board of Directors called by them, and if no other place is fixed, the place of meeting shall be the principal business office of the corporation in the State of Wisconsin.

3.06 Notice; Waiver. Notice of meetings of the Board of Directors (unless otherwise provided pursuant to Section 3.04) shall be given by written notice delivered personally or mailed or given by email, telegram or facsimile to each director at his or her business address or at such other address as such director shall have designated in writing filed with the Secretary, in each case not less five days if by mail and not less than forty-eight hours if by email, telegram, telephone, teletype, telegraph, facsimile or other form of wire or wireless communication, or personal delivery. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail so addressed, with postage thereon prepaid. If notice be given by telegram or facsimile, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company. Whenever any notice whatever is required to be given to any director of the corporation under the articles of incorporation or these by-laws or any provision of law, a waiver thereof in writing, signed at any time, whether before or after the time of meeting, by the director entitled to such notice, shall be deemed equivalent to the giving of such notice. The attendance of a director at a meeting shall constitute a waiver of objects thereat to the transaction of any business because the meeting is not lawfully called or convened. Neither business to be transacted at, nor the purpose of, any regular or special meeting of the Board of Directors need to be specified in the notice or waiver of notice of such meeting.

3.07 Quorum. Except as otherwise provided by law or by the articles of incorporation or these by-laws, a majority of the number of directors as provided in Section 3.01 shall constitute a quorum for the transaction of business at any meeting of the Board of Directors, but a majority of the directors present (though less than such quorum) may adjourn the meeting from time to time without further notice.

3.08 Manner of Acting. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, unless the act of a greater number is required by law or by the articles of incorporation or these by-laws.

3.09 Conduct of Meetings. In the absence of the Chairman of the Board, the Chief Executive Officer shall call the meeting of the Board of Directors to order, and shall act as chairman of the meeting, and in their absence any director chosen by the Directors present shall call the meeting of the Board of Directors to order and shall act as chairman of the meeting. The Secretary shall act as Secretary of all meetings of the Board of

Directors but, in the absence of the Secretary, the presiding officer may appoint any Assistant Secretary or any director or other person present to act as secretary of the meeting.

3.10 Vacancies. Any vacancy occurring in the Board of Directors, including a vacancy created by an increase in the number of directors, may be filled until the next succeeding annual election by the affirmative vote of a majority of the directors then in office, though less than a quorum of the Board of Directors; provided, that in case of a vacancy created by the removal of a director by vote of the shareholders, the shareholders shall have the right to fill such vacancy at the same meeting or any adjournment thereof; and provided further, that a vacancy filled by the Board of Directors shall be filled by the vote of the remaining director(s) elected by the voting group of shareholders which would be entitled to fill that vacancy at a meeting of the shareholders.

3.11 Compensation. The Board of Directors, by affirmative vote of a majority of the directors then in office, and irrespective of any personal interest of any of its members, may establish from time to time a reasonable compensation for directors of the corporation; provided that persons who are directors and also are officers or employees of the corporation eligible shall be ineligible to receive compensation as directors. By affirmative vote of a majority of such directors, and irrespective of any personal interest of any of them, the Board of Directors also may establish, from time to time, reasonable compensation for each of the officers of the corporation. The Board of Directors, from time to time, may delegate its authority under this by-law to an appropriate committee. The Board of Directors also shall have authority to provide for or to delegate authority to an appropriate committee to provide for reasonable pensions, disability or death benefits, and other benefits or payments to directors, officers and employees, and to their estates, families, dependents or beneficiaries on account of services rendered by such directors, officers and employees of the corporation.

3.12 Presumption of Assent. A director of the corporation who is present at a meeting of the Board of Directors or a committee thereof of which he or she is a member at which action on any corporate matter is taken shall be presumed to have assented to the action taken unless his or her dissent shall be entered in the minutes of the meeting or unless he or she shall file his or her written dissent to such action with the person acting as the secretary of the meeting before the adjournment thereof or shall forward such dissent by registered mail to the Secretary of the corporation immediately after the adjournment of the meeting. Such right to dissent shall not apply to a director who voted in favor of such action.

3.13 Committees. The Board of Directors by resolution adopted by the affirmative vote of a majority of them then in office may designate one or more committees from time to time. Each such committee shall consist of at least one director and shall have those of the powers of the Board of Directors as shall be granted to such committee. Each such committee may exercise its power at times when the Board of Directors is not in session, subject to these by-laws and the Wisconsin Business Corporation Law. The Board of Directors also at any time may elect one or more of its members as alternate members of any such committee. Any such alternate, upon request by the Chairman of the Board, or in his or her absence the Chief Executive Officer, or in his or her absence the Chairman of such committee, may take the place of any absent member or members of the committee at any of its meetings. Except as provided by these by-laws or by resolution of the Board of Directors, each such committee shall fix its own rules governing the conduct of its activities as the Board of Directors may request.

3.14 Unanimous Consent Without Meeting. Any action required or permitted by the articles of incorporation or by-laws or any provision of law to be taken by the Board of Directors at a meeting or by resolution may be taken without a meeting, if a consent in writing, setting forth the action so taken, shall be signed by all of the directors then in office.

3.15 Telephonic Meetings. Except as provided by this by-law, any action required or permitted by the articles of incorporation or by-laws or any provision of law to be taken by the Board of Directors at a meeting or by resolution may be taken by a quorum of the Board of Directors at a telephonic meeting or other meeting utilizing electronic communication, if all participating directors are informed that a meeting is taking place at which official business may be transacted; if all participating directors simultaneously may hear each other during the meeting; if each participating director immediately is able to send messages to all other participating directors; and if all communication during the meeting immediately is transmitted to each participating director.

ARTICLE IV. OFFICERS

4.01 Number. The principal officers of the corporation shall be a Chief Executive Officer, a President, any number of Vice Presidents, a Secretary and a Treasurer, each of whom shall be elected by the Board of Directors. Such other officers and assistant officers as may be deemed necessary may be elected or appointed by the Board of Directors, the Chief Executive Officer or the President. Any two or more offices may be held by the same person, except that the same person may not hold the offices of President and Secretary, President and Treasurer or President and Vice President.

4.02 Election and Term of Office. The officers of the corporation to be elected by the Board of Directors shall be elected annually. Each officer shall hold office until his or her successor shall have been duly elected or until his or her prior death, resignation or removal.

4.03 Resignation; Removal. Any officer may resign at any time by delivering written notice to an officer of the corporation. A resignation shall be effective when delivered unless the notice specifies a later date which is accepted by the corporation. Any officer or agent may be removed by the Board of Directors whenever in its judgment the best interest of the corporation will be served thereby. Any officer or assistant officer elected or appointed by the Chief Executive Officer or the President may be removed by the person then holding the title of the officer that appointed such officer or assistant officer whenever in its judgment the best interest of the corporation will be served thereby. However, such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment shall not of itself create contract rights.

4.04 Vacancies. A vacancy in any principal office because of death, resignation, removal, disqualification or otherwise shall be filled by the Board of Directors for the unexpired portion of the term.

4.05 Chief Executive Officer and President. Subject to the control of the Board of Directors, the Chief Executive Officer shall be responsible for the control and general management of all of the business and affairs of the corporation. In the absence of the Chairman of the Board, he or she may preside at all meetings of the shareholders and of the Board of Directors. He or she shall see that all resolutions and orders of the Board of Directors and its committees are carried into effect. The President (if the President is not then the Chief Executive Officer) shall perform all duties incident to the office of President and such other duties as may be prescribed by the Board of Directors, by the Executive Committee or by the Chief Executive Officer from time to time. In the absence of the Chief Executive Officer (if the President is not then the Chief Executive Officer) or in the event of his death, inability or refusal to act, or in the event for any reason it shall be impracticable for the Chief Executive Officer to act personally, the President shall perform the duties of the Chief Executive Officer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer. Both the Chief Executive Officer and the President (if the President is not then the Chief Executive Officer) shall have authority to sign, execute and acknowledge, on behalf of the corporation, all deeds, mortgages, bonds, stock certificates, contracts, leases, reports and all other documents or instruments necessary or proper to be executed in the course of the ordinary business of the corporation, or which shall be authorized by resolution of the Board of Directors. Except as otherwise provided by law or the Board of Directors, either of them also may authorize any Vice President or other officer or agent of the corporation to sign, execute and acknowledge such documents or instruments in his place and stead. Each shall have authority, subject to such rules as may be prescribed by the Board of Directors, to appoint such agents and employees of the corporation as he or she shall deem necessary, to prescribe their powers, duties and compensation, and to delegate authority to them. Such agents and employees shall hold office at the discretion of the Chief Executive Officer and the President.

4.06 The Vice Presidents. In the absence of the President or in the event of his death, inability or refusal to act, or in the event for any reason it shall be impracticable for the President to act personally, the Vice President (or in the event there be more than one Vice President, the Vice Presidents in the order designated by the Board of Directors, or in the absence of any designation, then in the order of their election) shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The Board of Directors may designate a Vice President as the Chief Financial Officer, in which event he or she shall have responsibility for all financial matters which affect the corporation other than those expressly provided for the Treasurer. Any Vice President may sign, with the Secretary or Assistant Secretary, certificates for shares of the corporation; and shall perform such other duties and have such authority as from time to time may be delegated or assigned to him or her by the Chief Executive Officer, by the President or by the Board of Directors. The execution of any instrument of the corporation by any Vice President shall be conclusive evidence, as to third parties, of his or her authority to act in the stead of the President.

4.07 The Secretary. The Secretary shall: (a) keep the minutes of the meetings of the shareholders and of the Board of Directors in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these by-laws or as required by law; (c) be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all documents the execution of which on behalf of the corporation under its seal is duly authorized; (d) keep or arrange for the keeping of a register of the post office addresses of each shareholder which shall be furnished to the Secretary by such shareholder; (e) sign with the Chief Executive Officer or the President, or a Vice President, certificates for shares of the corporation, the issuance of which shall have been authorized by resolution of the Board of Directors; (f) have general charge of the stock transfer books of the corporation; and (g) in general perform all duties incident to the office of Secretary and have such other duties and exercise such authority as from time to time may be delegated or assigned to him or her by the Chief Executive Officer, by the President or by the Board of Directors.

4.08 The Treasurer. The Treasurer shall: (a) have charge and custody of and be responsible for all funds and securities of the corporation; (b) receive and give receipts for money due and payables to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of Section 5.04; and (c) in general perform all of the duties incident to the office of Treasurer and have such other duties and exercise such other authority as from time to time may be delegated or assigned to him or her by the Chief Executive Officer, by the President or by the Board of Directors. If required by the Board of Directors, the Treasurer shall give a bond for the faithful discharge of his duties in such sum and with such surety or sureties as the Board of Directors shall determine.

4.09 Assistant Secretaries and Assistant Treasurers. There shall be such number of Assistant Secretaries and Assistant Treasurers as the Board of Directors, the Chief Executive Officer or the President may from time to time authorize. The Assistant Secretaries may sign with the Chief Executive Officer, the President or a Vice President certificates for shares of the corporation the issuance of which shall have been authorized by a resolution of the Board of Directors. The Assistant Treasurers shall respectively, if required by the Board of Directors, give bonds for the faithful discharge of their duties in such sums and with such sureties as the Board of Directors shall determine. The Assistant Secretaries and Assistant Treasurers, in general, shall perform such duties and have such authority as shall from time to time be delegated or assigned to them by the Secretary or the Treasurer, respectively, or by the Chief Executive Officer, the President or the Board of Directors.

4.10 Other Assistants and Acting Officers. The Board of Directors, the Chief Executive Officer and the President each shall have the power to appoint any person to act as Assistant to any officer, or as agent for the corporation in his stead, or to perform the duties of such officer whenever for any reason it is impracticable for such officer to act personally, and such assistant or acting officer or other agent so appointed shall have the power to perform all the duties of the office to which he or she is so appointed to be assistant, or as to which he or she is so appointed to act, except as such power may be otherwise defined or restricted by the Board of Directors, the Chief Executive Officer or the President.

4.11 Salaries. The salaries of the principal officers shall be fixed from time to time by the Board of Directors or by a duly authorized committee thereof, and no officer shall be prevented from receiving such salary by reason of the fact that he or she is also a director of the corporation.

ARTICLE V. CONTRACTS, LOANS, CHECKS AND DEPOSITS; SPECIAL CORPORATE ACTS

5.01 Contracts. The Board of Directors may authorize any officer or officers, agent or agents, to enter into any contract or execute or deliver any instrument in the name of and on behalf of the corporation and such authorization may be general or confined to specific instances. In the absence of other designation, all deeds, mortgages and instruments of assignment or pledge made by the corporation shall be executed in the name of the corporation by the Chief Executive Officer or the President, or, in the absence of the Chief Executive Officer and the President, by one of the Vice Presidents, and by the Secretary, an Assistant Secretary, the Treasurer, an Assistant Treasurer, or Controller. When necessary or required by law, the Secretary or an Assistant Secretary shall affix the corporate seal to all such instruments. When an instrument has been executed in the manner provided by this Section, no party or third person shall be required to inquire into the authority of the officers signing for the corporation so to act.

5.02 Loans. No indebtedness for borrowed money shall be contracted on behalf of the corporation and no evidences of such indebtedness shall be issued in its name unless authorized by or under the authority of a resolution of the Board of Directors. Such authorization may be general or confined to specific instances.

5.03 Checks, Drafts, etc. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the corporation, shall be signed by such officer or officers, agent or agents, of the corporation and in such manner as shall from time to time be determined by or under the authority of a resolution of the Board of Directors.

5.04 Deposits. All funds of the corporation not otherwise employed shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositaries as may be selected by or under the authority of a resolution of the Board of Directors.

5.05 Voting of Securities Owned by this Corporation. Subject always to the specific directions of the Board of Directors, (a) any shares or other securities issued by any other corporation and owned or controlled by this corporation may be voted at any meeting of security holders of such other corporation by the Chief Executive Officer or the President or, in the absence of both of them, by any Vice President then present, and (b) whenever in the judgment of the Chief Executive Officer or the President or, in the absence of both of them, by any Vice President, it is desirable for this corporation to execute a proxy or written consent in respect to any share or other securities issued by any other corporation and owned by this corporation, such proxy or consent shall be executed in the name of this corporation by the Chief Executive Officer or the President or, in the absence of both of them, by any Vice President, without necessity of any authorization by the Board of Directors, affixation of corporate seal, or counter-signature or attestation by another officer. Any person or persons designated in the manner provided by this Section as the proxy or proxies of this corporation shall have full right, power and authority to vote the shares or other securities issued by such other corporation and owned by this corporation the same as such shares or other securities might be voted by this corporation.

ARTICLE VI. SHARES AND THEIR TRANSFER

6.01 Certificates for Shares. The corporation may issue any shares of the classes or series of capital stock of the corporation without certificates to the full extent that the Secretary or Assistant Secretary of the corporation determines that such issuance is appropriate and allowed by applicable law and rules of the New York Stock Exchange, any such determination to be conclusively evidenced by the delivery to the corporation’s transfer agent and registrar by the Secretary or Assistant Secretary of the corporation of an instrument referring to this by-law and providing instructions of the Secretary or Assistant Secretary of the corporation to the transfer agent and registrar to issue any such shares without certificates in accordance with applicable law. In any event, the foregoing authorization does not affect shares already represented by certificates until the certificates are surrendered to the corporation. Certificates, if any, representing shares of the corporation shall be in such form, consistent with law, as shall be determined by the Board of Directors. All certificates shall be signed by the Chief Executive Officer or the President or a Vice President and by the Secretary or an Assistant Secretary. All certificates shall be numbered consecutively or otherwise identified. The name and address of each person to whom a certificate is issued, together with the number of shares represented by the certificate and the date of its issue, shall be entered on the stock transfer books of the corporation. The name and address of each person to whom a share is issued without a certificate, together with the number of shares so issued and the date of their issue, shall be entered on the stock transfer books of the corporation. All certificates surrendered to the corporation shall be canceled. No new certificate for previously issued shares shall be issued until the outstanding certificate(s) for the same share shall have been surrendered and canceled, except as provided by Section 6.06.

6.02 Facsimile Signatures and Seal. The seal of the corporation on any certificate for shares may be a facsimile. The signatures of the Chief Executive Officer or the President or Vice President and the Secretary or Assistant Secretary upon a certificate may be facsimiles if the certificate is manually signed on behalf of a transfer agent, or a registrar, other than the corporation itself or an employee of the corporation.

6.03 Signature by Former Officers. In case any officer, who has signed or whose facsimile signature has been placed upon any certificate for shares, shall have ceased to be such officer before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer at the date of its issue.

6.04 Transfer of Shares. Prior to due presentment of a certificate for shares for registration of transfer, and prior to compliance with the customary procedures for transferring shares issued without a certificate, the corporation may treat the registered owner of such shares as the person exclusively entitled to vote, to receive notifications and otherwise to have and exercise all the rights and power of an owner. Where a certificate for shares is presented to the corporation with a request to register for transfer, the corporation shall not be liable to the owner or any other person suffering loss as a result of such registration of transfer if (a) there were on or with the certificate the necessary endorsements and (b) the corporation had no duty to inquire into adverse claims or has discharged any such duty. The corporation may require reasonable assurance that said endorsements are genuine and effective and in compliance with such other regulations as may be prescribed by or under the authority of the Board of Directors. Where the corporation receives a request to register for transfer shares issued without a certificate, the corporation shall not be liable to the owner or any other person suffering loss as a result of such registration of transfer if (a) the party requesting the transfer has complied with customary procedures for transferring shares issued without a certificate and (b) the corporation had no duty to inquire into adverse claims or has discharged any such duty.

6.05 Restrictions on Transfer. The face or reverse side of each certificate representing shares, or the written statement provided to shareholders for shares issued without a certificate, shall bear a conspicuous notation of any restriction imposed by the corporation upon the transfer of such shares.

6.06 Lost, Destroyed or Stolen Certificates. Where the owner of a share represented by a certificate claims that his certificate has been lost, destroyed or wrongfully taken, a new certificate shall be issued in place thereof, or the corporation shall enter the name and address of such owner on the stock transfer books of the corporation as a person to whom a share has been issued without a certificate, if the owner (a) so requests before the corporation has notice that such shares have been acquired by a bona fide purchaser, and (b) files with the corporation a sufficient indemnity bond, and (c) satisfied such other reasonable requirements as may be prescribed by or under the authority of the Board of Directors.

6.07 Consideration for Shares. The shares of the corporation may be issued for such consideration as shall be fixed from time to time by the Board of Directors, provided that any shares having a par value shall not be issued for a consideration less than the par value thereof. The consideration to be paid for shares may be paid in whole or in part, in money, on other property, tangible or intangible, or in labor or services actually performed for the corporation. When payment of the consideration for which shares are to be issued shall have been received by the corporation, such shares shall be deemed to be fully paid and nonassessable by the corporation. No certificate shall be issued for any share, and no entry on the stock transfer books of the corporation of a share to be issued without a certificate, until such share is fully paid.

6.08 Stock Regulations. The Board of Directors shall have the power and authority to make all such further rules and regulations not inconsistent with the statutes of the State of Wisconsin as it may deem expedient concerning the issue, transfer and registration of shares of the corporation, whether or not represented by certificates.

ARTICLE VII. INDEMNIFICATION

7.01 Certain Definitions. The following capitalized terms (including any plural forms thereof) used in this Article VII shall be defined as follows:

(a) "Affiliate" shall include, without limitation, any corporation, partnership, limited liability company, joint venture, employee benefit plan, trust or other enterprise, whether domestic or foreign, that directly or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the Corporation.

(b) "Authority" shall mean the entity selected by the Director or Officer to determine his or her right to indemnification pursuant to Section 7.04.

(c) "Board" shall mean the entire then elected and serving Board of Directors of the Corporation, including all members thereof who are Parties to the subject Proceeding or any related Proceeding.

(d) "Breach of Duty" shall mean the Director or Officer breached or failed to perform his or her duties to the Corporation and his or her breach of or failure to perform those duties is determined, in accordance with Section 7.04, to constitute conduct as a result of which the Director or Officer is not entitled to mandatory indemnification under the Statute.

(e) "Corporation," as used herein and as defined in the Statute and incorporated by reference into the definitions of certain other capitalized terms used herein, shall mean this corporation, including, without limitation, any successor corporation or entity to this corporation by way of merger, consolidation or acquisition of all or substantially all of the capital stock or assets of this corporation.

(f) "Director or Officer" shall have the meaning set forth in the Statute; provided, that, for purposes of this Article VII, (i) "Director or Officer" shall include a director or officer of a Subsidiary (whether or not otherwise serving as a Director of Officer), (ii) the term "employee benefit plan" as used in the Statute shall include an employee benefit plan sponsored, maintained or contributed to by a Subsidiary and (iii) it shall be conclusively presumed that any Director or Officer serving as a director, officer, partner, member, trustee, member of any governing or decision-making committee, manager, employee or agent of an Affiliate shall be so serving at the request of the Corporation.

(g) "Disinterested Quorum" shall mean a quorum of the Board who are not Parties to the subject Proceeding or any related Proceeding.

(h) "Expenses" shall mean and include fees, costs, charges, disbursements, attorney fees and any other expenses incurred in connection with a Proceeding.

(i) "Liability" shall mean and include the obligation to pay a judgment, settlement, penalty, assessment, forfeiture or fine, including an excise tax assessed with respect to an employee benefit plan, and reasonable Expenses.

(j) "Party" shall have the meaning set forth in the Statute; provided, that, for purposes of this Article VII, the term "Party" shall also include any Director or Officer or employee of the Corporation who is or was a witness in a Proceeding at a time when he or she has not otherwise been formally named a Party thereto.

(k) "Proceeding" shall have the meaning set forth in the Statute; provided, that, in accordance with the Statute and for purposes of this Article VII, the term "Proceeding" shall also include all Proceedings (i) brought under (in whole or in part) the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, their respective state counterparts, and/or any rule or regulation promulgated under any of the foregoing; (ii) brought before an Authority or otherwise to enforce rights hereunder; (iii) any appeal from a Proceeding; and (iv) any Proceeding in which the Director or Officer is a plaintiff or petitioner because he or she is a

Director or Officer; provided, however, that any such Proceeding under this subsection (iv) must be authorized by a majority vote of a Disinterested Quorum.

(l) "Statute" shall mean the provisions of the Wisconsin Business Corporation Law, Chapter 180 of the Wisconsin Statutes, relating to indemnification and insurance for Directors, Officers and others, which are contained in Wisconsin Statutes Sections 180.0850 through 180.0859 as of September 20, 2010, as the same shall then be in effect, including any amendments thereto after September 20, 2010, but, in the case of any such amendment, only to the extent such amendment permits or requires the Corporation to provide broader indemnification rights than the Statute permitted or required the Corporation to provide prior to such amendment.

(m) "Subsidiary" shall mean any direct or indirect subsidiary of the Corporation as determined for financial reporting purposes, whether domestic or foreign.

7.02 Mandatory Indemnification of Directors and Officers. To the fullest extent permitted or required by the Statute, the Corporation shall indemnify a Director or Officer against all Liabilities incurred by or on behalf of such Director or Officer in connection with a Proceeding in which the Director or Officer is a Party because he or she is a Director or Officer.

7.03 Procedural Requirements.

(a) A Director or Officer who seeks indemnification under Section 7.02 shall make a written request therefor to the Corporation. Subject to Section 7.03(b), within sixty days of the Corporation's receipt of such request, the Corporation shall pay or reimburse the Director or Officer for the entire amount of Liabilities incurred by the Director or Officer in connection with the subject Proceeding (net of any Expenses previously advanced pursuant to Section 7.05).

(b) No indemnification shall be required to be paid by the Corporation pursuant to Section 7.02 if, within such sixty-day period, (i) a Disinterested Quorum, by a majority vote thereof, determines that the Director or Officer requesting indemnification engaged in misconduct constituting a Breach of Duty or (ii) a Disinterested Quorum cannot be obtained.

(c) In either case of nonpayment pursuant to Section 7.03(b), the Board shall immediately authorize by resolution that an Authority, as provided in Section 7.04, determine whether the Director's or Officer's conduct constituted a Breach of Duty and, therefore, whether indemnification should be denied hereunder.

(d) (i) If the Board does not authorize an Authority to determine the Director's or Officer's right to indemnification hereunder within such sixty-day period and/or (ii) if indemnification of the requested amount of Liabilities is paid by the Corporation, then it shall be conclusively presumed for all purposes that a Disinterested Quorum has affirmatively determined that the Director or Officer did not engage in misconduct constituting a Breach of Duty and, in the case of subsection (i) above (but not subsection (ii)), indemnification by the Corporation of the requested amount of Liabilities shall be paid to the Director or Officer immediately.

7.04 Determination of Indemnification.

(a) If the Board authorizes an Authority to determine a Director's or Officer's right to indemnification pursuant to Section 7.03, then the Director or Officer requesting indemnification shall have the absolute discretionary authority to select one of the following as such Authority:

(i) An independent legal counsel; provided, that such counsel shall be mutually selected by such Director or Officer and by a majority vote of a Disinterested Quorum or, if a Disinterested Quorum cannot be obtained, then by a majority vote of the Board;

(ii) A panel of three arbitrators selected from the panels of arbitrators of the American Arbitration Association in Wisconsin; provided, that (A) one arbitrator shall be selected by such Director or Officer, the second arbitrator shall be selected by a majority vote of a Disinterested Quorum or, if a Disinterested

Quorum cannot be obtained, then by a majority vote of the Board, and the third arbitrator shall be selected by the two previously selected arbitrators, and (B) in all other respects (other than this Article VII), such panel shall be governed by the American Arbitration Association's then existing Commercial Arbitration Rules; or

(iii) A court pursuant to and in accordance with the Statute.

(b) In any such determination by the selected Authority there shall exist a rebuttable presumption that the Director's or Officer's conduct did not constitute a Breach of Duty and that indemnification against the requested amount of Liabilities is required. The burden of rebutting such a presumption by clear and convincing evidence shall be on the Corporation or such other party asserting that such indemnification should not be allowed.

(c) The Authority shall make its determination within sixty days of being selected and shall submit a written opinion of its conclusion simultaneously to both the Corporation and the Director or Officer.

(d) If the Authority determines that indemnification is required hereunder, the Corporation shall pay the entire requested amount of Liabilities (net of any Expenses previously advanced pursuant to Section 7.05), including interest thereon at a reasonable rate, as determined by the Authority, within ten days of receipt of the Authority's opinion; provided, that, if it is determined by the Authority that a Director or Officer is entitled to indemnification against Liabilities' incurred in connection with some claims, issues or matters, but not as to other claims, issues or matters, involved in the subject Proceeding, the Corporation shall be required to pay (as set forth above) only the amount of such requested Liabilities as the Authority shall deem appropriate in light of all of the circumstances of such Proceeding.

(e) The determination by the Authority that indemnification is required hereunder shall be binding upon the Corporation regardless of any prior determination that the Director or Officer engaged in a Breach of Duty.

(f) All Expenses incurred in the determination process under this Section 7.04 by either the Corporation or the Director or Officer, including, without limitation, all Expenses of the selected Authority, shall be paid by the Corporation.

7.05 Mandatory Allowance of Expenses.

(a) The Corporation shall pay or reimburse from time to time or at any time, within ten days after the receipt of the Director's or Officer's written request therefor, the reasonable Expenses of the Director or Officer as such Expenses are incurred; provided, the following conditions are satisfied:

(i) The Director or Officer furnishes to the Corporation an executed written certificate affirming his or her good faith belief that he or she has not engaged in misconduct which constitutes a Breach of Duty; and

(ii) The Director or Officer furnishes to the Corporation an unsecured executed written agreement to repay any advances made under this Section 7.05 if it is ultimately determined by an Authority that he or she is not entitled to be indemnified by the Corporation for such Expenses pursuant to Section 7.04.

(b) If the Director or Officer must repay any previously advanced Expenses pursuant to this Section 7.05, such Director or Officer shall not be required to pay interest on such amounts.

7.06 Indemnification and Allowance of Expenses of Certain Others.

(a) The Board may, in its sole and absolute discretion as it deems appropriate, pursuant to a majority vote thereof, indemnify a director or officer of an Affiliate (who is not otherwise serving as a Director or Officer) against all Liabilities, and shall advance the reasonable Expenses, incurred by such director or officer in a Proceeding to the same extent hereunder as if such director or officer incurred such Liabilities because he or she was a Director or Officer, if such director or officer is a Party thereto because he or she is or was a director or officer of the Affiliate.

(b) The Corporation shall indemnify an employee who is not a Director or Officer, to the extent he or she has been successful on the merits or otherwise in defense of a Proceeding, for all reasonable Expenses incurred in the Proceeding if the employee was a Party because he or she was an employee of the Corporation.

(c) The Board may, in its sole and absolute discretion as it deems appropriate, pursuant to a majority vote thereof, indemnify (to the extent not otherwise provided in Section 7.06(b)) against Liabilities incurred by, and/or provide for the allowance of reasonable Expenses of, an employee or authorized agent of the Corporation acting within the scope of his or her duties as such and who is not otherwise a Director or Officer.

7.07 Insurance. The Corporation may purchase and maintain insurance on behalf of a Director or Officer or any individual who is or was an employee or authorized agent of the Corporation against any Liability asserted against or incurred by such individual in his or her capacity as such or arising from his or her status as such, regardless of whether the Corporation is required or permitted to indemnify against any such Liability under this Article VII.

7.08 Notice to the Corporation. A Director, Officer or employee shall promptly notify the Corporation in writing when he or she has actual knowledge of a Proceeding which may result in a claim of indemnification against Liabilities or allowance of Expenses hereunder, but the failure to do so shall not relieve the Corporation of any liability to the Director, Officer or employee hereunder unless the Corporation shall have been irreparably prejudiced by such failure (as determined, in the case of Directors or Officers only, by an Authority selected pursuant to Section 7.04(a)).

7.09 Severability. If any provision of this Article VII shall be deemed invalid or inoperative, or if a court of competent jurisdiction determines that any of the provisions of this Article VII contravene public policy, this Article VII shall be construed so that the remaining provisions shall not be affected, but shall remain in full force and effect, and any such provisions which are invalid or inoperative or which contravene public policy shall be deemed, without further action or deed by or on behalf of the Corporation, to be modified, amended and/or limited, but only to the extent necessary to render the same valid and enforceable; it being understood that it is the Corporation's intention to provide the Directors and Officers with the broadest possible protection against personal liability allowable under the Statute.

7.10 Nonexclusivity of Article VII. The rights of a Director, Officer or employee (or any other person) granted under this Article VII shall not be deemed exclusive of any other rights to indemnification against Liabilities or allowance of Expenses which the Director, Officer or employee (or such other person) may be entitled to under any written agreement, Board resolution, vote of shareholders of the Corporation or otherwise, including, without limitation, under the Statute. Nothing contained in this Article VII shall be deemed to limit the Corporation's obligations to indemnify against Liabilities or allow Expenses to a Director, Officer or employee under the Statute.

7.11 Contractual Nature of Article VII; Changes to Rights. This Article VII shall be deemed to be a contract between the Corporation and each Director, Officer and employee of the Corporation and any repeal or other limitation of this Article VII or any repeal or limitation of the Statute or any other applicable law shall not limit any rights of indemnification against Liabilities or allowance of Expenses then existing or arising out of events, acts or omissions occurring prior to such repeal or limitation, including, without limitation, the right to indemnification against Liabilities or allowance of Expenses for Proceedings commenced after such repeal or limitation to enforce this Article VII with regard to acts, omissions or events arising prior to such repeal or limitation. If the Statute is amended to permit or require the Corporation to provide broader indemnification rights than this Article VII permits or requires, then this Article VII shall be automatically amended and deemed to incorporate such broader indemnification rights.

ARTICLE VIII. AMENDMENTS

8.01 By Shareholders. These by-laws may be altered, amended or repealed and new by-laws may be adopted by the shareholders by affirmative vote of not less than a majority of the shares present or represented and entitled to vote thereon under the articles of incorporation at any Annual Meeting or Special Meeting at which a quorum is in attendance.

8.02 By Directors. These by-laws may also be altered, amended or repealed and new by-laws may be adopted by the Board of Directors by affirmative vote of a majority of the number of directors present at any meeting at which a quorum is in attendance; but no by-law adopted by the shareholders shall be amended or repealed by the Board of Directors if the by-law so adopted so provides.

8.03 Implied Amendments. Any action taken or authorized by the shareholders or by the Board of Directors, which would be inconsistent with the by-laws then in effect but is taken or authorized by affirmative vote of not less than the number of shares or the number of directors required to amend the by-laws so that the by-laws would be consistent with such action, shall be given the same effect as though the by-laws had been temporarily amended or suspended so far, but only so far, as is necessary to permit the specific action so taken or authorized.

Exhibit 10.3

OSHKOSH CORPORATION

Summary of Cash Compensation for Non-Employee Directors

Cash compensation for non-employee members of the Board of Directors (the “Board”) of Oshkosh Corporation consists of payment of the following: (i) an annual retainer of $97,500 for each non-employee director; (ii) an additional annual retainer of $170,000 for the non-employee Chairman of the Board; (iii) an additional annual retainer of $13,500 for each Board Committee on which a non-employee director serves during the calendar year; (iv) an additional annual retainer of $20,000 to the non-employee Chair of the Audit Committee of the Board; (v) an additional annual retainer of $15,000 to the non-employee Chair of the Governance Committee and the Human Resources Committee of the Board; and (vi) reimbursement of reasonable travel and related expenses incurred in attending Board and Board committee meetings and continuing education programs.

Subsidiaries of the Company

Listed below are the Company's wholly owned subsidiaries as of the date of this report. Names of certain inactive or minor subsidiaries have been omitted.

Name	State or Other Jurisdiction of Incorporation or Organization
JLG Industries India Private Limited	India
Kewaunee Fabrications, LLC	Wisconsin
McNeilus Companies, Inc.	Minnesota
Iowa Contract Fabricators, Inc.	Iowa
Iowa Mold Tooling Co., Inc.	Delaware
JLG Industries, Inc.	Pennsylvania
Fulton International, Inc.	Delaware
JLG Equipment Services, Inc.	Pennsylvania
Access Financial Solutions, LLC.	Maryland
JerrDan, LLC	Delaware
JLG New Zealand Access Equipment and Services	New Zealand
JLG Industries Korea, Limited	South Korea
JLG Pacific Holdings, Inc.	Pennsylvania
JLG Industries, Japan Co., Limited	Japan
JLG Properties Australia Pty Limited	Australia
OSK Industries LLC	Wisconsin
JLG EMEA Holdings B.V.	Netherlands
JLG EMEA B.V.	Netherlands
JLG France SAS	France
JLG Ground Support Europe BVBA	Belgium
JLG Industries GmbH	Germany
JLG Deutschland GmbH	Germany
JLG Industries (Italia) S.R.L	Italy
JLG Industries (United Kingdom) Limited	United Kingdom
JLG Manufacturing Central Europe S.R.L.	Romania
JLG Manufacturing Europe BVBA	Belgium
JLG Sverige AB	Sweden
Oshkosh Italy B.V.	Netherlands
Oshkosh Rus, LLC	Russia
Platformas Elevadoras JLG Iberica S.L	Spain
Power Towers Limited	United Kingdom
Power Towers LLC	United Arab Emirates

Name	State or Other Jurisdiction of Incorporation or Organization
Oshkosh Europe B.V.	Netherlands
Oshkosh Equipment Manufacturing, S. de R.L. de C.V.	Mexico
Oshkosh-JLG (Singapore) Technology Equipment Private Limited	Singapore
JLG Equipment Services Limited	Hong Kong
Oshkosh JLG (Tianjin) Equipment Technology Co., Ltd.	China
JLG Latino Americana Ltda.	Brazil
OSK Company LLC	Wisconsin
Premco Products Inc.	California
JLG Maquinaria Mexico, S. de R.L. de C.V.	Mexico
JLG Maquinaria Mexico Services, S. de R.L. de C.V.	Mexico
London Machinery Inc.	Canada
London (Mtl) Inc.	Canada
McNeilus Financial Services, Inc.	Minnesota
McNeilus Truck and Manufacturing, Inc.	Minnesota
McNeilus Financial, Inc.	Texas
Viking Truck & Equipment Sales (OH), Inc.	Ohio
Oshkosh Airport Products, LLC	Wisconsin
Oshkosh Arabia FZE	Dubai
Oshkosh Asia Holdings Limited	Mauritius
Oshkosh Commercial (Beijing) Co., Limited	China
Oshkosh Commercial Products, LLC	Wisconsin
Oshkosh Defense, LLC	Wisconsin
Oshkosh Defense Canada Incorporated	Canada
Pratt & Miller Engineering & Fabrication, LLC	Michigan
Oshkosh HD, LLC	Wisconsin
Oshkosh Logistics Corporation	Wisconsin
Oshkosh Manufacturing, LLC	Wisconsin
OSK Ventures, LLC	Wisconsin
Pierce Manufacturing Inc.	Wisconsin
TN-GR Holdings LLC	Delaware

McNeilus Truck and Manufacturing, Inc. owns a 49% interest in Mezcladoras Trailers de Mexico, S.A. de C.V.

Pierce Manufacturing, Inc. owns a 25% interest in BME Fire Trucks LLC (Boise Mobile).

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-181578, 333-114939, 333-217858, and 333-101596 on Form S-8 and Registration Statement No. 333-228500 on Form S-3 of our reports dated November 16, 2021, relating to the consolidated financial statements of Oshkosh Corporation and subsidiaries (the "Company"), and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Oshkosh Corporation and subsidiaries for the year ended September 30, 2021.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin

November 16, 2021

Exhibit 31.1

CERTIFICATIONS

I, John C. Pfeifer, certify that:

1. I have reviewed this annual report on Form 10-K of Oshkosh Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   (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.

November 16, 2021

/s/ John C. Pfeifer

John C. Pfeifer, President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Michael E. Pack, certify that:

1. I have reviewed this annual report on Form 10-K of Oshkosh Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   (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.

November 16, 2021

/s/ Michael E. Pack

Michael E. Pack, Executive Vice President and Chief Financial Officer

Exhibit 32.1

Written Statement of the President and Chief Executive Officer
Pursuant to 18 U.S.C. §1350

Solely for the purposes of complying with 18 U.S.C. §1350, I, the undersigned President and Chief Executive Officer of Oshkosh Corporation (the "Company"), hereby certify, to the best of my knowledge, that the Annual Report on Form 10-K of the Company for the year ended September 30, 2021 (the "Report") fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ John C. Pfeifer

John C. Pfeifer
November 16, 2021

Exhibit 32.2

Written Statement of the Executive Vice President and Chief Financial Officer
Pursuant to 18 U.S.C. §1350

Solely for the purposes of complying with 18 U.S.C. §1350, I, the undersigned Executive Vice President and Chief Financial Officer of Oshkosh Corporation (the “Company”), hereby certify, to the best of my knowledge, that the Annual Report on Form 10-K of the Company for the year ended September 30, 2021 (the “Report”) fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael E. Pack

Michael E. Pack

November 16, 2021